

## Contents

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### Init program

---

```
clear all; close all; clc;
diary OFF; force_delete('diary'); diary ON;
savefig = @(num) saveas(figure(num), sprintf('fig%d', num), 'bmp');
printl = @(varargin) display(arrayfun(@(i) sprintf('%c',i), cell2mat(varargin)));
progress = @(i,n,t) printl([
    'Program running...', ...
    sprintf('\n\tIteration: %d', i), ...
    sprintf('\n\tPercentage completed: %.4f%%', (i/n)*100), ...
    sprintf('\n\tTime elapsed: %.5f seconds', t), ...
    sprintf('\n\tEstimated time remaining: %.5f minutes\n', ( (t/(i/n)) - toc)/60 )];
```

### Initial values

---

```
no_gens = 3e3; % number of generations
no_members = 100; % number of parents / members per generation
no_genes = 10; % number of genes; polynomial coefficients
no_steps = 10; % number of loop iteration between each plot
pad_size = 2^13; % size of vector for zero padding for FFT
technique = 1; % technique for creating phase member
degree = 100; % Range of phase coefficient to try (+- Range) as random number
offspring_range = 0.5*degree;
fit_fun = @(members) fitnesses(members, pad_size, technique);
```

### Initiate parents.

---

Create phase coefficient for all parents. (matrix of size no\_genes x no\_members)

```
parents = degree*(rand(no_genes, no_members)-0.5);
parent_grades = fit_fun(parents);
```

### Initiate offspring

---

populate offspring Fitness values vectors with zero (and convergence) The two values initially used are F (Fitness parameters) and parents

```
new_generation=zeros(no_genes, 2*no_members);
sorted_generation=zeros(size(new_generation));
```

## Evolutionary Loop

```
for gen_i = 1:no_gens

if (gen_i == 1)
    figure(2); figure(3); figure(1);
    pause; tic; % First pass has a pause to organize graph on screen
end; progress(gen_i,no_gens,toc);

% half of offspring are yielded by random mutations
mutated_generation = degree*(rand(no_genes,no_members/2)-0.5);

% half of offspring created yielded by parents
offspring_generation = parents(:,1:no_members/2) + ...
    offspring_range*(rand(no_genes,no_members/2)-0.5);

offspring = [mutated_generation, offspring_generation];
offspring_grades = fit_fun(offspring); % Fitness of offspring ii

grades=[parent_grades offspring_grades]; % Fitness parameters of all parents & offspring
new_generation=[parents offspring];

% Select the best members for next generation
[grades_sorted, orderAll] = sort(grades);
for ii=1:no_members
    prev_index = orderAll(ii);
    sorted_generation(:,ii)=new_generation(:,prev_index);
end

% Create next generation (remove unwanted members)
parent_grades=grades_sorted(1,1:no_members);
parents=sorted_generation(:,1:no_members);
convergence(gen_i)=mean(parent_grades(1:no_members));
```

Program running...  
Iteration: 1  
Percentage completed: 0.0333%  
Time elapsed: 0.00040 seconds  
Estimated time remaining: 0.01998 minutes

Program running...

```
Iteration: 2
Percentage completed: 0.0667%
Time elapsed: 1.28042 seconds
Estimated time remaining: 31.98911 minutes
```

```
Program running...
Iteration: 3
Percentage completed: 0.1000%
Time elapsed: 1.45601 seconds
Estimated time remaining: 24.24250 minutes
```

```
Program running...
Iteration: 4
Percentage completed: 0.1333%
Time elapsed: 1.63190 seconds
Estimated time remaining: 20.37158 minutes
```

```
Program running...
Iteration: 5
Percentage completed: 0.1667%
Time elapsed: 1.79913 seconds
Estimated time remaining: 17.96130 minutes
```

```
Program running...
Iteration: 6
Percentage completed: 0.2000%
Time elapsed: 1.98143 seconds
Estimated time remaining: 16.47890 minutes
```

```
Program running...
Iteration: 7
Percentage completed: 0.2333%
Time elapsed: 2.16047 seconds
Estimated time remaining: 15.39589 minutes
```

```
Program running...
Iteration: 8
Percentage completed: 0.2667%
Time elapsed: 2.33464 seconds
Estimated time remaining: 14.55259 minutes
```

```
Program running...
Iteration: 9
Percentage completed: 0.3000%
Time elapsed: 2.50852 seconds
Estimated time remaining: 13.89439 minutes
```

```
Program running...
Iteration: 10
Percentage completed: 0.3333%
Time elapsed: 2.68607 seconds
Estimated time remaining: 13.38560 minutes
```

```
Program running...
Iteration: 11
Percentage completed: 0.3667%
Time elapsed: 6.11979 seconds
Estimated time remaining: 27.71525 minutes
```

```
Program running...
Iteration: 12
Percentage completed: 0.4000%
Time elapsed: 6.27966 seconds
Estimated time remaining: 26.06059 minutes
```

```
Program running...
Iteration: 13
Percentage completed: 0.4333%
Time elapsed: 6.45098 seconds
Estimated time remaining: 24.70396 minutes
```

```
Program running...
Iteration: 14
Percentage completed: 0.4667%
Time elapsed: 6.61596 seconds
Estimated time remaining: 23.51817 minutes
```

```
Program running...
Iteration: 15
Percentage completed: 0.5000%
Time elapsed: 6.77399 seconds
Estimated time remaining: 22.46705 minutes
```

```
Program running...
Iteration: 16
Percentage completed: 0.5333%
Time elapsed: 6.93811 seconds
Estimated time remaining: 21.56595 minutes
```

```
Program running...
Iteration: 17
Percentage completed: 0.5667%
Time elapsed: 7.10746 seconds
Estimated time remaining: 20.78584 minutes
```

```
Program running...
Iteration: 18
Percentage completed: 0.6000%
Time elapsed: 7.27524 seconds
Estimated time remaining: 20.08774 minutes
```

```
Program running...
Iteration: 19
Percentage completed: 0.6333%
Time elapsed: 7.43572 seconds
Estimated time remaining: 19.44375 minutes
```

```
Program running...
Iteration: 20
Percentage completed: 0.6667%
Time elapsed: 7.59473 seconds
Estimated time remaining: 18.86025 minutes
```

```
Program running...
Iteration: 21
Percentage completed: 0.7000%
Time elapsed: 8.57694 seconds
Estimated time remaining: 20.27834 minutes
```

```
Program running...
Iteration: 22
```

```
Percentage completed: 0.1333%
Time elapsed: 8.73660 seconds
Estimated time remaining: 19.71031 minutes
```

```
Program running...
Iteration: 23
Percentage completed: 0.7667%
Time elapsed: 8.89390 seconds
Estimated time remaining: 19.18632 minutes
```

```
Program running...
Iteration: 24
Percentage completed: 0.8000%
Time elapsed: 9.05381 seconds
Estimated time remaining: 18.71121 minutes
```

```
Program running...
Iteration: 25
Percentage completed: 0.8333%
Time elapsed: 9.21678 seconds
Estimated time remaining: 18.27995 minutes
```

```
Program running...
Iteration: 26
Percentage completed: 0.8667%
Time elapsed: 9.37505 seconds
Estimated time remaining: 17.87269 minutes
```

```
Program running...
Iteration: 27
Percentage completed: 0.9000%
Time elapsed: 9.54823 seconds
Estimated time remaining: 17.52277 minutes
```

```
Program running...
Iteration: 28
Percentage completed: 0.9333%
Time elapsed: 9.71450 seconds
Estimated time remaining: 17.18541 minutes
```

```
Program running...
Iteration: 29
Percentage completed: 0.9667%
Time elapsed: 9.87398 seconds
Estimated time remaining: 16.85953 minutes
```

```
Program running...
Iteration: 30
Percentage completed: 1.0000%
Time elapsed: 10.03101 seconds
Estimated time remaining: 16.55117 minutes
```

```
Program running...
Iteration: 31
Percentage completed: 1.0333%
Time elapsed: 10.94848 seconds
Estimated time remaining: 17.47636 minutes
```

```
Program running...
Iteration: 32
Percentage completed: 1.0667%
Time elapsed: 11.10593 seconds
Estimated time remaining: 17.16792 minutes
```

```
Program running...
Iteration: 33
Percentage completed: 1.1000%
Time elapsed: 11.26690 seconds
Estimated time remaining: 16.88328 minutes
```

```
Program running...
Iteration: 34
Percentage completed: 1.1333%
Time elapsed: 11.42337 seconds
Estimated time remaining: 16.60869 minutes
```

```
Program running...
Iteration: 35
Percentage completed: 1.1667%
Time elapsed: 11.58349 seconds
Estimated time remaining: 16.35478 minutes
```

```
Program running...
Iteration: 36
Percentage completed: 1.2000%
Time elapsed: 11.73876 seconds
Estimated time remaining: 16.10819 minutes
```

```
Program running...
Iteration: 37
Percentage completed: 1.2333%
Time elapsed: 11.89445 seconds
Estimated time remaining: 15.87533 minutes
```

```
Program running...
Iteration: 38
Percentage completed: 1.2667%
Time elapsed: 12.05338 seconds
Estimated time remaining: 15.65882 minutes
```

```
Program running...
Iteration: 39
Percentage completed: 1.3000%
Time elapsed: 12.20975 seconds
Estimated time remaining: 15.45003 minutes
```

```
Program running...
Iteration: 40
Percentage completed: 1.3333%
Time elapsed: 12.36668 seconds
Estimated time remaining: 15.25224 minutes
```

```
Program running...
Iteration: 41
Percentage completed: 1.3667%
Time elapsed: 13.30671 seconds
Estimated time remaining: 16.00592 minutes
```

```
Program running...
Iteration: 42
Percentage completed: 1.4000%
Time elapsed: 13.47068 seconds
Estimated time remaining: 15.81201 minutes
```

ESTIMATED TIME REMAINING: 15.61668 MINUTES

Program running...  
Iteration: 43  
Percentage completed: 1.4333%  
Time elapsed: 13.62564 seconds  
Estimated time remaining: 15.61668 minutes

Program running...  
Iteration: 44  
Percentage completed: 1.4667%  
Time elapsed: 13.79131 seconds  
Estimated time remaining: 15.44208 minutes

Program running...  
Iteration: 45  
Percentage completed: 1.5000%  
Time elapsed: 13.95772 seconds  
Estimated time remaining: 15.27595 minutes

Program running...  
Iteration: 46  
Percentage completed: 1.5333%  
Time elapsed: 14.11535 seconds  
Estimated time remaining: 15.10751 minutes

Program running...  
Iteration: 47  
Percentage completed: 1.5667%  
Time elapsed: 14.27564 seconds  
Estimated time remaining: 14.94893 minutes

Program running...  
Iteration: 48  
Percentage completed: 1.6000%  
Time elapsed: 14.43267 seconds  
Estimated time remaining: 14.79349 minutes

Program running...

Iteration: 49

Program running...  
Iteration: 50  
Percentage completed: 1.6333%  
Time elapsed: 14.59002 seconds  
Estimated time remaining: 14.64460 minutes

Program running...  
Iteration: 50  
Percentage completed: 1.6667%  
Time elapsed: 14.74830 seconds  
Estimated time remaining: 14.50249 minutes

Program running...  
Iteration: 51  
Percentage completed: 1.7000%  
Time elapsed: 15.67306 seconds  
Estimated time remaining: 15.10452 minutes

Program running...  
Iteration: 52  
Percentage completed: 1.7333%  
Time elapsed: 15.83198 seconds  
Estimated time remaining: 14.95919 minutes

Program running...  
Iteration: 53  
Percentage completed: 1.7667%  
Time elapsed: 15.99533 seconds  
Estimated time remaining: 14.82334 minutes

Program running...  
Iteration: 54  
Percentage completed: 1.8000%  
Time elapsed: 16.15424 seconds  
Estimated time remaining: 14.68839 minutes

Program running...  
Iteration: 55  
Percentage completed: 1.8333%  
Time elapsed: 16.32245 seconds  
Estimated time remaining: 14.56654 minutes

```
Program running...
Iteration: 56
Percentage completed: 1.8667%
Time elapsed: 16.48081 seconds
Estimated time remaining: 14.44033 minutes
```

```
Program running...
Iteration: 57
Percentage completed: 1.9000%
Time elapsed: 16.64094 seconds
Estimated time remaining: 14.31997 minutes
```

```
Program running...
Iteration: 58
Percentage completed: 1.9333%
Time elapsed: 16.79971 seconds
Estimated time remaining: 14.20251 minutes
```

```
Program running...
Iteration: 59
Percentage completed: 1.9667%
Time elapsed: 16.96113 seconds
Estimated time remaining: 14.09116 minutes
```

```
Program running...
Iteration: 60
Percentage completed: 2.0000%
Time elapsed: 17.12173 seconds
Estimated time remaining: 13.98275 minutes
```

```
Program running...
Iteration: 61
Percentage completed: 2.0333%
Time elapsed: 18.04542 seconds
Estimated time remaining: 14.49057 minutes
```

```
Program running...
Iteration: 62
Percentage completed: 2.0667%
Time elapsed: 18.20242 seconds
Estimated time remaining: 14.37600 minutes
```

```
Program running...
  Iteration: 63
  Percentage completed: 2.1000%
  Time elapsed: 18.36204 seconds
  Estimated time remaining: 14.26702 minutes
```

```
Program running...
  Iteration: 64
  Percentage completed: 2.1333%
  Time elapsed: 18.52163 seconds
  Estimated time remaining: 14.16133 minutes
```

```
Program running...
  Iteration: 65
  Percentage completed: 2.1667%
  Time elapsed: 18.68665 seconds
  Estimated time remaining: 14.06290 minutes
```

```
Program running...
  Iteration: 66
  Percentage completed: 2.2000%
  Time elapsed: 18.84694 seconds
  Estimated time remaining: 13.96387 minutes
```

```
Program running...
  Iteration: 67
  Percentage completed: 2.2333%
  Time elapsed: 19.03277 seconds
  Estimated time remaining: 13.88634 minutes
```

```
Program running...
  Iteration: 68
  Percentage completed: 2.2667%
  Time elapsed: 19.19097 seconds
  Estimated time remaining: 13.79116 minutes
```

```
Program running...
  Iteration: 69
  Percentage completed: 2.3000%
```

Time elapsed: 19.36300 seconds  
Estimated time remaining: 13.70844 minutes

Program running...  
Iteration: 70  
Percentage completed: 2.3333%  
Time elapsed: 19.52037 seconds  
Estimated time remaining: 13.61778 minutes

Program running...  
Iteration: 71  
Percentage completed: 2.3667%  
Time elapsed: 20.41206 seconds  
Estimated time remaining: 14.03448 minutes

Program running...  
Iteration: 72  
Percentage completed: 2.4000%  
Time elapsed: 20.57192 seconds  
Estimated time remaining: 13.94319 minutes

Program running...  
Iteration: 73  
Percentage completed: 2.4333%  
Time elapsed: 20.73456 seconds  
Estimated time remaining: 13.85617 minutes

Program running...  
Iteration: 74  
Percentage completed: 2.4667%  
Time elapsed: 20.89199 seconds  
Estimated time remaining: 13.76801 minutes

Program running...  
Iteration: 75  
Percentage completed: 2.5000%  
Time elapsed: 21.05145 seconds  
Estimated time remaining: 13.68344 minutes

Program running...

Iteration: 76  
Percentage completed: 2.5333%  
Time elapsed: 21.20765 seconds  
Estimated time remaining: 13.59894 minutes

Program running...  
Iteration: 77  
Percentage completed: 2.5667%  
Time elapsed: 21.36711 seconds  
Estimated time remaining: 13.51863 minutes

Program running...  
Iteration: 78  
Percentage completed: 2.6000%  
Time elapsed: 21.52560 seconds  
Estimated time remaining: 13.43970 minutes

Program running...  
Iteration: 79  
Percentage completed: 2.6333%  
Time elapsed: 21.68430 seconds  
Estimated time remaining: 13.36284 minutes

Program running...  
Iteration: 80  
Percentage completed: 2.6667%  
Time elapsed: 21.84328 seconds  
Estimated time remaining: 13.28799 minutes

Program running...  
Iteration: 81  
Percentage completed: 2.7000%  
Time elapsed: 22.72409 seconds  
Estimated time remaining: 13.64848 minutes

Program running...  
Iteration: 82  
Percentage completed: 2.7333%  
Time elapsed: 22.88429 seconds  
Estimated time remaining: 13.57243 minutes

```
Program running...
Iteration: 83
Percentage completed: 2.7667%
Time elapsed: 23.04069 seconds
Estimated time remaining: 13.49592 minutes
```

```
Program running...
Iteration: 84
Percentage completed: 2.8000%
Time elapsed: 23.19690 seconds
Estimated time remaining: 13.42106 minutes
```

```
Program running...
Iteration: 85
Percentage completed: 2.8333%
Time elapsed: 23.35960 seconds
Estimated time remaining: 13.35162 minutes
```

```
Program running...
Iteration: 86
Percentage completed: 2.8667%
Time elapsed: 23.51922 seconds
Estimated time remaining: 13.28197 minutes
```

```
Program running...
Iteration: 87
Percentage completed: 2.9000%
Time elapsed: 23.67613 seconds
Estimated time remaining: 13.21237 minutes
```

```
Program running...
Iteration: 88
Percentage completed: 2.9333%
Time elapsed: 23.84163 seconds
Estimated time remaining: 13.14902 minutes
```

```
Program running...
Iteration: 89
Percentage completed: 2.9667%
Time elapsed: 24.00095 seconds
Estimated time remaining: 13.08366 minutes
```

```
Program running...
Iteration: 90
Percentage completed: 3.0000%
Time elapsed: 24.15636 seconds
Estimated time remaining: 13.01759 minutes
```

```
Program running...
Iteration: 91
Percentage completed: 3.0333%
Time elapsed: 25.09849 seconds
Estimated time remaining: 13.37207 minutes
```

```
Program running...
Iteration: 92
Percentage completed: 3.0667%
Time elapsed: 25.26819 seconds
Estimated time remaining: 13.31157 minutes
```

```
Program running...
Iteration: 93
Percentage completed: 3.1000%
Time elapsed: 25.42053 seconds
Estimated time remaining: 13.24327 minutes
```

```
Program running...
Iteration: 94
Percentage completed: 3.1333%
Time elapsed: 25.57673 seconds
Estimated time remaining: 13.17836 minutes
```

```
Program running...
Iteration: 95
Percentage completed: 3.1667%
Time elapsed: 25.73312 seconds
Estimated time remaining: 13.11486 minutes
```

```
Program running...
Iteration: 96
```

```
Percentage completed: 3.2000%
Time elapsed: 25.88910 seconds
Estimated time remaining: 13.05242 minutes
```

```
Program running...
Iteration: 97
Percentage completed: 3.2333%
Time elapsed: 26.04724 seconds
Estimated time remaining: 12.99229 minutes
```

```
Program running...
Iteration: 98
Percentage completed: 3.2667%
Time elapsed: 26.20474 seconds
Estimated time remaining: 12.93302 minutes
```

```
Program running...
Iteration: 99
Percentage completed: 3.3000%
Time elapsed: 26.36259 seconds
Estimated time remaining: 12.87506 minutes
```

```
Program running...
Iteration: 100
Percentage completed: 3.3333%
Time elapsed: 26.52021 seconds
Estimated time remaining: 12.81810 minutes
```

```
Program running...
Iteration: 101
Percentage completed: 3.3667%
Time elapsed: 27.41032 seconds
Estimated time remaining: 13.11262 minutes
```

```
Program running...
Iteration: 102
Percentage completed: 3.4000%
Time elapsed: 27.57240 seconds
Estimated time remaining: 13.05634 minutes
```

```
Program running...
```

Program running...  
Iteration: 103  
Percentage completed: 3.4333%  
Time elapsed: 27.72884 seconds  
Estimated time remaining: 12.99845 minutes

Program running...  
Iteration: 104  
Percentage completed: 3.4667%  
Time elapsed: 27.88833 seconds  
Estimated time remaining: 12.94304 minutes

Program running...  
Iteration: 105  
Percentage completed: 3.5000%  
Time elapsed: 28.04600 seconds  
Estimated time remaining: 12.88780 minutes

Program running...  
Iteration: 106  
Percentage completed: 3.5333%  
Time elapsed: 28.21422 seconds  
Estimated time remaining: 12.83835 minutes

Program running...  
Iteration: 107  
Percentage completed: 3.5667%  
Time elapsed: 28.37283 seconds  
Estimated time remaining: 12.78545 minutes

Program running...  
Iteration: 108  
Percentage completed: 3.6000%  
Time elapsed: 28.53026 seconds  
Estimated time remaining: 12.73295 minutes

Program running...  
Iteration: 109  
Percentage completed: 3.6333%  
Time elapsed: 28.68769 seconds  
Estimated time remaining: 12.68136 minutes

```
Program running...
  Iteration: 110
  Percentage completed: 3.6667%
  Time elapsed: 28.84524 seconds
  Estimated time remaining: 12.63072 minutes
```

```
Program running...
  Iteration: 111
  Percentage completed: 3.7000%
  Time elapsed: 29.73513 seconds
  Estimated time remaining: 12.89861 minutes
```

```
Program running...
  Iteration: 112
  Percentage completed: 3.7333%
  Time elapsed: 29.89094 seconds
  Estimated time remaining: 12.84599 minutes
```

```
Program running...
  Iteration: 113
  Percentage completed: 3.7667%
  Time elapsed: 30.04652 seconds
  Estimated time remaining: 12.79415 minutes
```

```
Program running...
  Iteration: 114
  Percentage completed: 3.8000%
  Time elapsed: 30.21102 seconds
  Estimated time remaining: 12.74693 minutes
```

```
Program running...
  Iteration: 115
  Percentage completed: 3.8333%
  Time elapsed: 30.37286 seconds
  Estimated time remaining: 12.69938 minutes
```

```
Program running...
  Iteration: 116
  Percentage completed: 3.8667%
```

```
Time elapsed: 30.52707 seconds
Estimated time remaining: 12.64943 minutes
```

```
Program running...
Iteration: 117
Percentage completed: 3.9000%
Time elapsed: 30.68408 seconds
Estimated time remaining: 12.60145 minutes
```

```
Program running...
Iteration: 118
Percentage completed: 3.9333%
Time elapsed: 30.84238 seconds
Estimated time remaining: 12.55476 minutes
```

```
Program running...
Iteration: 119
Percentage completed: 3.9667%
Time elapsed: 30.99858 seconds
Estimated time remaining: 12.50797 minutes
```

```
Program running...
Iteration: 120
Percentage completed: 4.0000%
Time elapsed: 31.15464 seconds
Estimated time remaining: 12.46186 minutes
```

```
Program running...
Iteration: 121
Percentage completed: 4.0333%
Time elapsed: 32.05530 seconds
Estimated time remaining: 12.71174 minutes
```

```
Program running...
Iteration: 122
Percentage completed: 4.0667%
Time elapsed: 32.20953 seconds
Estimated time remaining: 12.66380 minutes
```

```
Program running...
```

```
Iteration: 123
Percentage completed: 4.1000%
Time elapsed: 32.37310 seconds
Estimated time remaining: 12.62024 minutes
```

```
Program running...
Iteration: 124
Percentage completed: 4.1333%
Time elapsed: 32.52943 seconds
Estimated time remaining: 12.57455 minutes
```

```
Program running...
Iteration: 125
Percentage completed: 4.1667%
Time elapsed: 32.69511 seconds
Estimated time remaining: 12.53313 minutes
```

```
Program running...
Iteration: 126
Percentage completed: 4.2000%
Time elapsed: 32.85237 seconds
Estimated time remaining: 12.48911 minutes
```

```
Program running...
Iteration: 127
Percentage completed: 4.2333%
Time elapsed: 33.00729 seconds
Estimated time remaining: 12.44487 minutes
```

```
Program running...
Iteration: 128
Percentage completed: 4.2667%
Time elapsed: 33.16683 seconds
Estimated time remaining: 12.40301 minutes
```

```
Program running...
Iteration: 129
Percentage completed: 4.3000%
Time elapsed: 33.32566 seconds
Estimated time remaining: 12.36149 minutes
```

```
Program running...
Iteration: 130
Percentage completed: 4.3333%
Time elapsed: 33.48111 seconds
Estimated time remaining: 12.31933 minutes
```

```
Program running...
Iteration: 131
Percentage completed: 4.3667%
Time elapsed: 34.35747 seconds
Estimated time remaining: 12.54091 minutes
```

```
Program running...
Iteration: 132
Percentage completed: 4.4000%
Time elapsed: 34.51929 seconds
Estimated time remaining: 12.50016 minutes
```

```
Program running...
Iteration: 133
Percentage completed: 4.4333%
Time elapsed: 34.67801 seconds
Estimated time remaining: 12.45888 minutes
```

```
Program running...
Iteration: 134
Percentage completed: 4.4667%
Time elapsed: 34.83529 seconds
Estimated time remaining: 12.41765 minutes
```

```
Program running...
Iteration: 135
Percentage completed: 4.5000%
Time elapsed: 34.99802 seconds
Estimated time remaining: 12.37893 minutes
```

```
Program running...
Iteration: 136
Percentage completed: 4.5333%
Time elapsed: 35.15549 seconds
Estimated time remaining: 12.33889 minutes
```

```
Program running...
Iteration: 137
Percentage completed: 4.5667%
Time elapsed: 35.31260 seconds
Estimated time remaining: 12.29926 minutes
```

```
Program running...
Iteration: 138
Percentage completed: 4.6000%
Time elapsed: 35.46892 seconds
Estimated time remaining: 12.25991 minutes
```

```
Program running...
Iteration: 139
Percentage completed: 4.6333%
Time elapsed: 35.62579 seconds
Estimated time remaining: 12.22127 minutes
```

```
Program running...
Iteration: 140
Percentage completed: 4.6667%
Time elapsed: 35.78025 seconds
Estimated time remaining: 12.18232 minutes
```

```
Program running...
Iteration: 141
Percentage completed: 4.7000%
Time elapsed: 36.67056 seconds
Estimated time remaining: 12.39257 minutes
```

```
Program running...
Iteration: 142
Percentage completed: 4.7333%
Time elapsed: 36.82897 seconds
Estimated time remaining: 12.35413 minutes
```

```
Program running...
Iteration: 143
Percentage completed: 4.7667%
```

percentage completed: 4.7000%  
Time elapsed: 36.99866 seconds  
Estimated time remaining: 12.31995 minutes

Program running...  
Iteration: 144  
Percentage completed: 4.8000%  
Time elapsed: 37.15706 seconds  
Estimated time remaining: 12.28247 minutes

Program running...  
Iteration: 145  
Percentage completed: 4.8333%  
Time elapsed: 37.32624 seconds  
Estimated time remaining: 12.24901 minutes

Program running...  
Iteration: 146  
Percentage completed: 4.8667%  
Time elapsed: 37.48408 seconds  
Estimated time remaining: 12.21228 minutes

Program running...  
Iteration: 147  
Percentage completed: 4.9000%  
Time elapsed: 37.64341 seconds  
Estimated time remaining: 12.17649 minutes

Program running...  
Iteration: 148  
Percentage completed: 4.9333%  
Time elapsed: 37.80092 seconds  
Estimated time remaining: 12.14057 minutes

Program running...  
Iteration: 149  
Percentage completed: 4.9667%  
Time elapsed: 37.96166 seconds  
Estimated time remaining: 12.10612 minutes

Program running...

```
Iteration: 150
Percentage completed: 5.0000%
Time elapsed: 38.11851 seconds
Estimated time remaining: 12.07086 minutes
```

```
Program running...
Iteration: 151
Percentage completed: 5.0333%
Time elapsed: 39.00649 seconds
Estimated time remaining: 12.26595 minutes
```

```
Program running...
Iteration: 152
Percentage completed: 5.0667%
Time elapsed: 39.16839 seconds
Estimated time remaining: 12.23153 minutes
```

```
Program running...
Iteration: 153
Percentage completed: 5.1000%
Time elapsed: 39.32486 seconds
Estimated time remaining: 12.19584 minutes
```

```
Program running...
Iteration: 154
Percentage completed: 5.1333%
Time elapsed: 39.48288 seconds
Estimated time remaining: 12.16107 minutes
```

```
Program running...
Iteration: 155
Percentage completed: 5.1667%
Time elapsed: 39.64321 seconds
Estimated time remaining: 12.12741 minutes
```

```
Program running...
Iteration: 156
Percentage completed: 5.2000%
Time elapsed: 39.79994 seconds
Estimated time remaining: 12.09306 minutes
```

```
Program running...
  Iteration: 157
  Percentage completed: 5.2333%
  Time elapsed: 39.95953 seconds
  Estimated time remaining: 12.05997 minutes
```

```
Program running...
  Iteration: 158
  Percentage completed: 5.2667%
  Time elapsed: 40.11730 seconds
  Estimated time remaining: 12.02672 minutes
```

```
Program running...
  Iteration: 159
  Percentage completed: 5.3000%
  Time elapsed: 40.27486 seconds
  Estimated time remaining: 11.99380 minutes
```

```
Program running...
  Iteration: 160
  Percentage completed: 5.3333%
  Time elapsed: 40.43565 seconds
  Estimated time remaining: 11.96221 minutes
```

```
Program running...
  Iteration: 161
  Percentage completed: 5.3667%
  Time elapsed: 41.34515 seconds
  Estimated time remaining: 12.15102 minutes
```

```
Program running...
  Iteration: 162
  Percentage completed: 5.4000%
  Time elapsed: 41.50184 seconds
  Estimated time remaining: 12.11751 minutes
```

```
Program running...
  Iteration: 163
  Percentage completed: 5.4333%
  Time elapsed: 41.66258 seconds
```

-----  
Estimated time remaining: 12.08555 minutes

Program running...  
Iteration: 164  
Percentage completed: 5.4667%  
Time elapsed: 41.81840 seconds  
Estimated time remaining: 12.05254 minutes

Program running...  
Iteration: 165  
Percentage completed: 5.5000%  
Time elapsed: 41.97976 seconds  
Estimated time remaining: 12.02148 minutes

Program running...  
Iteration: 166  
Percentage completed: 5.5333%  
Time elapsed: 42.15484 seconds  
Estimated time remaining: 11.99466 minutes

Program running...  
Iteration: 167  
Percentage completed: 5.5667%  
Time elapsed: 42.33424 seconds  
Estimated time remaining: 11.96935 minutes

Program running...  
Iteration: 168  
Percentage completed: 5.6000%  
Time elapsed: 42.51415 seconds  
Estimated time remaining: 11.94445 minutes

Program running...  
Iteration: 169  
Percentage completed: 5.6333%  
Time elapsed: 42.69560 seconds  
Estimated time remaining: 11.92024 minutes

Program running...  
Iteration: 170

```
-----  
Percentage completed: 5.6667%  
Time elapsed: 42.88160 seconds  
Estimated time remaining: 11.89754 minutes
```

```
Program running...  
Iteration: 171  
Percentage completed: 5.7000%  
Time elapsed: 43.77458 seconds  
Estimated time remaining: 12.07001 minutes
```

```
Program running...  
Iteration: 172  
Percentage completed: 5.7333%  
Time elapsed: 43.94075 seconds  
Estimated time remaining: 12.04113 minutes
```

```
Program running...  
Iteration: 173  
Percentage completed: 5.7667%  
Time elapsed: 44.12028 seconds  
Estimated time remaining: 12.01619 minutes
```

```
Program running...  
Iteration: 174  
Percentage completed: 5.8000%  
Time elapsed: 44.28411 seconds  
Estimated time remaining: 11.98725 minutes
```

```
Program running...  
Iteration: 175  
Percentage completed: 5.8333%  
Time elapsed: 44.44704 seconds  
Estimated time remaining: 11.95837 minutes
```

```
Program running...  
Iteration: 176  
Percentage completed: 5.8667%  
Time elapsed: 44.60428 seconds  
Estimated time remaining: 11.92827 minutes
```

```
Program running...
Iteration: 177
Percentage completed: 5.9000%
Time elapsed: 44.76208 seconds
Estimated time remaining: 11.89862 minutes
```

```
Program running...
Iteration: 178
Percentage completed: 5.9333%
Time elapsed: 44.91904 seconds
Estimated time remaining: 11.86906 minutes
```

```
Program running...
Iteration: 179
Percentage completed: 5.9667%
Time elapsed: 45.07766 seconds
Estimated time remaining: 11.84023 minutes
```

```
Program running...
Iteration: 180
Percentage completed: 6.0000%
Time elapsed: 45.23247 seconds
Estimated time remaining: 11.81070 minutes
```

```
Program running...
Iteration: 181
Percentage completed: 6.0333%
Time elapsed: 46.10861 seconds
Estimated time remaining: 11.96871 minutes
```

```
Program running...
Iteration: 182
Percentage completed: 6.0667%
Time elapsed: 46.26371 seconds
Estimated time remaining: 11.93875 minutes
```

```
Program running...
Iteration: 183
Percentage completed: 6.1000%
Time elapsed: 46.42204 seconds
Estimated time remaining: 11.90991 minutes
```

```
Program running...
  Iteration: 184
  Percentage completed: 6.1333%
  Time elapsed: 46.57627 seconds
  Estimated time remaining: 11.88032 minutes
```

```
Program running...
  Iteration: 185
  Percentage completed: 6.1667%
  Time elapsed: 46.73338 seconds
  Estimated time remaining: 11.85175 minutes
```

```
Program running...
  Iteration: 186
  Percentage completed: 6.2000%
  Time elapsed: 46.88927 seconds
  Estimated time remaining: 11.82315 minutes
```

```
Program running...
  Iteration: 187
  Percentage completed: 6.2333%
  Time elapsed: 47.04509 seconds
  Estimated time remaining: 11.79481 minutes
```

```
Program running...
  Iteration: 188
  Percentage completed: 6.2667%
  Time elapsed: 47.19912 seconds
  Estimated time remaining: 11.76630 minutes
```

```
Program running...
  Iteration: 189
  Percentage completed: 6.3000%
  Time elapsed: 47.35272 seconds
  Estimated time remaining: 11.73796 minutes
```

```
Program running...
  Iteration: 190
  Percentage completed: 6.3333%
```

```
Time elapsed: 47.50769 seconds
Estimated time remaining: 11.71023 minutes
```

```
Program running...
Iteration: 191
Percentage completed: 6.3667%
Time elapsed: 48.37718 seconds
Estimated time remaining: 11.85790 minutes
```

```
Program running...
Iteration: 192
Percentage completed: 6.4000%
Time elapsed: 48.53552 seconds
Estimated time remaining: 11.83053 minutes
```

```
Program running...
Iteration: 193
Percentage completed: 6.4333%
Time elapsed: 48.69197 seconds
Estimated time remaining: 11.80297 minutes
```

```
Program running...
Iteration: 194
Percentage completed: 6.4667%
Time elapsed: 48.84983 seconds
Estimated time remaining: 11.77600 minutes
```

```
Program running...
Iteration: 195
Percentage completed: 6.5000%
Time elapsed: 49.01208 seconds
Estimated time remaining: 11.75033 minutes
```

```
Program running...
Iteration: 196
Percentage completed: 6.5333%
Time elapsed: 49.17289 seconds
Estimated time remaining: 11.72455 minutes
```

```
Program running...
----- 107
```

```
Iteration: 197
Percentage completed: 6.5667%
Time elapsed: 49.32961 seconds
Estimated time remaining: 11.69804 minutes
```

```
Program running...
Iteration: 198
Percentage completed: 6.6000%
Time elapsed: 49.49051 seconds
Estimated time remaining: 11.67276 minutes
```

```
Program running...
Iteration: 199
Percentage completed: 6.6333%
Time elapsed: 49.64675 seconds
Estimated time remaining: 11.64661 minutes
```

```
Program running...
Iteration: 200
Percentage completed: 6.6667%
Time elapsed: 49.80444 seconds
Estimated time remaining: 11.62103 minutes
```

```
Program running...
Iteration: 201
Percentage completed: 6.7000%
Time elapsed: 50.68370 seconds
Estimated time remaining: 11.76316 minutes
```

```
Program running...
Iteration: 202
Percentage completed: 6.7333%
Time elapsed: 50.83989 seconds
Estimated time remaining: 11.73680 minutes
```

```
Program running...
Iteration: 203
Percentage completed: 6.7667%
Time elapsed: 50.99689 seconds
Estimated time remaining: 11.71086 minutes
```

```
Program running...
Iteration: 204
Percentage completed: 6.8000%
Time elapsed: 51.15582 seconds
Estimated time remaining: 11.68559 minutes
```

```
Program running...
Iteration: 205
Percentage completed: 6.8333%
Time elapsed: 51.31188 seconds
Estimated time remaining: 11.65989 minutes
```

```
Program running...
Iteration: 206
Percentage completed: 6.8667%
Time elapsed: 51.47146 seconds
Estimated time remaining: 11.63521 minutes
```

```
Program running...
Iteration: 207
Percentage completed: 6.9000%
Time elapsed: 51.63425 seconds
Estimated time remaining: 11.61147 minutes
```

```
Program running...
Iteration: 208
Percentage completed: 6.9333%
Time elapsed: 51.78885 seconds
Estimated time remaining: 11.58609 minutes
```

```
Program running...
Iteration: 209
Percentage completed: 6.9667%
Time elapsed: 51.94605 seconds
Estimated time remaining: 11.56152 minutes
```

```
Program running...
Iteration: 210
Percentage completed: 7.0000%
Time elapsed: 52.10567 seconds
```

Estimated time remaining: 11.53768 minutes

Program running...  
Iteration: 211  
Percentage completed: 7.0333%  
Time elapsed: 52.98087 seconds  
Estimated time remaining: 11.67169 minutes

Program running...  
Iteration: 212  
Percentage completed: 7.0667%  
Time elapsed: 53.14028 seconds  
Estimated time remaining: 11.64741 minutes

Program running...  
Iteration: 213  
Percentage completed: 7.1000%  
Time elapsed: 53.29624 seconds  
Estimated time remaining: 11.62258 minutes

Program running...  
Iteration: 214  
Percentage completed: 7.1333%  
Time elapsed: 53.45281 seconds  
Estimated time remaining: 11.59809 minutes

Program running...  
Iteration: 215  
Percentage completed: 7.1667%  
Time elapsed: 53.61088 seconds  
Estimated time remaining: 11.57413 minutes

Program running...  
Iteration: 216  
Percentage completed: 7.2000%  
Time elapsed: 53.77541 seconds  
Estimated time remaining: 11.55175 minutes

Program running...  
Iteration: 217

```
Percentage completed: 7.2333%
Time elapsed: 53.93128 seconds
Estimated time remaining: 11.52771 minutes
```

```
Program running...
Iteration: 218
Percentage completed: 7.2667%
Time elapsed: 54.08574 seconds
Estimated time remaining: 11.50355 minutes
```

```
Program running...
Iteration: 219
Percentage completed: 7.3000%
Time elapsed: 54.24253 seconds
Estimated time remaining: 11.48010 minutes
```

```
Program running...
Iteration: 220
Percentage completed: 7.3333%
Time elapsed: 54.40151 seconds
Estimated time remaining: 11.45729 minutes
```

```
Program running...
Iteration: 221
Percentage completed: 7.3667%
Time elapsed: 55.29390 seconds
Estimated time remaining: 11.58837 minutes
```

```
Program running...
Iteration: 222
Percentage completed: 7.4000%
Time elapsed: 55.45110 seconds
Estimated time remaining: 11.56480 minutes
```

```
Program running...
Iteration: 223
Percentage completed: 7.4333%
Time elapsed: 55.60697 seconds
Estimated time remaining: 11.54115 minutes
```

```
Program running...
Iteration: 224
Percentage completed: 7.4667%
Time elapsed: 55.76126 seconds
Estimated time remaining: 11.51735 minutes
```

```
Program running...
Iteration: 225
Percentage completed: 7.5000%
Time elapsed: 55.92395 seconds
Estimated time remaining: 11.49548 minutes
```

```
Program running...
Iteration: 226
Percentage completed: 7.5333%
Time elapsed: 56.08243 seconds
Estimated time remaining: 11.47291 minutes
```

```
Program running...
Iteration: 227
Percentage completed: 7.5667%
Time elapsed: 56.23794 seconds
Estimated time remaining: 11.44991 minutes
```

```
Program running...
Iteration: 228
Percentage completed: 7.6000%
Time elapsed: 56.39213 seconds
Estimated time remaining: 11.42683 minutes
```

```
Program running...
Iteration: 229
Percentage completed: 7.6333%
Time elapsed: 56.54729 seconds
Estimated time remaining: 11.40411 minutes
```

```
Program running...
Iteration: 230
Percentage completed: 7.6667%
Time elapsed: 56.70138 seconds
Estimated time remaining: 11.38136 minutes
```

```
Program running...
Iteration: 231
Percentage completed: 7.7000%
Time elapsed: 57.57431 seconds
Estimated time remaining: 11.50240 minutes
```

```
Program running...
Iteration: 232
Percentage completed: 7.7333%
Time elapsed: 57.73107 seconds
Estimated time remaining: 11.47985 minutes
```

```
Program running...
Iteration: 233
Percentage completed: 7.7667%
Time elapsed: 57.88671 seconds
Estimated time remaining: 11.45726 minutes
```

```
Program running...
Iteration: 234
Percentage completed: 7.8000%
Time elapsed: 58.04418 seconds
Estimated time remaining: 11.43520 minutes
```

```
Program running...
Iteration: 235
Percentage completed: 7.8333%
Time elapsed: 58.20496 seconds
Estimated time remaining: 11.41395 minutes
```

```
Program running...
Iteration: 236
Percentage completed: 7.8667%
Time elapsed: 58.36302 seconds
Estimated time remaining: 11.39233 minutes
```

```
Program running...
Iteration: 237
Percentage completed: 7.9000%
Time elapsed: 58.52200 seconds
```

Time elapsed: 58.52300 seconds  
Estimated time remaining: 11.37124 minutes

Program running...  
Iteration: 238  
Percentage completed: 7.9333%  
Time elapsed: 58.67889 seconds  
Estimated time remaining: 11.34952 minutes

Program running...  
Iteration: 239  
Percentage completed: 7.9667%  
Time elapsed: 58.83624 seconds  
Estimated time remaining: 11.32823 minutes

Program running...  
Iteration: 240  
Percentage completed: 8.0000%  
Time elapsed: 58.99269 seconds  
Estimated time remaining: 11.30693 minutes

Program running...  
Iteration: 241  
Percentage completed: 8.0333%  
Time elapsed: 59.86851 seconds  
Estimated time remaining: 11.42304 minutes

Program running...  
Iteration: 242  
Percentage completed: 8.0667%  
Time elapsed: 60.02569 seconds  
Estimated time remaining: 11.40157 minutes

Program running...  
Iteration: 243  
Percentage completed: 8.1000%  
Time elapsed: 60.18239 seconds  
Estimated time remaining: 11.38017 minutes

Program running...  
Iteration: 244

```
Percentage completed: 8.1333%
Time elapsed: 60.33990 seconds
Estimated time remaining: 11.35907 minutes
```

```
Program running...
Iteration: 245
Percentage completed: 8.1667%
Time elapsed: 60.49897 seconds
Estimated time remaining: 11.33841 minutes
```

```
Program running...
Iteration: 246
Percentage completed: 8.2000%
Time elapsed: 60.65811 seconds
Estimated time remaining: 11.31791 minutes
```

```
Program running...
Iteration: 247
Percentage completed: 8.2333%
Time elapsed: 60.81553 seconds
Estimated time remaining: 11.29724 minutes
```

```
Program running...
Iteration: 248
Percentage completed: 8.2667%
Time elapsed: 60.97249 seconds
Estimated time remaining: 11.27663 minutes
```

```
Program running...
Iteration: 249
Percentage completed: 8.3000%
Time elapsed: 61.12976 seconds
Estimated time remaining: 11.25622 minutes
```

```
Program running...
Iteration: 250
Percentage completed: 8.3333%
Time elapsed: 61.28715 seconds
Estimated time remaining: 11.23598 minutes
```

```
Program running...
Iteration: 251
Percentage completed: 8.3667%
Time elapsed: 62.16248 seconds
Estimated time remaining: 11.34692 minutes
```

```
Program running...
Iteration: 252
Percentage completed: 8.4000%
Time elapsed: 62.32973 seconds
Estimated time remaining: 11.32818 minutes
```

```
Program running...
Iteration: 253
Percentage completed: 8.4333%
Time elapsed: 62.48646 seconds
Estimated time remaining: 11.30766 minutes
```

```
Program running...
Iteration: 254
Percentage completed: 8.4667%
Time elapsed: 62.64555 seconds
Estimated time remaining: 11.28771 minutes
```

```
Program running...
Iteration: 255
Percentage completed: 8.5000%
Time elapsed: 62.80631 seconds
Estimated time remaining: 11.26819 minutes
```

```
Program running...
Iteration: 256
Percentage completed: 8.5333%
Time elapsed: 62.96530 seconds
Estimated time remaining: 11.24849 minutes
```

```
Program running...
Iteration: 257
Percentage completed: 8.5667%
Time elapsed: 63.13072 seconds
Estimated time remaining: 11.23006 minutes
```

Estimated time remaining: 11.2000 minutes

Program running...  
Iteration: 258  
Percentage completed: 8.6000%  
Time elapsed: 63.29078 seconds  
Estimated time remaining: 11.21081 minutes

Program running...  
Iteration: 259  
Percentage completed: 8.6333%  
Time elapsed: 63.44773 seconds  
Estimated time remaining: 11.19113 minutes

Program running...  
Iteration: 260  
Percentage completed: 8.6667%  
Time elapsed: 63.60953 seconds  
Estimated time remaining: 11.17244 minutes

Program running...  
Iteration: 261  
Percentage completed: 8.7000%  
Time elapsed: 64.47266 seconds  
Estimated time remaining: 11.27654 minutes

Program running...  
Iteration: 262  
Percentage completed: 8.7333%  
Time elapsed: 64.63103 seconds  
Estimated time remaining: 11.25698 minutes

Program running...  
Iteration: 263  
Percentage completed: 8.7667%  
Time elapsed: 64.78784 seconds  
Estimated time remaining: 11.23728 minutes

Program running...  
Iteration: 264  
Percentage completed: 8.8000%

Percentage completed: 8.0000%  
Time elapsed: 64.94632 seconds  
Estimated time remaining: 11.21800 minutes

Program running...  
Iteration: 265  
Percentage completed: 8.8333%  
Time elapsed: 65.10666 seconds  
Estimated time remaining: 11.19916 minutes

Program running...  
Iteration: 266  
Percentage completed: 8.8667%  
Time elapsed: 65.26535 seconds  
Estimated time remaining: 11.18017 minutes

Program running...  
Iteration: 267  
Percentage completed: 8.9000%  
Time elapsed: 65.42297 seconds  
Estimated time remaining: 11.16111 minutes

Program running...  
Iteration: 268  
Percentage completed: 8.9333%  
Time elapsed: 65.58851 seconds  
Estimated time remaining: 11.14352 minutes

Program running...  
Iteration: 269  
Percentage completed: 8.9667%  
Time elapsed: 65.74272 seconds  
Estimated time remaining: 11.12412 minutes

Program running...  
Iteration: 270  
Percentage completed: 9.0000%  
Time elapsed: 65.90037 seconds  
Estimated time remaining: 11.10543 minutes

Program running...

Program running...  
Iteration: 271  
Percentage completed: 9.0333%  
Time elapsed: 66.76837 seconds  
Estimated time remaining: 11.20608 minutes

Program running...  
Iteration: 272  
Percentage completed: 9.0667%  
Time elapsed: 66.92490 seconds  
Estimated time remaining: 11.18695 minutes

Program running...  
Iteration: 273  
Percentage completed: 9.1000%  
Time elapsed: 67.08103 seconds  
Estimated time remaining: 11.16788 minutes

Program running...  
Iteration: 274  
Percentage completed: 9.1333%  
Time elapsed: 67.23629 seconds  
Estimated time remaining: 11.14879 minutes

Program running...  
Iteration: 275  
Percentage completed: 9.1667%  
Time elapsed: 67.39365 seconds  
Estimated time remaining: 11.13016 minutes

Program running...  
Iteration: 276  
Percentage completed: 9.2000%  
Time elapsed: 67.55871 seconds  
Estimated time remaining: 11.11292 minutes

Program running...  
Iteration: 277  
Percentage completed: 9.2333%  
Time elapsed: 67.71589 seconds  
Estimated time remaining: 11.09449 minutes

```
Program running...
Iteration: 278
Percentage completed: 9.2667%
Time elapsed: 67.87286 seconds
Estimated time remaining: 11.07613 minutes
```

```
Program running...
Iteration: 279
Percentage completed: 9.3000%
Time elapsed: 68.03043 seconds
Estimated time remaining: 11.05799 minutes
```

```
Program running...
Iteration: 280
Percentage completed: 9.3333%
Time elapsed: 68.18634 seconds
Estimated time remaining: 11.03969 minutes
```

```
Program running...
Iteration: 281
Percentage completed: 9.3667%
Time elapsed: 69.05611 seconds
Estimated time remaining: 11.13663 minutes
```

```
Program running...
Iteration: 282
Percentage completed: 9.4000%
Time elapsed: 69.21252 seconds
Estimated time remaining: 11.11818 minutes
```

```
Program running...
Iteration: 283
Percentage completed: 9.4333%
Time elapsed: 69.36910 seconds
Estimated time remaining: 11.09987 minutes
```

```
Program running...
Iteration: 284
Percentage completed: 9.4667%
Time elapsed: 69.52560 seconds
```

Estimated time remaining: 11.08166 minutes

Program running...  
Iteration: 285  
Percentage completed: 9.5000%  
Time elapsed: 69.68631 seconds  
Estimated time remaining: 11.06423 minutes

Program running...  
Iteration: 286  
Percentage completed: 9.5333%  
Time elapsed: 69.84415 seconds  
Estimated time remaining: 11.04645 minutes

Program running...  
Iteration: 287  
Percentage completed: 9.5667%  
Time elapsed: 70.00141 seconds  
Estimated time remaining: 11.02868 minutes

Program running...  
Iteration: 288  
Percentage completed: 9.6000%  
Time elapsed: 70.15557 seconds  
Estimated time remaining: 11.01052 minutes

Program running...  
Iteration: 289  
Percentage completed: 9.6333%  
Time elapsed: 70.31486 seconds  
Estimated time remaining: 10.99329 minutes

Program running...  
Iteration: 290  
Percentage completed: 9.6667%  
Time elapsed: 70.47415 seconds  
Estimated time remaining: 10.97615 minutes

Program running...  
Iteration: 291  
- - - - -

```
Percentage completed: 9.0000%
Time elapsed: 71.33914 seconds
Estimated time remaining: 11.06860 minutes
```

```
Program running...
Iteration: 292
Percentage completed: 9.7333%
Time elapsed: 71.49689 seconds
Estimated time remaining: 11.05100 minutes
```

```
Program running...
Iteration: 293
Percentage completed: 9.7667%
Time elapsed: 71.65391 seconds
Estimated time remaining: 11.03340 minutes
```

```
Program running...
Iteration: 294
Percentage completed: 9.8000%
Time elapsed: 71.80885 seconds
Estimated time remaining: 11.01557 minutes
```

```
Program running...
Iteration: 295
Percentage completed: 9.8333%
Time elapsed: 71.96298 seconds
Estimated time remaining: 10.99773 minutes
```

```
Program running...
Iteration: 296
Percentage completed: 9.8667%
Time elapsed: 72.11978 seconds
Estimated time remaining: 10.98040 minutes
```

```
Program running...
Iteration: 297
Percentage completed: 9.9000%
Time elapsed: 72.27400 seconds
Estimated time remaining: 10.96277 minutes
```

```
Program running...
Iteration: 298
Percentage completed: 9.9333%
Time elapsed: 72.43110 seconds
Estimated time remaining: 10.94568 minutes
```

```
Program running...
Iteration: 299
Percentage completed: 9.9667%
Time elapsed: 72.58550 seconds
Estimated time remaining: 10.92828 minutes
```

```
Program running...
Iteration: 300
Percentage completed: 10.0000%
Time elapsed: 72.74073 seconds
Estimated time remaining: 10.91111 minutes
```

```
Program running...
Iteration: 301
Percentage completed: 10.0333%
Time elapsed: 73.61132 seconds
Estimated time remaining: 11.00094 minutes
```

```
Program running...
Iteration: 302
Percentage completed: 10.0667%
Time elapsed: 73.76547 seconds
Estimated time remaining: 10.98340 minutes
```

```
Program running...
Iteration: 303
Percentage completed: 10.1000%
Time elapsed: 73.92137 seconds
Estimated time remaining: 10.96622 minutes
```

```
Program running...
Iteration: 304
Percentage completed: 10.1333%
Time elapsed: 74.07587 seconds
Estimated time remaining: 10.94893 minutes
```

```
Program running...
Iteration: 305
Percentage completed: 10.1667%
Time elapsed: 74.23552 seconds
Estimated time remaining: 10.93250 minutes
```

```
Program running...
Iteration: 306
Percentage completed: 10.2000%
Time elapsed: 74.39604 seconds
Estimated time remaining: 10.91628 minutes
```

```
Program running...
Iteration: 307
Percentage completed: 10.2333%
Time elapsed: 74.54938 seconds
Estimated time remaining: 10.89910 minutes
```

```
Program running...
Iteration: 308
Percentage completed: 10.2667%
Time elapsed: 74.70513 seconds
Estimated time remaining: 10.88237 minutes
```

```
Program running...
Iteration: 309
Percentage completed: 10.3000%
Time elapsed: 74.86104 seconds
Estimated time remaining: 10.86575 minutes
```

```
Program running...
Iteration: 310
Percentage completed: 10.3333%
Time elapsed: 75.01639 seconds
Estimated time remaining: 10.84914 minutes
```

```
Program running...
Iteration: 311
Percentage completed: 10.3667%
```

```
Time elapsed: 75.89475 seconds
Estimated time remaining: 10.93681 minutes
```

```
Program running...
Iteration: 312
Percentage completed: 10.4000%
Time elapsed: 76.04996 seconds
Estimated time remaining: 10.91999 minutes
```

```
Program running...
Iteration: 313
Percentage completed: 10.4333%
Time elapsed: 76.20445 seconds
Estimated time remaining: 10.90316 minutes
```

```
Program running...
Iteration: 314
Percentage completed: 10.4667%
Time elapsed: 76.36022 seconds
Estimated time remaining: 10.88660 minutes
```

```
Program running...
Iteration: 315
Percentage completed: 10.5000%
Time elapsed: 76.51630 seconds
Estimated time remaining: 10.87017 minutes
```

```
Program running...
Iteration: 316
Percentage completed: 10.5333%
Time elapsed: 76.67387 seconds
Estimated time remaining: 10.85404 minutes
```

```
Program running...
Iteration: 317
Percentage completed: 10.5667%
Time elapsed: 76.83322 seconds
Estimated time remaining: 10.83825 minutes
```

```
Program running...
```

```
Iteration: 318
Percentage completed: 10.6000%
Time elapsed: 76.98963 seconds
Estimated time remaining: 10.82213 minutes
```

```
Program running...
Iteration: 319
Percentage completed: 10.6333%
Time elapsed: 77.14532 seconds
Estimated time remaining: 10.80599 minutes
```

```
Program running...
Iteration: 320
Percentage completed: 10.6667%
Time elapsed: 77.30089 seconds
Estimated time remaining: 10.78991 minutes
```

```
Program running...
Iteration: 321
Percentage completed: 10.7000%
Time elapsed: 78.16064 seconds
Estimated time remaining: 10.87188 minutes
```

```
Program running...
Iteration: 322
Percentage completed: 10.7333%
Time elapsed: 78.31763 seconds
Estimated time remaining: 10.85583 minutes
```

```
Program running...
Iteration: 323
Percentage completed: 10.7667%
Time elapsed: 78.47296 seconds
Estimated time remaining: 10.83963 minutes
```

```
Program running...
Iteration: 324
Percentage completed: 10.8000%
Time elapsed: 78.62824 seconds
Estimated time remaining: 10.82352 minutes
```

```
Program running...
Iteration: 325
Percentage completed: 10.8333%
Time elapsed: 78.78791 seconds
Estimated time remaining: 10.80808 minutes
```

```
Program running...
Iteration: 326
Percentage completed: 10.8667%
Time elapsed: 78.94695 seconds
Estimated time remaining: 10.79264 minutes
```

```
Program running...
Iteration: 327
Percentage completed: 10.9000%
Time elapsed: 79.11188 seconds
Estimated time remaining: 10.77809 minutes
```

```
Program running...
Iteration: 328
Percentage completed: 10.9333%
Time elapsed: 79.26684 seconds
Estimated time remaining: 10.76224 minutes
```

```
Program running...
Iteration: 329
Percentage completed: 10.9667%
Time elapsed: 79.42263 seconds
Estimated time remaining: 10.74660 minutes
```

```
Program running...
Iteration: 330
Percentage completed: 11.0000%
Time elapsed: 79.58042 seconds
Estimated time remaining: 10.73130 minutes
```

```
Program running...
Iteration: 331
Percentage completed: 11.0333%
Time elapsed: 80.45022 seconds
Estimated time remaining: 10.70700 minutes
```

Estimated time remaining: 10.8116 minutes

Program running...  
Iteration: 332  
Percentage completed: 11.0667%  
Time elapsed: 80.60717 seconds  
Estimated time remaining: 10.79618 minutes

Program running...  
Iteration: 333  
Percentage completed: 11.1000%  
Time elapsed: 80.76383 seconds  
Estimated time remaining: 10.78064 minutes

Program running...  
Iteration: 334  
Percentage completed: 11.1333%  
Time elapsed: 80.91912 seconds  
Estimated time remaining: 10.76499 minutes

Program running...  
Iteration: 335  
Percentage completed: 11.1667%  
Time elapsed: 81.08097 seconds  
Estimated time remaining: 10.75029 minutes

Program running...  
Iteration: 336  
Percentage completed: 11.2000%  
Time elapsed: 81.23964 seconds  
Estimated time remaining: 10.73524 minutes

Program running...  
Iteration: 337  
Percentage completed: 11.2333%  
Time elapsed: 81.39660 seconds  
Estimated time remaining: 10.72004 minutes

Program running...  
Iteration: 338  
Percentage completed: 11.2667%

```
Time elapsed: 81.55411 seconds
Estimated time remaining: 10.70498 minutes
```

```
Program running...
Iteration: 339
Percentage completed: 11.3000%
Time elapsed: 81.71136 seconds
Estimated time remaining: 10.68997 minutes
```

```
Program running...
Iteration: 340
Percentage completed: 11.3333%
Time elapsed: 81.86601 seconds
Estimated time remaining: 10.67468 minutes
```

```
Program running...
Iteration: 341
Percentage completed: 11.3667%
Time elapsed: 82.72150 seconds
Estimated time remaining: 10.75056 minutes
```

```
Program running...
Iteration: 342
Percentage completed: 11.4000%
Time elapsed: 82.87770 seconds
Estimated time remaining: 10.73533 minutes
```

```
Program running...
Iteration: 343
Percentage completed: 11.4333%
Time elapsed: 83.03483 seconds
Estimated time remaining: 10.72029 minutes
```

```
Program running...
Iteration: 344
Percentage completed: 11.4667%
Time elapsed: 83.19176 seconds
Estimated time remaining: 10.70529 minutes
```

```
Program running...
Iteration: 345
Percentage completed: 11.5000%
Time elapsed: 83.35075 seconds
Estimated time remaining: 10.69064 minutes
```

```
Program running...
Iteration: 346
Percentage completed: 11.5333%
Time elapsed: 83.50841 seconds
Estimated time remaining: 10.67588 minutes
```

```
Program running...
Iteration: 347
Percentage completed: 11.5667%
Time elapsed: 83.66316 seconds
Estimated time remaining: 10.66082 minutes
```

```
Program running...
Iteration: 348
Percentage completed: 11.6000%
Time elapsed: 83.81906 seconds
Estimated time remaining: 10.64598 minutes
```

```
Program running...
Iteration: 349
Percentage completed: 11.6333%
Time elapsed: 83.97607 seconds
Estimated time remaining: 10.63135 minutes
```

```
Program running...
Iteration: 350
Percentage completed: 11.6667%
Time elapsed: 84.13073 seconds
Estimated time remaining: 10.61650 minutes
```

```
Program running...
Iteration: 351
Percentage completed: 11.7000%
Time elapsed: 84.99835 seconds
Estimated time remaining: 10.69139 minutes
```

```
Program running...
Iteration: 352
Percentage completed: 11.7333%
Time elapsed: 85.15336 seconds
Estimated time remaining: 10.67642 minutes
```

```
Program running...
Iteration: 353
Percentage completed: 11.7667%
Time elapsed: 85.30761 seconds
Estimated time remaining: 10.66144 minutes
```

```
Program running...
Iteration: 354
Percentage completed: 11.8000%
Time elapsed: 85.46494 seconds
Estimated time remaining: 10.64690 minutes
```

```
Program running...
Iteration: 355
Percentage completed: 11.8333%
Time elapsed: 85.62542 seconds
Estimated time remaining: 10.63283 minutes
```

```
Program running...
Iteration: 356
Percentage completed: 11.8667%
Time elapsed: 85.78143 seconds
Estimated time remaining: 10.61826 minutes
```

```
Program running...
Iteration: 357
Percentage completed: 11.9000%
Time elapsed: 85.94238 seconds
Estimated time remaining: 10.60437 minutes
```

```
Program running...
Iteration: 358
Percentage completed: 11.9333%
Time elapsed: 86.00605 seconds
```

Time elapsed: 86.25285 seconds  
Estimated time remaining: 10.58976 minutes

Program running...  
Iteration: 359  
Percentage completed: 11.9667%  
Time elapsed: 86.25285 seconds  
Estimated time remaining: 10.57538 minutes

Program running...  
Iteration: 360  
Percentage completed: 12.0000%  
Time elapsed: 86.40966 seconds  
Estimated time remaining: 10.56118 minutes

Program running...  
Iteration: 361  
Percentage completed: 12.0333%  
Time elapsed: 87.28037 seconds  
Estimated time remaining: 10.63402 minutes

Program running...  
Iteration: 362  
Percentage completed: 12.0667%  
Time elapsed: 87.43646 seconds  
Estimated time remaining: 10.61958 minutes

Program running...  
Iteration: 363  
Percentage completed: 12.1000%  
Time elapsed: 87.59098 seconds  
Estimated time remaining: 10.60502 minutes

Program running...  
Iteration: 364  
Percentage completed: 12.1333%  
Time elapsed: 87.74615 seconds  
Estimated time remaining: 10.59060 minutes

Program running...  
Iteration: 365

Iteration: 365  
Percentage completed: 12.1667%  
Time elapsed: 87.90428 seconds  
Estimated time remaining: 10.57661 minutes

Program running...  
Iteration: 366  
Percentage completed: 12.2000%  
Time elapsed: 88.05982 seconds  
Estimated time remaining: 10.56236 minutes

Program running...  
Iteration: 367  
Percentage completed: 12.2333%  
Time elapsed: 88.21503 seconds  
Estimated time remaining: 10.54814 minutes

Program running...  
Iteration: 368  
Percentage completed: 12.2667%  
Time elapsed: 88.36973 seconds  
Estimated time remaining: 10.53393 minutes

Program running...  
Iteration: 369  
Percentage completed: 12.3000%  
Time elapsed: 88.52755 seconds  
Estimated time remaining: 10.52014 minutes

Program running...  
Iteration: 370  
Percentage completed: 12.3333%  
Time elapsed: 88.68541 seconds  
Estimated time remaining: 10.50642 minutes

Program running...  
Iteration: 371  
Percentage completed: 12.3667%  
Time elapsed: 89.57245 seconds  
Estimated time remaining: 10.57888 minutes

```
Program running...
Iteration: 372
Percentage completed: 12.4000%
Time elapsed: 89.73019 seconds
Estimated time remaining: 10.56500 minutes
```

```
Program running...
Iteration: 373
Percentage completed: 12.4333%
Time elapsed: 89.88845 seconds
Estimated time remaining: 10.55125 minutes
```

```
Program running...
Iteration: 374
Percentage completed: 12.4667%
Time elapsed: 90.04656 seconds
Estimated time remaining: 10.53753 minutes
```

```
Program running...
Iteration: 375
Percentage completed: 12.5000%
Time elapsed: 90.20580 seconds
Estimated time remaining: 10.52401 minutes
```

```
Program running...
Iteration: 376
Percentage completed: 12.5333%
Time elapsed: 90.36360 seconds
Estimated time remaining: 10.51037 minutes
```

```
Program running...
Iteration: 377
Percentage completed: 12.5667%
Time elapsed: 90.52277 seconds
Estimated time remaining: 10.49696 minutes
```

```
Program running...
Iteration: 378
Percentage completed: 12.6000%
Time elapsed: 90.67901 seconds
Estimated time remaining: 10.48326 minutes
```

-----  
Program running...  
Iteration: 379  
Percentage completed: 12.6333%  
Time elapsed: 90.83695 seconds  
Estimated time remaining: 10.46982 minutes

Program running...  
Iteration: 380  
Percentage completed: 12.6667%  
Time elapsed: 90.99220 seconds  
Estimated time remaining: 10.45612 minutes

Program running...  
Iteration: 381  
Percentage completed: 12.7000%  
Time elapsed: 91.85384 seconds  
Estimated time remaining: 10.52341 minutes

Program running...  
Iteration: 382  
Percentage completed: 12.7333%  
Time elapsed: 92.01008 seconds  
Estimated time remaining: 10.50970 minutes

Program running...  
Iteration: 383  
Percentage completed: 12.7667%  
Time elapsed: 92.16680 seconds  
Estimated time remaining: 10.49610 minutes

Program running...  
Iteration: 384  
Percentage completed: 12.8000%  
Time elapsed: 92.32194 seconds  
Estimated time remaining: 10.48239 minutes

Program running...  
Iteration: 385  
Percentage completed: 12.8333%

```
Time elapsed: 92.47969 seconds
Estimated time remaining: 10.46902 minutes
```

```
Program running...
Iteration: 386
Percentage completed: 12.8667%
Time elapsed: 92.63651 seconds
Estimated time remaining: 10.45560 minutes
```

```
Program running...
Iteration: 387
Percentage completed: 12.9000%
Time elapsed: 92.79460 seconds
Estimated time remaining: 10.44239 minutes
```

```
Program running...
Iteration: 388
Percentage completed: 12.9333%
Time elapsed: 92.94895 seconds
Estimated time remaining: 10.42881 minutes
```

```
Program running...
Iteration: 389
Percentage completed: 12.9667%
Time elapsed: 93.10649 seconds
Estimated time remaining: 10.41564 minutes
```

```
Program running...
Iteration: 390
Percentage completed: 13.0000%
Time elapsed: 93.26246 seconds
Estimated time remaining: 10.40235 minutes
```

```
Program running...
Iteration: 391
Percentage completed: 13.0333%
Time elapsed: 94.12583 seconds
Estimated time remaining: 10.46779 minutes
```

```
Program running...
Iteration: 392
Percentage completed: 13.0667%
Time elapsed: 94.28248 seconds
Estimated time remaining: 10.45445 minutes
```

```
Program running...
Iteration: 393
Percentage completed: 13.1000%
Time elapsed: 94.44176 seconds
Estimated time remaining: 10.44146 minutes
```

```
Program running...
Iteration: 394
Percentage completed: 13.1333%
Time elapsed: 94.60023 seconds
Estimated time remaining: 10.42843 minutes
```

```
Program running...
Iteration: 395
Percentage completed: 13.1667%
Time elapsed: 94.76075 seconds
Estimated time remaining: 10.41568 minutes
```

```
Program running...
Iteration: 396
Percentage completed: 13.2000%
Time elapsed: 94.91811 seconds
Estimated time remaining: 10.40264 minutes
```

```
Program running...
Iteration: 397
Percentage completed: 13.2333%
Time elapsed: 95.07557 seconds
Estimated time remaining: 10.38966 minutes
```

```
Program running...
Iteration: 398
Percentage completed: 13.2667%
Time elapsed: 95.23360 seconds
Estimated time remaining: 10.37679 minutes
```

```
Program running...
  Iteration: 399
  Percentage completed: 13.3000%
  Time elapsed: 95.38891 seconds
  Estimated time remaining: 10.36368 minutes
```

```
Program running...
  Iteration: 400
  Percentage completed: 13.3333%
  Time elapsed: 95.54410 seconds
  Estimated time remaining: 10.35061 minutes
```

```
Program running...
  Iteration: 401
  Percentage completed: 13.3667%
  Time elapsed: 96.40474 seconds
  Estimated time remaining: 10.41379 minutes
```

```
Program running...
  Iteration: 402
  Percentage completed: 13.4000%
  Time elapsed: 96.56005 seconds
  Estimated time remaining: 10.40062 minutes
```

```
Program running...
  Iteration: 403
  Percentage completed: 13.4333%
  Time elapsed: 96.72117 seconds
  Estimated time remaining: 10.38812 minutes
```

```
Program running...
  Iteration: 404
  Percentage completed: 13.4667%
  Time elapsed: 96.87798 seconds
  Estimated time remaining: 10.37521 minutes
```

```
Program running...
  Iteration: 405
  Percentage completed: 13.5000%
  Time elapsed: 97.03576 seconds
```

Estimated time remaining: 10.36246 minutes

Program running...  
Iteration: 406  
Percentage completed: 13.5333%  
Time elapsed: 97.19396 seconds  
Estimated time remaining: 10.34980 minutes

Program running...  
Iteration: 407  
Percentage completed: 13.5667%  
Time elapsed: 97.34951 seconds  
Estimated time remaining: 10.33691 minutes

Program running...  
Iteration: 408  
Percentage completed: 13.6000%  
Time elapsed: 97.50523 seconds  
Estimated time remaining: 10.32408 minutes

Program running...  
Iteration: 409  
Percentage completed: 13.6333%  
Time elapsed: 97.66657 seconds  
Estimated time remaining: 10.31190 minutes

Program running...  
Iteration: 410  
Percentage completed: 13.6667%  
Time elapsed: 97.82222 seconds  
Estimated time remaining: 10.29917 minutes

Program running...  
Iteration: 411  
Percentage completed: 13.7000%  
Time elapsed: 98.69768 seconds  
Estimated time remaining: 10.36205 minutes

Program running...  
Iteration: 412

```
Percentage completed: 13.7333%
Time elapsed: 98.85472 seconds
Estimated time remaining: 10.34935 minutes
```

```
Program running...
Iteration: 413
Percentage completed: 13.7667%
Time elapsed: 99.01202 seconds
Estimated time remaining: 10.33673 minutes
```

```
Program running...
Iteration: 414
Percentage completed: 13.8000%
Time elapsed: 99.16989 seconds
Estimated time remaining: 10.32421 minutes
```

```
Program running...
Iteration: 415
Percentage completed: 13.8333%
Time elapsed: 99.32925 seconds
Estimated time remaining: 10.31189 minutes
```

```
Program running...
Iteration: 416
Percentage completed: 13.8667%
Time elapsed: 99.48644 seconds
Estimated time remaining: 10.29940 minutes
```

```
Program running...
Iteration: 417
Percentage completed: 13.9000%
Time elapsed: 99.64773 seconds
Estimated time remaining: 10.28737 minutes
```

```
Program running...
Iteration: 418
Percentage completed: 13.9333%
Time elapsed: 99.80557 seconds
Estimated time remaining: 10.27504 minutes
```

```
Program running...
Iteration: 419
Percentage completed: 13.9667%
Time elapsed: 99.96205 seconds
Estimated time remaining: 10.26261 minutes
```

```
Program running...
Iteration: 420
Percentage completed: 14.0000%
Time elapsed: 100.12124 seconds
Estimated time remaining: 10.25051 minutes
```

```
Program running...
Iteration: 421
Percentage completed: 14.0333%
Time elapsed: 100.99679 seconds
Estimated time remaining: 10.31159 minutes
```

```
Program running...
Iteration: 422
Percentage completed: 14.0667%
Time elapsed: 101.15369 seconds
Estimated time remaining: 10.29914 minutes
```

```
Program running...
Iteration: 423
Percentage completed: 14.1000%
Time elapsed: 101.30951 seconds
Estimated time remaining: 10.28663 minutes
```

```
Program running...
Iteration: 424
Percentage completed: 14.1333%
Time elapsed: 101.46592 seconds
Estimated time remaining: 10.27422 minutes
```

```
Program running...
Iteration: 425
Percentage completed: 14.1667%
Time elapsed: 101.62278 seconds
Estimated time remaining: 10.26191 minutes
```

```
Program running...
Iteration: 426
Percentage completed: 14.2000%
Time elapsed: 101.78085 seconds
Estimated time remaining: 10.24976 minutes
```

```
Program running...
Iteration: 427
Percentage completed: 14.2333%
Time elapsed: 101.96042 seconds
Estimated time remaining: 10.23982 minutes
```

```
Program running...
Iteration: 428
Percentage completed: 14.2667%
Time elapsed: 102.11856 seconds
Estimated time remaining: 10.22776 minutes
```

```
Program running...
Iteration: 429
Percentage completed: 14.3000%
Time elapsed: 102.27390 seconds
Estimated time remaining: 10.21547 minutes
```

```
Program running...
Iteration: 430
Percentage completed: 14.3333%
Time elapsed: 102.42876 seconds
Estimated time remaining: 10.20317 minutes
```

```
Program running...
Iteration: 431
Percentage completed: 14.3667%
Time elapsed: 103.29745 seconds
Estimated time remaining: 10.26184 minutes
```

```
Program running...
Iteration: 432
Percentage completed: 14.4000%
Time elapsed: 103.45497 seconds
```

Time elapsed: 103.61393 seconds  
Estimated time remaining: 10.24970 minutes

Program running...  
Iteration: 433  
Percentage completed: 14.4333%  
Time elapsed: 103.61393 seconds  
Estimated time remaining: 10.23776 minutes

Program running...  
Iteration: 434  
Percentage completed: 14.4667%  
Time elapsed: 103.76861 seconds  
Estimated time remaining: 10.22543 minutes

Program running...  
Iteration: 435  
Percentage completed: 14.5000%  
Time elapsed: 103.92545 seconds  
Estimated time remaining: 10.21336 minutes

Program running...  
Iteration: 436  
Percentage completed: 14.5333%  
Time elapsed: 104.08479 seconds  
Estimated time remaining: 10.20158 minutes

Program running...  
Iteration: 437  
Percentage completed: 14.5667%  
Time elapsed: 104.24279 seconds  
Estimated time remaining: 10.18971 minutes

Program running...  
Iteration: 438  
Percentage completed: 14.6000%  
Time elapsed: 104.39923 seconds  
Estimated time remaining: 10.17773 minutes

Program running...

-  
Iteration: 439  
Percentage completed: 14.6333%  
Time elapsed: 104.55521 seconds  
Estimated time remaining: 10.16575 minutes

Program running...  
Iteration: 440  
Percentage completed: 14.6667%  
Time elapsed: 104.71066 seconds  
Estimated time remaining: 10.15376 minutes

Program running...  
Iteration: 441  
Percentage completed: 14.7000%  
Time elapsed: 105.57810 seconds  
Estimated time remaining: 10.21067 minutes

Program running...  
Iteration: 442  
Percentage completed: 14.7333%  
Time elapsed: 105.73872 seconds  
Estimated time remaining: 10.19908 minutes

Program running...  
Iteration: 443  
Percentage completed: 14.7667%  
Time elapsed: 105.89866 seconds  
Estimated time remaining: 10.18747 minutes

Program running...  
Iteration: 444  
Percentage completed: 14.8000%  
Time elapsed: 106.05540 seconds  
Estimated time remaining: 10.17558 minutes

Program running...  
Iteration: 445  
  
Percentage completed: 14.8333%  
Time elapsed: 106.21272 seconds  
Estimated time remaining: 10.16380 minutes

```
Program running...
Iteration: 446
Percentage completed: 14.8667%
Time elapsed: 106.37134 seconds
Estimated time remaining: 10.15218 minutes
```

```
Program running...
Iteration: 447
Percentage completed: 14.9000%
Time elapsed: 106.52576 seconds
Estimated time remaining: 10.14020 minutes
```

```
Program running...
Iteration: 448
Percentage completed: 14.9333%
Time elapsed: 106.68277 seconds
Estimated time remaining: 10.12851 minutes
```

```
Program running...
Iteration: 449
Percentage completed: 14.9667%
Time elapsed: 106.83971 seconds
Estimated time remaining: 10.11685 minutes
```

```
Program running...
Iteration: 450
Percentage completed: 15.0000%
Time elapsed: 106.99620 seconds
Estimated time remaining: 10.10520 minutes
```

```
Program running...
Iteration: 451
Percentage completed: 15.0333%
Time elapsed: 107.86025 seconds
Estimated time remaining: 10.16023 minutes
```

```
Program running...
Iteration: 452
Percentage completed: 15.0667%
Time elapsed: 108.01602 seconds
Estimated time remaining: 10.14021 minutes
```

Estimated time remaining: 10.14841 minutes

Program running...  
Iteration: 453  
Percentage completed: 15.1000%  
Time elapsed: 108.16939 seconds  
Estimated time remaining: 10.13640 minutes

Program running...  
Iteration: 454  
Percentage completed: 15.1333%  
Time elapsed: 108.32611 seconds  
Estimated time remaining: 10.12475 minutes

Program running...  
Iteration: 455  
Percentage completed: 15.1667%  
Time elapsed: 108.48226 seconds  
Estimated time remaining: 10.11309 minutes

Program running...  
Iteration: 456  
Percentage completed: 15.2000%  
Time elapsed: 108.64257 seconds  
Estimated time remaining: 10.10185 minutes

Program running...  
Iteration: 457  
Percentage completed: 15.2333%  
Time elapsed: 108.79754 seconds  
Estimated time remaining: 10.09016 minutes

Program running...  
Iteration: 458  
Percentage completed: 15.2667%  
Time elapsed: 108.95811 seconds  
Estimated time remaining: 10.07902 minutes

Program running...  
Iteration: 459  
Percentage completed: 15.3000%

```
Percentage completed: 15.3000%  
Time elapsed: 109.11343 seconds  
Estimated time remaining: 10.06744 minutes
```

```
Program running...  
Iteration: 460  
Percentage completed: 15.3333%  
Time elapsed: 109.27224 seconds  
Estimated time remaining: 10.05621 minutes
```

```
Program running...  
Iteration: 461  
Percentage completed: 15.3667%  
Time elapsed: 110.15563 seconds  
Estimated time remaining: 10.11154 minutes
```

```
Program running...  
Iteration: 462  
Percentage completed: 15.4000%  
Time elapsed: 110.31206 seconds  
Estimated time remaining: 10.10000 minutes
```

```
Program running...  
Iteration: 463  
Percentage completed: 15.4333%  
Time elapsed: 110.46826 seconds  
Estimated time remaining: 10.08848 minutes
```

```
Program running...  
Iteration: 464  
Percentage completed: 15.4667%  
Time elapsed: 110.62791 seconds  
Estimated time remaining: 10.07731 minutes
```

```
Program running...  
Iteration: 465  
Percentage completed: 15.5000%  
Time elapsed: 110.78643 seconds  
Estimated time remaining: 10.06608 minutes
```

```
Program running...
Iteration: 466
Percentage completed: 15.5333%
Time elapsed: 110.94495 seconds
Estimated time remaining: 10.05488 minutes
```

```
Program running...
Iteration: 467
Percentage completed: 15.5667%
Time elapsed: 111.10212 seconds
Estimated time remaining: 10.04360 minutes
```

```
Program running...
Iteration: 468
Percentage completed: 15.6000%
Time elapsed: 111.25859 seconds
Estimated time remaining: 10.03229 minutes
```

```
Program running...
Iteration: 469
Percentage completed: 15.6333%
Time elapsed: 111.41517 seconds
Estimated time remaining: 10.02103 minutes
```

```
Program running...
Iteration: 470
Percentage completed: 15.6667%
Time elapsed: 111.57121 seconds
Estimated time remaining: 10.00976 minutes
```

```
Program running...
Iteration: 471
Percentage completed: 15.7000%
Time elapsed: 112.44772 seconds
Estimated time remaining: 10.06300 minutes
```

```
Program running...
Iteration: 472
Percentage completed: 15.7333%
Time elapsed: 112.60080 seconds
Estimated time remaining: 10.05137 minutes
```

```
Program running...
Iteration: 473
Percentage completed: 15.7667%
Time elapsed: 112.75647 seconds
Estimated time remaining: 10.04001 minutes
```

```
Program running...
Iteration: 474
Percentage completed: 15.8000%
Time elapsed: 112.91194 seconds
Estimated time remaining: 10.02868 minutes
```

```
Program running...
Iteration: 475
Percentage completed: 15.8333%
Time elapsed: 113.07006 seconds
Estimated time remaining: 10.01761 minutes
```

```
Program running...
Iteration: 476
Percentage completed: 15.8667%
Time elapsed: 113.22434 seconds
Estimated time remaining: 10.00624 minutes
```

```
Program running...
Iteration: 477
Percentage completed: 15.9000%
Time elapsed: 113.38242 seconds
Estimated time remaining: 9.99524 minutes
```

```
Program running...
Iteration: 478
Percentage completed: 15.9333%
Time elapsed: 113.53804 seconds
Estimated time remaining: 9.98406 minutes
```

```
Program running...
Iteration: 479
Percentage completed: 15.9667%
Time elapsed: 113.69333 seconds
```

Estimated time remaining: 9.97289 minutes

Program running...  
Iteration: 480  
Percentage completed: 16.0000%  
Time elapsed: 113.84801 seconds  
Estimated time remaining: 9.96170 minutes

Program running...  
Iteration: 481  
Percentage completed: 16.0333%  
Time elapsed: 114.71501 seconds  
Estimated time remaining: 10.01272 minutes

Program running...  
Iteration: 482  
Percentage completed: 16.0667%  
Time elapsed: 114.87103 seconds  
Estimated time remaining: 10.00156 minutes

Program running...  
Iteration: 483  
Percentage completed: 16.1000%  
Time elapsed: 115.02330 seconds  
Estimated time remaining: 9.99012 minutes

Program running...  
Iteration: 484  
Percentage completed: 16.1333%  
Time elapsed: 115.17689 seconds  
Estimated time remaining: 9.97882 minutes

Program running...  
Iteration: 485  
Percentage completed: 16.1667%  
Time elapsed: 115.33279 seconds  
Estimated time remaining: 9.96776 minutes

Program running...  
- - - - -

```
Iteration: 486
Percentage completed: 16.2000%
Time elapsed: 115.49491 seconds
Estimated time remaining: 9.95728 minutes
```

```
Program running...
Iteration: 487
Percentage completed: 16.2333%
Time elapsed: 115.65227 seconds
Estimated time remaining: 9.94641 minutes
```

```
Program running...
Iteration: 488
Percentage completed: 16.2667%
Time elapsed: 115.80775 seconds
Estimated time remaining: 9.93542 minutes
```

```
Program running...
Iteration: 489
Percentage completed: 16.3000%
Time elapsed: 115.96691 seconds
Estimated time remaining: 9.92477 minutes
```

```
Program running...
Iteration: 490
Percentage completed: 16.3333%
Time elapsed: 116.13326 seconds
Estimated time remaining: 9.91478 minutes
```

```
Program running...
Iteration: 491
Percentage completed: 16.3667%
Time elapsed: 117.00418 seconds
Estimated time remaining: 9.96481 minutes
```

```
Program running...
Iteration: 492
Percentage completed: 16.4000%
Time elapsed: 117.16067 seconds
Estimated time remaining: 9.95389 minutes
```

```
Program running...
  Iteration: 493
  Percentage completed: 16.4333%
  Time elapsed: 117.31636 seconds
  Estimated time remaining: 9.94294 minutes
```

```
Program running...
  Iteration: 494
  Percentage completed: 16.4667%
  Time elapsed: 117.47168 seconds
  Estimated time remaining: 9.93198 minutes
```

```
Program running...
  Iteration: 495
  Percentage completed: 16.5000%
  Time elapsed: 117.63002 seconds
  Estimated time remaining: 9.92132 minutes
```

```
Program running...
  Iteration: 496
  Percentage completed: 16.5333%
  Time elapsed: 117.79122 seconds
  Estimated time remaining: 9.91093 minutes
```

```
Program running...
  Iteration: 497
  Percentage completed: 16.5667%
  Time elapsed: 117.94750 seconds
  Estimated time remaining: 9.90015 minutes
```

```
Program running...
  Iteration: 498
  Percentage completed: 16.6000%
  Time elapsed: 118.10420 seconds
  Estimated time remaining: 9.88945 minutes
```

```
Program running...
  Iteration: 499
  Percentage completed: 16.6333%
  Time elapsed: 118.26074 seconds
  Estimated time remaining: 9.87876 minutes
```

Program running...  
Iteration: 500  
Percentage completed: 16.6667%  
Time elapsed: 118.41665 seconds  
Estimated time remaining: 9.86805 minutes

Program running...  
Iteration: 501  
Percentage completed: 16.7000%  
Time elapsed: 119.28571 seconds  
Estimated time remaining: 9.91666 minutes

Program running...  
Iteration: 502  
Percentage completed: 16.7333%  
Time elapsed: 119.44049 seconds  
Estimated time remaining: 9.90579 minutes

Program running...  
Iteration: 503  
Percentage completed: 16.7667%  
Time elapsed: 119.59623 seconds  
Estimated time remaining: 9.89502 minutes

Program running...  
Iteration: 504  
Percentage completed: 16.8000%  
Time elapsed: 119.75387 seconds  
Estimated time remaining: 9.88444 minutes

Program running...  
Iteration: 505  
Percentage completed: 16.8333%  
Time elapsed: 119.91445 seconds  
Estimated time remaining: 9.87414 minutes

Program running...  
Iteration: 506  
Percentage completed: 16.8667%

Time elapsed: 120.07321 seconds  
Estimated time remaining: 9.86372 minutes

Program running...  
Iteration: 507  
Percentage completed: 16.9000%  
Time elapsed: 120.23384 seconds  
Estimated time remaining: 9.85348 minutes

Program running...  
Iteration: 508  
Percentage completed: 16.9333%  
Time elapsed: 120.39549 seconds  
Estimated time remaining: 9.84336 minutes

Program running...  
Iteration: 509  
Percentage completed: 16.9667%  
Time elapsed: 120.55389 seconds  
Estimated time remaining: 9.83300 minutes

Program running...  
Iteration: 510  
Percentage completed: 17.0000%  
Time elapsed: 120.71127 seconds  
Estimated time remaining: 9.82258 minutes

Program running...  
Iteration: 511  
Percentage completed: 17.0333%  
Time elapsed: 121.58186 seconds  
Estimated time remaining: 9.87010 minutes

Program running...  
Iteration: 512  
Percentage completed: 17.0667%  
Time elapsed: 121.74016 seconds  
Estimated time remaining: 9.85968 minutes

Program running...

Program running...

Iteration: 513  
Percentage completed: 17.1000%  
Time elapsed: 121.90981 seconds  
Estimated time remaining: 9.85022 minutes

Program running...

Iteration: 514  
Percentage completed: 17.1333%  
Time elapsed: 122.07841 seconds  
Estimated time remaining: 9.84069 minutes

Program running...

Iteration: 515  
Percentage completed: 17.1667%  
Time elapsed: 122.23904 seconds  
Estimated time remaining: 9.83055 minutes

Program running...

Iteration: 516  
Percentage completed: 17.2000%  
Time elapsed: 122.39899 seconds  
Estimated time remaining: 9.82038 minutes

Program running...

Iteration: 517  
Percentage completed: 17.2333%  
Time elapsed: 122.55703 seconds  
Estimated time remaining: 9.81009 minutes

Program running...

Iteration: 518  
Percentage completed: 17.2667%  
Time elapsed: 122.71520 seconds  
Estimated time remaining: 9.79984 minutes

Program running...

Iteration: 519  
Percentage completed: 17.3000%  
Time elapsed: 122.87266 seconds  
Estimated time remaining: 9.78956 minutes

```
Program running...
Iteration: 520
Percentage completed: 17.3333%
Time elapsed: 123.02973 seconds
Estimated time remaining: 9.77928 minutes
```

```
Program running...
Iteration: 521
Percentage completed: 17.3667%
Time elapsed: 123.90628 seconds
Estimated time remaining: 9.82609 minutes
```

```
Program running...
Iteration: 522
Percentage completed: 17.4000%
Time elapsed: 124.06245 seconds
Estimated time remaining: 9.81567 minutes
```

```
Program running...
Iteration: 523
Percentage completed: 17.4333%
Time elapsed: 124.21646 seconds
Estimated time remaining: 9.80510 minutes
```

```
Program running...
Iteration: 524
Percentage completed: 17.4667%
Time elapsed: 124.37227 seconds
Estimated time remaining: 9.79471 minutes
```

```
Program running...
Iteration: 525
Percentage completed: 17.5000%
Time elapsed: 124.53031 seconds
Estimated time remaining: 9.78452 minutes
```

```
Program running...
Iteration: 526
Percentage completed: 17.5333%
Time elapsed: 124.69336 seconds
Estimated time remaining: 9.77176 minutes
```

ESTIMATED TIME REMAINING: 9.7747 MINUTES

Program running...  
Iteration: 527  
Percentage completed: 17.5667%  
Time elapsed: 124.85329 seconds  
Estimated time remaining: 9.76477 minutes

Program running...  
Iteration: 528  
Percentage completed: 17.6000%  
Time elapsed: 125.00891 seconds  
Estimated time remaining: 9.75448 minutes

Program running...  
Iteration: 529  
Percentage completed: 17.6333%  
Time elapsed: 125.16740 seconds  
Estimated time remaining: 9.74444 minutes

Program running...  
Iteration: 530  
Percentage completed: 17.6667%  
Time elapsed: 125.32406 seconds  
Estimated time remaining: 9.73429 minutes

Program running...  
Iteration: 531  
Percentage completed: 17.7000%  
Time elapsed: 126.18947 seconds  
Estimated time remaining: 9.77909 minutes

Program running...  
Iteration: 532  
Percentage completed: 17.7333%  
Time elapsed: 126.34373 seconds  
Estimated time remaining: 9.76868 minutes

Program running...  
Iteration: 533

```
-----  
Percentage completed: 17.7667%  
Time elapsed: 126.49946 seconds  
Estimated time remaining: 9.75842 minutes
```

```
Program running...  
Iteration: 534  
Percentage completed: 17.8000%  
Time elapsed: 126.65477 seconds  
Estimated time remaining: 9.74815 minutes
```

```
Program running...  
Iteration: 535  
Percentage completed: 17.8333%  
Time elapsed: 126.81377 seconds  
Estimated time remaining: 9.73819 minutes
```

```
Program running...  
Iteration: 536  
Percentage completed: 17.8667%  
Time elapsed: 126.97141 seconds  
Estimated time remaining: 9.72816 minutes
```

```
Program running...  
Iteration: 537  
Percentage completed: 17.9000%  
Time elapsed: 127.12590 seconds  
Estimated time remaining: 9.71791 minutes
```

```
Program running...  
Iteration: 538  
Percentage completed: 17.9333%  
Time elapsed: 127.28102 seconds  
Estimated time remaining: 9.70774 minutes
```

```
Program running...  
Iteration: 539  
Percentage completed: 17.9667%  
Time elapsed: 127.43472 seconds  
Estimated time remaining: 9.69749 minutes
```

```
Program running...
Iteration: 540
Percentage completed: 18.0000%
Time elapsed: 127.58916 seconds
Estimated time remaining: 9.68732 minutes
```

```
Program running...
Iteration: 541
Percentage completed: 18.0333%
Time elapsed: 128.45168 seconds
Estimated time remaining: 9.73083 minutes
```

```
Program running...
Iteration: 542
Percentage completed: 18.0667%
Time elapsed: 128.60679 seconds
Estimated time remaining: 9.72065 minutes
```

```
Program running...
Iteration: 543
Percentage completed: 18.1000%
Time elapsed: 128.76553 seconds
Estimated time remaining: 9.71077 minutes
```

```
Program running...
Iteration: 544
Percentage completed: 18.1333%
Time elapsed: 128.92277 seconds
Estimated time remaining: 9.70080 minutes
```

```
Program running...
Iteration: 545
Percentage completed: 18.1667%
Time elapsed: 129.09746 seconds
Estimated time remaining: 9.69218 minutes
```

```
Program running...
Iteration: 546
Percentage completed: 18.2000%
Time elapsed: 129.25293 seconds
Estimated time remaining: 9.68213 minutes
```

```
Program running...
Iteration: 547
Percentage completed: 18.2333%
Time elapsed: 129.40831 seconds
Estimated time remaining: 9.67211 minutes
```

```
Program running...
Iteration: 548
Percentage completed: 18.2667%
Time elapsed: 129.56436 seconds
Estimated time remaining: 9.66216 minutes
```

```
Program running...
Iteration: 549
Percentage completed: 18.3000%
Time elapsed: 129.71858 seconds
Estimated time remaining: 9.65210 minutes
```

```
Program running...
Iteration: 550
Percentage completed: 18.3333%
Time elapsed: 129.87481 seconds
Estimated time remaining: 9.64222 minutes
```

```
Program running...
Iteration: 551
Percentage completed: 18.3667%
Time elapsed: 130.73676 seconds
Estimated time remaining: 9.68464 minutes
```

```
Program running...
Iteration: 552
Percentage completed: 18.4000%
Time elapsed: 130.89239 seconds
Estimated time remaining: 9.67465 minutes
```

```
Program running...
Iteration: 553
Percentage completed: 18.4333%
```

```
Time elapsed: 131.04780 seconds
Estimated time remaining: 9.66468 minutes
```

```
Program running...
Iteration: 554
Percentage completed: 18.4667%
Time elapsed: 131.20397 seconds
Estimated time remaining: 9.65478 minutes
```

```
Program running...
Iteration: 555
Percentage completed: 18.5000%
Time elapsed: 131.35958 seconds
Estimated time remaining: 9.64487 minutes
```

```
Program running...
Iteration: 556
Percentage completed: 18.5333%
Time elapsed: 131.51945 seconds
Estimated time remaining: 9.63530 minutes
```

```
Program running...
Iteration: 557
Percentage completed: 18.5667%
Time elapsed: 131.67391 seconds
Estimated time remaining: 9.62535 minutes
```

```
Program running...
Iteration: 558
Percentage completed: 18.6000%
Time elapsed: 131.83070 seconds
Estimated time remaining: 9.61561 minutes
```

```
Program running...
Iteration: 559
Percentage completed: 18.6333%
Time elapsed: 131.98672 seconds
Estimated time remaining: 9.60583 minutes
```

```
Program running...
```

```
Iteration: 560
Percentage completed: 18.6667%
Time elapsed: 132.14376 seconds
Estimated time remaining: 9.59615 minutes
```

```
Program running...
Iteration: 561
Percentage completed: 18.7000%
Time elapsed: 133.00538 seconds
Estimated time remaining: 9.63755 minutes
```

```
Program running...
Iteration: 562
Percentage completed: 18.7333%
Time elapsed: 133.16430 seconds
Estimated time remaining: 9.62795 minutes
```

```
Program running...
Iteration: 563
Percentage completed: 18.7667%
Time elapsed: 133.31880 seconds
Estimated time remaining: 9.61805 minutes
```

```
Program running...
Iteration: 564
Percentage completed: 18.8000%
Time elapsed: 133.48062 seconds
Estimated time remaining: 9.60871 minutes
```

```
Program running...
Iteration: 565
Percentage completed: 18.8333%
Time elapsed: 133.64107 seconds
Estimated time remaining: 9.59929 minutes
```

```
Program running...
Iteration: 566
Percentage completed: 18.8667%
Time elapsed: 133.79978 seconds
Estimated time remaining: 9.58977 minutes
```

```
Program running...
Iteration: 567
Percentage completed: 18.9000%
Time elapsed: 133.95816 seconds
Estimated time remaining: 9.58025 minutes
```

```
Program running...
Iteration: 568
Percentage completed: 18.9333%
Time elapsed: 134.11503 seconds
Estimated time remaining: 9.57065 minutes
```

```
Program running...
Iteration: 569
Percentage completed: 18.9667%
Time elapsed: 134.26943 seconds
Estimated time remaining: 9.56089 minutes
```

```
Program running...
Iteration: 570
Percentage completed: 19.0000%
Time elapsed: 134.42763 seconds
Estimated time remaining: 9.55144 minutes
```

```
Program running...
Iteration: 571
Percentage completed: 19.0333%
Time elapsed: 135.28985 seconds
Estimated time remaining: 9.59191 minutes
```

```
Program running...
Iteration: 572
Percentage completed: 19.0667%
Time elapsed: 135.44442 seconds
Estimated time remaining: 9.58214 minutes
```

```
Program running...
Iteration: 573
Percentage completed: 19.1000%
Time elapsed: 135.59881 seconds
Estimated time remaining: 9.57238 minutes
```

```
Program running...
Iteration: 574
Percentage completed: 19.1333%
Time elapsed: 135.75573 seconds
Estimated time remaining: 9.56281 minutes
```

```
Program running...
Iteration: 575
Percentage completed: 19.1667%
Time elapsed: 135.91167 seconds
Estimated time remaining: 9.55321 minutes
```

```
Program running...
Iteration: 576
Percentage completed: 19.2000%
Time elapsed: 136.06965 seconds
Estimated time remaining: 9.54377 minutes
```

```
Program running...
Iteration: 577
Percentage completed: 19.2333%
Time elapsed: 136.22444 seconds
Estimated time remaining: 9.53414 minutes
```

```
Program running...
Iteration: 578
Percentage completed: 19.2667%
Time elapsed: 136.37958 seconds
Estimated time remaining: 9.52455 minutes
```

```
Program running...
Iteration: 579
Percentage completed: 19.3000%
Time elapsed: 136.53381 seconds
Estimated time remaining: 9.51492 minutes
```

```
Program running...
Iteration: 580
```

```
Percentage completed: 19.3333%
Time elapsed: 136.69426 seconds
Estimated time remaining: 9.50575 minutes
```

```
Program running...
Iteration: 581
Percentage completed: 19.3667%
Time elapsed: 137.56326 seconds
Estimated time remaining: 9.54577 minutes
```

```
Program running...
Iteration: 582
Percentage completed: 19.4000%
Time elapsed: 137.71518 seconds
Estimated time remaining: 9.53595 minutes
```

```
Program running...
Iteration: 583
Percentage completed: 19.4333%
Time elapsed: 137.87211 seconds
Estimated time remaining: 9.52650 minutes
```

```
Program running...
Iteration: 584
Percentage completed: 19.4667%
Time elapsed: 138.02750 seconds
Estimated time remaining: 9.51696 minutes
```

```
Program running...
Iteration: 585
Percentage completed: 19.5000%
Time elapsed: 138.18256 seconds
Estimated time remaining: 9.50743 minutes
```

```
Program running...
Iteration: 586
Percentage completed: 19.5333%
Time elapsed: 138.34147 seconds
Estimated time remaining: 9.49819 minutes
```

```
Program running...
  Iteration: 587
  Percentage completed: 19.5667%
  Time elapsed: 138.49641 seconds
  Estimated time remaining: 9.48869 minutes
```

```
Program running...
  Iteration: 588
  Percentage completed: 19.6000%
  Time elapsed: 138.65151 seconds
  Estimated time remaining: 9.47923 minutes
```

```
Program running...
  Iteration: 589
  Percentage completed: 19.6333%
  Time elapsed: 138.80895 seconds
  Estimated time remaining: 9.46996 minutes
```

```
Program running...
  Iteration: 590
  Percentage completed: 19.6667%
  Time elapsed: 138.96485 seconds
  Estimated time remaining: 9.46060 minutes
```

```
Program running...
  Iteration: 591
  Percentage completed: 19.7000%
  Time elapsed: 139.83067 seconds
  Estimated time remaining: 9.49949 minutes
```

```
Program running...
  Iteration: 592
  Percentage completed: 19.7333%
  Time elapsed: 139.98769 seconds
  Estimated time remaining: 9.49016 minutes
```

```
Program running...
  Iteration: 593
  Percentage completed: 19.7667%
  Time elapsed: 140.14262 seconds
  Estimated time remaining: 9.48070 minutes
```

```
Program running...
  Iteration: 594
  Percentage completed: 19.8000%
  Time elapsed: 140.29912 seconds
  Estimated time remaining: 9.47137 minutes
```

```
Program running...
  Iteration: 595
  Percentage completed: 19.8333%
  Time elapsed: 140.46081 seconds
  Estimated time remaining: 9.46241 minutes
```

```
Program running...
  Iteration: 596
  Percentage completed: 19.8667%
  Time elapsed: 140.61633 seconds
  Estimated time remaining: 9.45307 minutes
```

```
Program running...
  Iteration: 597
  Percentage completed: 19.9000%
  Time elapsed: 140.77332 seconds
  Estimated time remaining: 9.44384 minutes
```

```
Program running...
  Iteration: 598
  Percentage completed: 19.9333%
  Time elapsed: 140.92864 seconds
  Estimated time remaining: 9.43452 minutes
```

```
Program running...
  Iteration: 599
  Percentage completed: 19.9667%
  Time elapsed: 141.08525 seconds
  Estimated time remaining: 9.42531 minutes
```

```
Program running...
  Iteration: 600
  Percentage completed: 20.0000%
  Time elapsed: 141.24844 seconds
```

-----  
Estimated time remaining: 9.41656 minutes

Program running...  
Iteration: 601  
Percentage completed: 20.0333%  
Time elapsed: 142.12562 seconds  
Estimated time remaining: 9.45533 minutes

Program running...  
Iteration: 602  
Percentage completed: 20.0667%  
Time elapsed: 142.30932 seconds  
Estimated time remaining: 9.44789 minutes

Program running...  
Iteration: 603  
Percentage completed: 20.1000%  
Time elapsed: 142.50594 seconds  
Estimated time remaining: 9.44131 minutes

Program running...  
Iteration: 604  
Percentage completed: 20.1333%  
Time elapsed: 142.67132 seconds  
Estimated time remaining: 9.43268 minutes

Program running...  
Iteration: 605  
Percentage completed: 20.1667%  
Time elapsed: 142.83514 seconds  
Estimated time remaining: 9.42397 minutes

Program running...  
Iteration: 606  
Percentage completed: 20.2000%  
Time elapsed: 142.99491 seconds  
Estimated time remaining: 9.41501 minutes

Program running...  
Iteration: 607

```
Iteration: 607  
Percentage completed: 20.2333%  
Time elapsed: 143.15078 seconds  
Estimated time remaining: 9.40581 minutes
```

```
Program running...  
Iteration: 608  
Percentage completed: 20.2667%  
Time elapsed: 143.30680 seconds  
Estimated time remaining: 9.39665 minutes
```

```
Program running...  
Iteration: 609  
Percentage completed: 20.3000%  
Time elapsed: 143.46338 seconds  
Estimated time remaining: 9.38754 minutes
```

```
Program running...  
Iteration: 610  
Percentage completed: 20.3333%  
Time elapsed: 143.61955 seconds  
Estimated time remaining: 9.37843 minutes
```

```
Program running...  
Iteration: 611  
Percentage completed: 20.3667%  
Time elapsed: 144.47712 seconds  
Estimated time remaining: 9.41505 minutes
```

```
Program running...  
Iteration: 612  
Percentage completed: 20.4000%  
Time elapsed: 144.63345 seconds  
Estimated time remaining: 9.40590 minutes
```

```
Program running...  
Iteration: 613  
Percentage completed: 20.4333%  
Time elapsed: 144.78896 seconds  
Estimated time remaining: 9.39672 minutes
```

```
Program running...
  Iteration: 614
  Percentage completed: 20.4667%
  Time elapsed: 144.94484 seconds
  Estimated time remaining: 9.38758 minutes
```

```
Program running...
  Iteration: 615
  Percentage completed: 20.5000%
  Time elapsed: 145.09992 seconds
  Estimated time remaining: 9.37841 minutes
```

```
Program running...
  Iteration: 616
  Percentage completed: 20.5333%
  Time elapsed: 145.26232 seconds
  Estimated time remaining: 9.36973 minutes
```

```
Program running...
  Iteration: 617
  Percentage completed: 20.5667%
  Time elapsed: 145.41905 seconds
  Estimated time remaining: 9.36071 minutes
```

```
Program running...
  Iteration: 618
  Percentage completed: 20.6000%
  Time elapsed: 145.57354 seconds
  Estimated time remaining: 9.35157 minutes
```

```
Program running...
  Iteration: 619
  Percentage completed: 20.6333%
  Time elapsed: 145.73154 seconds
  Estimated time remaining: 9.34267 minutes
```

```
Program running...
  Iteration: 620
  Percentage completed: 20.6667%
  Time elapsed: 145.88782 seconds
  Estimated time remaining: 9.33368 minutes
```

```
Program running...
Iteration: 621
Percentage completed: 20.7000%
Time elapsed: 146.75132 seconds
Estimated time remaining: 9.36987 minutes
```

```
Program running...
Iteration: 622
Percentage completed: 20.7333%
Time elapsed: 146.90860 seconds
Estimated time remaining: 9.36089 minutes
```

```
Program running...
Iteration: 623
Percentage completed: 20.7667%
Time elapsed: 147.06400 seconds
Estimated time remaining: 9.35182 minutes
```

```
Program running...
Iteration: 624
Percentage completed: 20.8000%
Time elapsed: 147.21906 seconds
Estimated time remaining: 9.34275 minutes
```

```
Program running...
Iteration: 625
Percentage completed: 20.8333%
Time elapsed: 147.37659 seconds
Estimated time remaining: 9.33385 minutes
```

```
Program running...
Iteration: 626
Percentage completed: 20.8667%
Time elapsed: 147.53254 seconds
Estimated time remaining: 9.32487 minutes
```

```
Program running...
Iteration: 627
Percentage completed: 20.9000%
```

Percentage completed: 20.0000%  
Time elapsed: 147.68620 seconds  
Estimated time remaining: 9.31577 minutes

Program running...  
Iteration: 628  
Percentage completed: 20.9333%  
Time elapsed: 147.84251 seconds  
Estimated time remaining: 9.30686 minutes

Program running...  
Iteration: 629  
Percentage completed: 20.9667%  
Time elapsed: 148.00064 seconds  
Estimated time remaining: 9.29808 minutes

Program running...  
Iteration: 630  
Percentage completed: 21.0000%  
Time elapsed: 148.15848 seconds  
Estimated time remaining: 9.28930 minutes

Program running...  
Iteration: 631  
Percentage completed: 21.0333%  
Time elapsed: 149.01574 seconds  
Estimated time remaining: 9.32431 minutes

Program running...  
Iteration: 632  
Percentage completed: 21.0667%  
Time elapsed: 149.17136 seconds  
Estimated time remaining: 9.31534 minutes

Program running...  
Iteration: 633  
Percentage completed: 21.1000%  
Time elapsed: 149.32588 seconds  
Estimated time remaining: 9.30633 minutes

```
Program running...
Iteration: 634
Percentage completed: 21.1333%
Time elapsed: 149.48003 seconds
Estimated time remaining: 9.29731 minutes
```

```
Program running...
Iteration: 635
Percentage completed: 21.1667%
Time elapsed: 149.63558 seconds
Estimated time remaining: 9.28840 minutes
```

```
Program running...
Iteration: 636
Percentage completed: 21.2000%
Time elapsed: 149.79554 seconds
Estimated time remaining: 9.27979 minutes
```

```
Program running...
Iteration: 637
Percentage completed: 21.2333%
Time elapsed: 149.95174 seconds
Estimated time remaining: 9.27096 minutes
```

```
Program running...
Iteration: 638
Percentage completed: 21.2667%
Time elapsed: 150.10544 seconds
Estimated time remaining: 9.26199 minutes
```

```
Program running...
Iteration: 639
Percentage completed: 21.3000%
Time elapsed: 150.26306 seconds
Estimated time remaining: 9.25329 minutes
```

```
Program running...
Iteration: 640
Percentage completed: 21.3333%
Time elapsed: 150.41880 seconds
Estimated time remaining: 9.24449 minutes
```

```
Program running...
  Iteration: 641
  Percentage completed: 21.3667%
  Time elapsed: 151.27911 seconds
  Estimated time remaining: 9.27892 minutes
```

```
Program running...
  Iteration: 642
  Percentage completed: 21.4000%
  Time elapsed: 151.43441 seconds
  Estimated time remaining: 9.27005 minutes
```

```
Program running...
  Iteration: 643
  Percentage completed: 21.4333%
  Time elapsed: 151.59008 seconds
  Estimated time remaining: 9.26122 minutes
```

```
Program running...
  Iteration: 644
  Percentage completed: 21.4667%
  Time elapsed: 151.74777 seconds
  Estimated time remaining: 9.25253 minutes
```

```
Program running...
  Iteration: 645
  Percentage completed: 21.5000%
  Time elapsed: 151.90171 seconds
  Estimated time remaining: 9.24363 minutes
```

```
Program running...
  Iteration: 646
  Percentage completed: 21.5333%
  Time elapsed: 152.05972 seconds
  Estimated time remaining: 9.23500 minutes
```

```
Program running...
  Iteration: 647
  Percentage completed: 21.5667%
  Time elapsed: 152.21376 seconds
```

Estimated time remaining: 9.22614 minutes

Program running...  
Iteration: 648  
Percentage completed: 21.6000%  
Time elapsed: 152.36872 seconds  
Estimated time remaining: 9.21737 minutes

Program running...  
Iteration: 649  
Percentage completed: 21.6333%  
Time elapsed: 152.52640 seconds  
Estimated time remaining: 9.20877 minutes

Program running...  
Iteration: 650  
Percentage completed: 21.6667%  
Time elapsed: 152.68072 seconds  
Estimated time remaining: 9.19999 minutes

Program running...  
Iteration: 651  
Percentage completed: 21.7000%  
Time elapsed: 153.54429 seconds  
Estimated time remaining: 9.23388 minutes

Program running...  
Iteration: 652  
Percentage completed: 21.7333%  
Time elapsed: 153.69871 seconds  
Estimated time remaining: 9.22506 minutes

Program running...  
Iteration: 653  
Percentage completed: 21.7667%  
Time elapsed: 153.85512 seconds  
Estimated time remaining: 9.21638 minutes

Program running...  
Iteration: 654

Percentage completed: 21.8000%  
Time elapsed: 154.01292 seconds  
Estimated time remaining: 9.20780 minutes

Program running...  
Iteration: 655  
Percentage completed: 21.8333%  
Time elapsed: 154.17152 seconds  
Estimated time remaining: 9.19929 minutes

Program running...  
Iteration: 656  
Percentage completed: 21.8667%  
Time elapsed: 154.33137 seconds  
Estimated time remaining: 9.19087 minutes

Program running...  
Iteration: 657  
Percentage completed: 21.9000%  
Time elapsed: 154.48714 seconds  
Estimated time remaining: 9.18223 minutes

Program running...  
Iteration: 658  
Percentage completed: 21.9333%  
Time elapsed: 154.64422 seconds  
Estimated time remaining: 9.17368 minutes

Program running...  
Iteration: 659  
Percentage completed: 21.9667%  
Time elapsed: 154.80105 seconds  
Estimated time remaining: 9.16513 minutes

Program running...  
Iteration: 660  
Percentage completed: 22.0000%  
Time elapsed: 154.96140 seconds  
Estimated time remaining: 9.15681 minutes

```
Program running...
Iteration: 661
Percentage completed: 22.0333%
Time elapsed: 155.81938 seconds
Estimated time remaining: 9.18965 minutes
```

```
Program running...
Iteration: 662
Percentage completed: 22.0667%
Time elapsed: 155.97415 seconds
Estimated time remaining: 9.18095 minutes
```

```
Program running...
Iteration: 663
Percentage completed: 22.1000%
Time elapsed: 156.13092 seconds
Estimated time remaining: 9.17240 minutes
```

```
Program running...
Iteration: 664
Percentage completed: 22.1333%
Time elapsed: 156.28830 seconds
Estimated time remaining: 9.16389 minutes
```

```
Program running...
Iteration: 665
Percentage completed: 22.1667%
Time elapsed: 156.44412 seconds
Estimated time remaining: 9.15531 minutes
```

```
Program running...
Iteration: 666
Percentage completed: 22.2000%
Time elapsed: 156.60101 seconds
Estimated time remaining: 9.14681 minutes
```

```
Program running...
Iteration: 667
Percentage completed: 22.2333%
Time elapsed: 156.75529 seconds
Estimated time remaining: 9.13818 minutes
```

```
Program running...
  Iteration: 668
  Percentage completed: 22.2667%
  Time elapsed: 156.91075 seconds
  Estimated time remaining: 9.12964 minutes
```

```
Program running...
  Iteration: 669
  Percentage completed: 22.3000%
  Time elapsed: 157.06477 seconds
  Estimated time remaining: 9.12102 minutes
```

```
Program running...
  Iteration: 670
  Percentage completed: 22.3333%
  Time elapsed: 157.21871 seconds
  Estimated time remaining: 9.11243 minutes
```

```
Program running...
  Iteration: 671
  Percentage completed: 22.3667%
  Time elapsed: 158.10522 seconds
  Estimated time remaining: 9.14622 minutes
```

```
Program running...
  Iteration: 672
  Percentage completed: 22.4000%
  Time elapsed: 158.25944 seconds
  Estimated time remaining: 9.13760 minutes
```

```
Program running...
  Iteration: 673
  Percentage completed: 22.4333%
  Time elapsed: 158.41607 seconds
  Estimated time remaining: 9.12913 minutes
```

```
Program running...
  Iteration: 674
  Percentage completed: 22.4667%
```

```
Time elapsed: 158.57248 seconds
Estimated time remaining: 9.12066 minutes
```

```
Program running...
Iteration: 675
Percentage completed: 22.5000%
Time elapsed: 158.73109 seconds
Estimated time remaining: 9.11234 minutes
```

```
Program running...
Iteration: 676
Percentage completed: 22.5333%
Time elapsed: 158.89198 seconds
Estimated time remaining: 9.10416 minutes
```

```
Program running...
Iteration: 677
Percentage completed: 22.5667%
Time elapsed: 159.04636 seconds
Estimated time remaining: 9.09563 minutes
```

```
Program running...
Iteration: 678
Percentage completed: 22.6000%
Time elapsed: 159.20026 seconds
Estimated time remaining: 9.08709 minutes
```

```
Program running...
Iteration: 679
Percentage completed: 22.6333%
Time elapsed: 159.35575 seconds
Estimated time remaining: 9.07866 minutes
```

```
Program running...
Iteration: 680
Percentage completed: 22.6667%
Time elapsed: 159.51014 seconds
Estimated time remaining: 9.07018 minutes
```

```
Program running...
Iteration: 681
Percentage completed: 22.7000%
Time elapsed: 160.37375 seconds
Estimated time remaining: 9.10197 minutes
```

```
Program running...
Iteration: 682
Percentage completed: 22.7333%
Time elapsed: 160.52853 seconds
Estimated time remaining: 9.09348 minutes
```

```
Program running...
Iteration: 683
Percentage completed: 22.7667%
Time elapsed: 160.68391 seconds
Estimated time remaining: 9.08503 minutes
```

```
Program running...
Iteration: 684
Percentage completed: 22.8000%
Time elapsed: 160.84087 seconds
Estimated time remaining: 9.07669 minutes
```

```
Program running...
Iteration: 685
Percentage completed: 22.8333%
Time elapsed: 161.00275 seconds
Estimated time remaining: 9.06864 minutes
```

```
Program running...
Iteration: 686
Percentage completed: 22.8667%
Time elapsed: 161.16049 seconds
Estimated time remaining: 9.06038 minutes
```

```
Program running...
Iteration: 687
Percentage completed: 22.9000%
Time elapsed: 161.31923 seconds
Estimated time remaining: 9.05219 minutes
```

```
Program running...
Iteration: 688
Percentage completed: 22.9333%
Time elapsed: 161.47324 seconds
Estimated time remaining: 9.04375 minutes
```

```
Program running...
Iteration: 689
Percentage completed: 22.9667%
Time elapsed: 161.62791 seconds
Estimated time remaining: 9.03537 minutes
```

```
Program running...
Iteration: 690
Percentage completed: 23.0000%
Time elapsed: 161.78531 seconds
Estimated time remaining: 9.02715 minutes
```

```
Program running...
Iteration: 691
Percentage completed: 23.0333%
Time elapsed: 162.63726 seconds
Estimated time remaining: 9.05763 minutes
```

```
Program running...
Iteration: 692
Percentage completed: 23.0667%
Time elapsed: 162.79106 seconds
Estimated time remaining: 9.04917 minutes
```

```
Program running...
Iteration: 693
Percentage completed: 23.1000%
Time elapsed: 162.94558 seconds
Estimated time remaining: 9.04077 minutes
```

```
Program running...
Iteration: 694
Percentage completed: 23.1333%
Time elapsed: 163.10131 seconds
Estimated time remaining: 9.03246 minutes
```

Program running...  
Iteration: 695  
Percentage completed: 23.1667%  
Time elapsed: 163.25732 seconds  
Estimated time remaining: 9.02417 minutes

Program running...  
Iteration: 696  
Percentage completed: 23.2000%  
Time elapsed: 163.41243 seconds  
Estimated time remaining: 9.01586 minutes

Program running...  
Iteration: 697  
Percentage completed: 23.2333%  
Time elapsed: 163.56945 seconds  
Estimated time remaining: 9.00766 minutes

Program running...  
Iteration: 698  
Percentage completed: 23.2667%  
Time elapsed: 163.72667 seconds  
Estimated time remaining: 8.99949 minutes

Program running...  
Iteration: 699  
Percentage completed: 23.3000%  
Time elapsed: 163.88601 seconds  
Estimated time remaining: 8.99146 minutes

Program running...  
Iteration: 700  
Percentage completed: 23.3333%  
Time elapsed: 164.04172 seconds  
Estimated time remaining: 8.98324 minutes

Program running...  
Iteration: 701  
Percentage completed: 23.3667%

Percentage completed: 23.366/%  
Time elapsed: 164.90489 seconds  
Estimated time remaining: 9.01370 minutes

Program running...  
Iteration: 702  
Percentage completed: 23.4000%  
Time elapsed: 165.06091 seconds  
Estimated time remaining: 9.00546 minutes

Program running...  
Iteration: 703  
Percentage completed: 23.4333%  
Time elapsed: 165.21858 seconds  
Estimated time remaining: 8.99732 minutes

Program running...  
Iteration: 704  
Percentage completed: 23.4667%  
Time elapsed: 165.37546 seconds  
Estimated time remaining: 8.98916 minutes

Program running...  
Iteration: 705  
Percentage completed: 23.5000%  
Time elapsed: 165.53569 seconds  
Estimated time remaining: 8.98119 minutes

Program running...  
Iteration: 706  
Percentage completed: 23.5333%  
Time elapsed: 165.69438 seconds  
Estimated time remaining: 8.97316 minutes

Program running...  
Iteration: 707  
Percentage completed: 23.5667%  
Time elapsed: 165.85247 seconds  
Estimated time remaining: 8.96510 minutes

```
Program running...
Iteration: 708
Percentage completed: 23.6000%
Time elapsed: 166.00879 seconds
Estimated time remaining: 8.95697 minutes
```

```
Program running...
Iteration: 709
Percentage completed: 23.6333%
Time elapsed: 166.16596 seconds
Estimated time remaining: 8.94890 minutes
```

```
Program running...
Iteration: 710
Percentage completed: 23.6667%
Time elapsed: 166.32342 seconds
Estimated time remaining: 8.94086 minutes
```

```
Program running...
Iteration: 711
Percentage completed: 23.7000%
Time elapsed: 167.18719 seconds
Estimated time remaining: 8.97073 minutes
```

```
Program running...
Iteration: 712
Percentage completed: 23.7333%
Time elapsed: 167.34027 seconds
Estimated time remaining: 8.96242 minutes
```

```
Program running...
Iteration: 713
Percentage completed: 23.7667%
Time elapsed: 167.49651 seconds
Estimated time remaining: 8.95429 minutes
```

```
Program running...
Iteration: 714
Percentage completed: 23.8000%
Time elapsed: 167.65307 seconds
Estimated time remaining: 8.94619 minutes
```

```
Program running...
Iteration: 715
Percentage completed: 23.8333%
Time elapsed: 167.80626 seconds
Estimated time remaining: 8.93793 minutes
```

```
Program running...
Iteration: 716
Percentage completed: 23.8667%
Time elapsed: 167.96286 seconds
Estimated time remaining: 8.92987 minutes
```

```
Program running...
Iteration: 717
Percentage completed: 23.9000%
Time elapsed: 168.12224 seconds
Estimated time remaining: 8.92197 minutes
```

```
Program running...
Iteration: 718
Percentage completed: 23.9333%
Time elapsed: 168.27541 seconds
Estimated time remaining: 8.91375 minutes
```

```
Program running...
Iteration: 719
Percentage completed: 23.9667%
Time elapsed: 168.43415 seconds
Estimated time remaining: 8.90585 minutes
```

```
Program running...
Iteration: 720
Percentage completed: 24.0000%
Time elapsed: 168.58781 seconds
Estimated time remaining: 8.89769 minutes
```

```
Program running...
Iteration: 721
Percentage completed: 24.0333%
Time elapsed: 168.741801 seconds
```

TIME ELAPSED: 169.44884 SECONDS  
Estimated time remaining: 8.92677 minutes

Program running...  
Iteration: 722  
Percentage completed: 24.0667%  
Time elapsed: 169.60506 seconds  
Estimated time remaining: 8.91875 minutes

Program running...  
Iteration: 723  
Percentage completed: 24.1000%  
Time elapsed: 169.76107 seconds  
Estimated time remaining: 8.91069 minutes

Program running...  
Iteration: 724  
Percentage completed: 24.1333%  
Time elapsed: 169.91745 seconds  
Estimated time remaining: 8.90267 minutes

Program running...  
Iteration: 725  
Percentage completed: 24.1667%  
Time elapsed: 170.07405 seconds  
Estimated time remaining: 8.89468 minutes

Program running...  
Iteration: 726  
Percentage completed: 24.2000%  
Time elapsed: 170.23138 seconds  
Estimated time remaining: 8.88673 minutes

Program running...  
Iteration: 727  
Percentage completed: 24.2333%  
Time elapsed: 170.38625 seconds  
Estimated time remaining: 8.87868 minutes

Program running...

Program running...  
Iteration: 728  
Percentage completed: 24.2667%  
Time elapsed: 170.54092 seconds  
Estimated time remaining: 8.87062 minutes

Program running...  
Iteration: 729  
Percentage completed: 24.3000%  
Time elapsed: 170.69800 seconds  
Estimated time remaining: 8.86271 minutes

Program running...  
Iteration: 730  
Percentage completed: 24.3333%  
Time elapsed: 170.85549 seconds  
Estimated time remaining: 8.85484 minutes

Program running...  
Iteration: 731  
Percentage completed: 24.3667%  
Time elapsed: 171.72712 seconds  
Estimated time remaining: 8.88392 minutes

Program running...  
Iteration: 732  
Percentage completed: 24.4000%  
Time elapsed: 171.88269 seconds  
Estimated time remaining: 8.87591 minutes

Program running...  
Iteration: 733  
Percentage completed: 24.4333%  
Time elapsed: 172.03821 seconds  
Estimated time remaining: 8.86791 minutes

Program running...  
Iteration: 734  
Percentage completed: 24.4667%  
Time elapsed: 172.19288 seconds  
Estimated time remaining: 8.85988 minutes

```
Program running...
Iteration: 735
Percentage completed: 24.5000%
Time elapsed: 172.34922 seconds
Estimated time remaining: 8.85195 minutes
```

```
Program running...
Iteration: 736
Percentage completed: 24.5333%
Time elapsed: 172.50659 seconds
Estimated time remaining: 8.84409 minutes
```

```
Program running...
Iteration: 737
Percentage completed: 24.5667%
Time elapsed: 172.66560 seconds
Estimated time remaining: 8.83632 minutes
```

```
Program running...
Iteration: 738
Percentage completed: 24.6000%
Time elapsed: 172.82734 seconds
Estimated time remaining: 8.82871 minutes
```

```
Program running...
Iteration: 739
Percentage completed: 24.6333%
Time elapsed: 172.98214 seconds
Estimated time remaining: 8.82076 minutes
```

```
Program running...
Iteration: 740
Percentage completed: 24.6667%
Time elapsed: 173.13619 seconds
Estimated time remaining: 8.81279 minutes
```

```
Program running...
Iteration: 741
Percentage completed: 24.7000%
Time elapsed: 174.00186 seconds
Estimated time remaining: 8.80498 minutes
```

```
Program running...
Iteration: 742
Percentage completed: 24.7333%
Time elapsed: 174.15776 seconds
Estimated time remaining: 8.83307 minutes
```

```
Program running...
Iteration: 743
Percentage completed: 24.7667%
Time elapsed: 174.31434 seconds
Estimated time remaining: 8.82520 minutes
```

```
Program running...
Iteration: 744
Percentage completed: 24.8000%
Time elapsed: 174.46932 seconds
Estimated time remaining: 8.81727 minutes
```

```
Program running...
Iteration: 745
Percentage completed: 24.8333%
Time elapsed: 174.62764 seconds
Estimated time remaining: 8.80951 minutes
```

```
Program running...
Iteration: 746
Percentage completed: 24.8667%
Time elapsed: 174.78644 seconds
Estimated time remaining: 8.80180 minutes
```

```
Program running...
Iteration: 747
Percentage completed: 24.9000%
Time elapsed: 174.94334 seconds
Estimated time remaining: 8.79400 minutes
```

```
Program running...
Iteration: 748
Percentage completed: 24.9333%
```

Time elapsed: 175.09852 seconds  
Estimated time remaining: 8.78614 minutes

Program running...  
Iteration: 749  
Percentage completed: 24.9667%  
Time elapsed: 175.25571 seconds  
Estimated time remaining: 8.77838 minutes

Program running...  
Iteration: 750  
Percentage completed: 25.0000%  
Time elapsed: 175.40900 seconds  
Estimated time remaining: 8.77045 minutes

Program running...  
Iteration: 751  
Percentage completed: 25.0333%  
Time elapsed: 176.27483 seconds  
Estimated time remaining: 8.79809 minutes

Program running...  
Iteration: 752  
Percentage completed: 25.0667%  
Time elapsed: 176.43006 seconds  
Estimated time remaining: 8.79022 minutes

Program running...  
Iteration: 753  
Percentage completed: 25.1000%  
Time elapsed: 176.58563 seconds  
Estimated time remaining: 8.78238 minutes

Program running...  
Iteration: 754  
Percentage completed: 25.1333%  
Time elapsed: 176.74092 seconds  
Estimated time remaining: 8.77454 minutes

```
Program running...
Iteration: 755
Percentage completed: 25.1667%
Time elapsed: 176.90324 seconds
Estimated time remaining: 8.76706 minutes
```

```
Program running...
Iteration: 756
Percentage completed: 25.2000%
Time elapsed: 177.05811 seconds
Estimated time remaining: 8.75922 minutes
```

```
Program running...
Iteration: 757
Percentage completed: 25.2333%
Time elapsed: 177.21218 seconds
Estimated time remaining: 8.75136 minutes
```

```
Program running...
Iteration: 758
Percentage completed: 25.2667%
Time elapsed: 177.36706 seconds
Estimated time remaining: 8.74356 minutes
```

```
Program running...
Iteration: 759
Percentage completed: 25.3000%
Time elapsed: 177.52266 seconds
Estimated time remaining: 8.73580 minutes
```

```
Program running...
Iteration: 760
Percentage completed: 25.3333%
Time elapsed: 177.67817 seconds
Estimated time remaining: 8.72805 minutes
```

```
Program running...
Iteration: 761
Percentage completed: 25.3667%
Time elapsed: 178.54717 seconds
Estimated time remaining: 8.75530 minutes
```

```
Program running...
Iteration: 762
Percentage completed: 25.4000%
Time elapsed: 178.70270 seconds
Estimated time remaining: 8.74752 minutes
```

```
Program running...
Iteration: 763
Percentage completed: 25.4333%
Time elapsed: 178.85980 seconds
Estimated time remaining: 8.73983 minutes
```

```
Program running...
Iteration: 764
Percentage completed: 25.4667%
Time elapsed: 179.01532 seconds
Estimated time remaining: 8.73207 minutes
```

```
Program running...
Iteration: 765
Percentage completed: 25.5000%
Time elapsed: 179.17319 seconds
Estimated time remaining: 8.72444 minutes
```

```
Program running...
Iteration: 766
Percentage completed: 25.5333%
Time elapsed: 179.33032 seconds
Estimated time remaining: 8.71679 minutes
```

```
Program running...
Iteration: 767
Percentage completed: 25.5667%
Time elapsed: 179.48690 seconds
Estimated time remaining: 8.70913 minutes
```

```
Program running...
Iteration: 768
Percentage completed: 25.6000%
Time elapsed: 179.64354 seconds
```

Estimated time remaining: 8.70148 minutes

Program running...  
Iteration: 769  
Percentage completed: 25.6333%  
Time elapsed: 179.80004 seconds  
Estimated time remaining: 8.69384 minutes

Program running...  
Iteration: 770  
Percentage completed: 25.6667%  
Time elapsed: 179.95699 seconds  
Estimated time remaining: 8.68623 minutes

Program running...  
Iteration: 771  
Percentage completed: 25.7000%  
Time elapsed: 180.82827 seconds  
Estimated time remaining: 8.71306 minutes

Program running...  
Iteration: 772  
Percentage completed: 25.7333%  
Time elapsed: 180.98462 seconds  
Estimated time remaining: 8.70539 minutes

Program running...  
Iteration: 773  
Percentage completed: 25.7667%  
Time elapsed: 181.14457 seconds  
Estimated time remaining: 8.69791 minutes

Program running...  
Iteration: 774  
Percentage completed: 25.8000%  
Time elapsed: 181.30292 seconds  
Estimated time remaining: 8.69036 minutes

Program running...

```
Iteration: 775
Percentage completed: 25.8333%
Time elapsed: 181.46475 seconds
Estimated time remaining: 8.68299 minutes
```

```
Program running...
Iteration: 776
Percentage completed: 25.8667%
Time elapsed: 181.62363 seconds
Estimated time remaining: 8.67549 minutes
```

```
Program running...
Iteration: 777
Percentage completed: 25.9000%
Time elapsed: 181.77972 seconds
Estimated time remaining: 8.66787 minutes
```

```
Program running...
Iteration: 778
Percentage completed: 25.9333%
Time elapsed: 181.93948 seconds
Estimated time remaining: 8.66044 minutes
```

```
Program running...
Iteration: 779
Percentage completed: 25.9667%
Time elapsed: 182.09634 seconds
Estimated time remaining: 8.65289 minutes
```

```
Program running...
Iteration: 780
Percentage completed: 26.0000%
Time elapsed: 182.25442 seconds
Estimated time remaining: 8.64540 minutes
```

```
Program running...
Iteration: 781
Percentage completed: 26.0333%
Time elapsed: 183.11443 seconds
Estimated time remaining: 8.67117 minutes
```

```
Program running...
Iteration: 782
Percentage completed: 26.0667%
Time elapsed: 183.27226 seconds
Estimated time remaining: 8.66364 minutes
```

```
Program running...
Iteration: 783
Percentage completed: 26.1000%
Time elapsed: 183.42650 seconds
Estimated time remaining: 8.65595 minutes
```

```
Program running...
Iteration: 784
Percentage completed: 26.1333%
Time elapsed: 183.58170 seconds
Estimated time remaining: 8.64832 minutes
```

```
Program running...
Iteration: 785
Percentage completed: 26.1667%
Time elapsed: 183.73790 seconds
Estimated time remaining: 8.64075 minutes
```

```
Program running...
Iteration: 786
Percentage completed: 26.2000%
Time elapsed: 183.89757 seconds
Estimated time remaining: 8.63336 minutes
```

```
Program running...
Iteration: 787
Percentage completed: 26.2333%
Time elapsed: 184.05312 seconds
Estimated time remaining: 8.62578 minutes
```

```
Program running...
Iteration: 788
Percentage completed: 26.2667%
Time elapsed: 184.21098 seconds
Estimated time remaining: 8.61833 minutes
```

```
Program running...
Iteration: 789
Percentage completed: 26.3000%
Time elapsed: 184.37120 seconds
Estimated time remaining: 8.61100 minutes
```

```
Program running...
Iteration: 790
Percentage completed: 26.3333%
Time elapsed: 184.52990 seconds
Estimated time remaining: 8.60361 minutes
```

```
Program running...
Iteration: 791
Percentage completed: 26.3667%
Time elapsed: 185.39419 seconds
Estimated time remaining: 8.62907 minutes
```

```
Program running...
Iteration: 792
Percentage completed: 26.4000%
Time elapsed: 185.54953 seconds
Estimated time remaining: 8.62149 minutes
```

```
Program running...
Iteration: 793
Percentage completed: 26.4333%
Time elapsed: 185.70273 seconds
Estimated time remaining: 8.61383 minutes
```

```
Program running...
Iteration: 794
Percentage completed: 26.4667%
Time elapsed: 185.85646 seconds
Estimated time remaining: 8.60620 minutes
```

```
Program running...
Iteration: 795
Percentage completed: 26.5000%
```

Time elapsed: 186.01172 seconds  
Estimated time remaining: 8.59865 minutes

Program running...  
Iteration: 796  
Percentage completed: 26.5333%  
Time elapsed: 186.16721 seconds  
Estimated time remaining: 8.59113 minutes

Program running...  
Iteration: 797  
Percentage completed: 26.5667%  
Time elapsed: 186.32184 seconds  
Estimated time remaining: 8.58358 minutes

Program running...  
Iteration: 798  
Percentage completed: 26.6000%  
Time elapsed: 186.47499 seconds  
Estimated time remaining: 8.57598 minutes

Program running...  
Iteration: 799  
Percentage completed: 26.6333%  
Time elapsed: 186.62914 seconds  
Estimated time remaining: 8.56843 minutes

Program running...  
Iteration: 800  
Percentage completed: 26.6667%  
Time elapsed: 186.78321 seconds  
Estimated time remaining: 8.56090 minutes

Program running...  
Iteration: 801  
Percentage completed: 26.7000%  
Time elapsed: 187.64411 seconds  
Estimated time remaining: 8.58571 minutes

Program running...  
Iteration: 802  
Percentage completed: 26.7333%  
Time elapsed: 187.79885 seconds  
Estimated time remaining: 8.57818 minutes

Program running...  
Iteration: 803  
Percentage completed: 26.7667%  
Time elapsed: 187.95654 seconds  
Estimated time remaining: 8.57079 minutes

Program running...  
Iteration: 804  
Percentage completed: 26.8000%  
Time elapsed: 188.10958 seconds  
Estimated time remaining: 8.56320 minutes

Program running...  
Iteration: 805  
Percentage completed: 26.8333%  
Time elapsed: 188.26799 seconds  
Estimated time remaining: 8.55586 minutes

Program running...  
Iteration: 806  
Percentage completed: 26.8667%  
Time elapsed: 188.42478 seconds  
Estimated time remaining: 8.54847 minutes

Program running...  
Iteration: 807  
Percentage completed: 26.9000%  
Time elapsed: 188.57987 seconds  
Estimated time remaining: 8.54101 minutes

Program running...  
Iteration: 808  
Percentage completed: 26.9333%  
Time elapsed: 188.73593 seconds  
Estimated time remaining: 8.53360 minutes

```
Program running...
Iteration: 809
Percentage completed: 26.9667%
Time elapsed: 188.89151 seconds
Estimated time remaining: 8.52619 minutes
```

```
Program running...
Iteration: 810
Percentage completed: 27.0000%
Time elapsed: 189.04650 seconds
Estimated time remaining: 8.51876 minutes
```

```
Program running...
Iteration: 811
Percentage completed: 27.0333%
Time elapsed: 189.92841 seconds
Estimated time remaining: 8.54404 minutes
```

```
Program running...
Iteration: 812
Percentage completed: 27.0667%
Time elapsed: 190.08600 seconds
Estimated time remaining: 8.53670 minutes
```

```
Program running...
Iteration: 813
Percentage completed: 27.1000%
Time elapsed: 190.24343 seconds
Estimated time remaining: 8.52936 minutes
```

```
Program running...
Iteration: 814
Percentage completed: 27.1333%
Time elapsed: 190.40152 seconds
Estimated time remaining: 8.52207 minutes
```

```
Program running...
Iteration: 815
Percentage completed: 27.1667%
Time elapsed: 190.56301 seconds
Estimated time remaining: 8.51402 minutes
```

Estimated time remaining: 8.51493 minutes

Program running...  
Iteration: 816  
Percentage completed: 27.2000%  
Time elapsed: 190.71995 seconds  
Estimated time remaining: 8.50760 minutes

Program running...  
Iteration: 817  
Percentage completed: 27.2333%  
Time elapsed: 190.87832 seconds  
Estimated time remaining: 8.50035 minutes

Program running...  
Iteration: 818  
Percentage completed: 27.2667%  
Time elapsed: 191.03615 seconds  
Estimated time remaining: 8.49309 minutes

Program running...  
Iteration: 819  
Percentage completed: 27.3000%  
Time elapsed: 191.19311 seconds  
Estimated time remaining: 8.48580 minutes

Program running...  
Iteration: 820  
Percentage completed: 27.3333%  
Time elapsed: 191.34978 seconds  
Estimated time remaining: 8.47850 minutes

Program running...  
Iteration: 821  
Percentage completed: 27.3667%  
Time elapsed: 192.21744 seconds  
Estimated time remaining: 8.50267 minutes

Program running...  
Iteration: 822

```
Iteration: 822
Percentage completed: 27.4000%
Time elapsed: 192.37275 seconds
Estimated time remaining: 8.49529 minutes
```

```
Program running...
Iteration: 823
Percentage completed: 27.4333%
Time elapsed: 192.52988 seconds
Estimated time remaining: 8.48800 minutes
```

```
Program running...
Iteration: 824
Percentage completed: 27.4667%
Time elapsed: 192.68547 seconds
Estimated time remaining: 8.48065 minutes
```

```
Program running...
Iteration: 825
Percentage completed: 27.5000%
Time elapsed: 192.84079 seconds
Estimated time remaining: 8.47331 minutes
```

```
Program running...
Iteration: 826
Percentage completed: 27.5333%
Time elapsed: 193.00216 seconds
Estimated time remaining: 8.46624 minutes
```

```
Program running...
Iteration: 827
Percentage completed: 27.5667%
Time elapsed: 193.15834 seconds
Estimated time remaining: 8.45895 minutes
```

```
Program running...
Iteration: 828
Percentage completed: 27.6000%
Time elapsed: 193.31332 seconds
Estimated time remaining: 8.45162 minutes
```

```
Program running...
Iteration: 829
Percentage completed: 27.6333%
Time elapsed: 193.46903 seconds
Estimated time remaining: 8.44433 minutes
```

```
Program running...
Iteration: 830
Percentage completed: 27.6667%
Time elapsed: 193.62247 seconds
Estimated time remaining: 8.43696 minutes
```

```
Program running...
Iteration: 831
Percentage completed: 27.7000%
Time elapsed: 194.48672 seconds
Estimated time remaining: 8.46052 minutes
```

```
Program running...
Iteration: 832
Percentage completed: 27.7333%
Time elapsed: 194.64081 seconds
Estimated time remaining: 8.45315 minutes
```

```
Program running...
Iteration: 833
Percentage completed: 27.7667%
Time elapsed: 194.79712 seconds
Estimated time remaining: 8.44588 minutes
```

```
Program running...
Iteration: 834
Percentage completed: 27.8000%
Time elapsed: 194.95094 seconds
Estimated time remaining: 8.43852 minutes
```

```
Program running...
Iteration: 835
Percentage completed: 27.8333%
Time elapsed: 195.10636 seconds
Estimated time remaining: 8.43124 minutes
```

```
Program running...
  Iteration: 836
  Percentage completed: 27.8667%
  Time elapsed: 195.26370 seconds
  Estimated time remaining: 8.42405 minutes
```

```
Program running...
  Iteration: 837
  Percentage completed: 27.9000%
  Time elapsed: 195.41895 seconds
  Estimated time remaining: 8.41679 minutes
```

```
Program running...
  Iteration: 838
  Percentage completed: 27.9333%
  Time elapsed: 195.57476 seconds
  Estimated time remaining: 8.40956 minutes
```

```
Program running...
  Iteration: 839
  Percentage completed: 27.9667%
  Time elapsed: 195.73005 seconds
  Estimated time remaining: 8.40232 minutes
```

```
Program running...
  Iteration: 840
  Percentage completed: 28.0000%
  Time elapsed: 195.89099 seconds
  Estimated time remaining: 8.39533 minutes
```

```
Program running...
  Iteration: 841
  Percentage completed: 28.0333%
  Time elapsed: 196.74951 seconds
  Estimated time remaining: 8.41820 minutes
```

```
Program running...
  Iteration: 842
  Percentage completed: 28.0667%
  Time elapsed: 196.90426 seconds
```

-----  
Estimated time remaining: 8.41091 minutes

Program running...  
Iteration: 843  
Percentage completed: 28.1000%  
Time elapsed: 197.06328 seconds  
Estimated time remaining: 8.40382 minutes

Program running...  
Iteration: 844  
Percentage completed: 28.1333%  
Time elapsed: 197.22063 seconds  
Estimated time remaining: 8.39667 minutes

Program running...  
Iteration: 845  
Percentage completed: 28.1667%  
Time elapsed: 197.37796 seconds  
Estimated time remaining: 8.38954 minutes

Program running...  
Iteration: 846  
Percentage completed: 28.2000%  
Time elapsed: 197.53553 seconds  
Estimated time remaining: 8.38242 minutes

Program running...  
Iteration: 847  
Percentage completed: 28.2333%  
Time elapsed: 197.69112 seconds  
Estimated time remaining: 8.37522 minutes

Program running...  
Iteration: 848  
Percentage completed: 28.2667%  
Time elapsed: 197.84888 seconds  
Estimated time remaining: 8.36814 minutes

Program running...

```
Iteration: 849
Percentage completed: 28.3000%
Time elapsed: 198.00466 seconds
Estimated time remaining: 8.36097 minutes
```

```
Program running...
Iteration: 850
Percentage completed: 28.3333%
Time elapsed: 198.16021 seconds
Estimated time remaining: 8.35381 minutes
```

```
Program running...
Iteration: 851
Percentage completed: 28.3667%
Time elapsed: 199.02704 seconds
Estimated time remaining: 8.37660 minutes
```

```
Program running...
Iteration: 852
Percentage completed: 28.4000%
Time elapsed: 199.18508 seconds
Estimated time remaining: 8.36951 minutes
```

```
Program running...
Iteration: 853
Percentage completed: 28.4333%
Time elapsed: 199.34251 seconds
Estimated time remaining: 8.36241 minutes
```

```
Program running...
Iteration: 854
Percentage completed: 28.4667%
Time elapsed: 199.50004 seconds
Estimated time remaining: 8.35533 minutes
```

```
Program running...
Iteration: 855
Percentage completed: 28.5000%
Time elapsed: 199.65790 seconds
Estimated time remaining: 8.34827 minutes
```

```
Program running...
Iteration: 856
Percentage completed: 28.5333%
Time elapsed: 199.81714 seconds
Estimated time remaining: 8.34127 minutes
```

```
Program running...
Iteration: 857
Percentage completed: 28.5667%
Time elapsed: 199.97263 seconds
Estimated time remaining: 8.33414 minutes
```

```
Program running...
Iteration: 858
Percentage completed: 28.6000%
Time elapsed: 200.12715 seconds
Estimated time remaining: 8.32697 minutes
```

```
Program running...
Iteration: 859
Percentage completed: 28.6333%
Time elapsed: 200.28297 seconds
Estimated time remaining: 8.31986 minutes
```

```
Program running...
Iteration: 860
Percentage completed: 28.6667%
Time elapsed: 200.46627 seconds
Estimated time remaining: 8.31391 minutes
```

```
Program running...
Iteration: 861
Percentage completed: 28.7000%
Time elapsed: 201.32816 seconds
Estimated time remaining: 8.33606 minutes
```

```
Program running...
Iteration: 862
Percentage completed: 28.7333%
Time elapsed: 201.48652 seconds
Estimated time remaining: 8.32904 minutes
```

```
Program running...
Iteration: 863
Percentage completed: 28.7667%
Time elapsed: 201.64281 seconds
Estimated time remaining: 8.32195 minutes
```

```
Program running...
Iteration: 864
Percentage completed: 28.8000%
Time elapsed: 201.80127 seconds
Estimated time remaining: 8.31496 minutes
```

```
Program running...
Iteration: 865
Percentage completed: 28.8333%
Time elapsed: 201.96031 seconds
Estimated time remaining: 8.30800 minutes
```

```
Program running...
Iteration: 866
Percentage completed: 28.8667%
Time elapsed: 202.12279 seconds
Estimated time remaining: 8.30119 minutes
```

```
Program running...
Iteration: 867
Percentage completed: 28.9000%
Time elapsed: 202.27935 seconds
Estimated time remaining: 8.29415 minutes
```

```
Program running...
Iteration: 868
Percentage completed: 28.9333%
Time elapsed: 202.43864 seconds
Estimated time remaining: 8.28723 minutes
```

```
Program running...
Iteration: 869
```

```
Percentage completed: 28.9667%
Time elapsed: 202.59477 seconds
Estimated time remaining: 8.28020 minutes
```

```
Program running...
Iteration: 870
Percentage completed: 29.0000%
Time elapsed: 202.75115 seconds
Estimated time remaining: 8.27318 minutes
```

```
Program running...
Iteration: 871
Percentage completed: 29.0333%
Time elapsed: 203.62394 seconds
Estimated time remaining: 8.29536 minutes
```

```
Program running...
Iteration: 872
Percentage completed: 29.0667%
Time elapsed: 203.78266 seconds
Estimated time remaining: 8.28841 minutes
```

```
Program running...
Iteration: 873
Percentage completed: 29.1000%
Time elapsed: 203.93817 seconds
Estimated time remaining: 8.28134 minutes
```

```
Program running...
Iteration: 874
Percentage completed: 29.1333%
Time elapsed: 204.09417 seconds
Estimated time remaining: 8.27430 minutes
```

```
Program running...
Iteration: 875
Percentage completed: 29.1667%
Time elapsed: 204.25278 seconds
Estimated time remaining: 8.26737 minutes
```

```
Program running...
Iteration: 876
Percentage completed: 29.2000%
Time elapsed: 204.41034 seconds
Estimated time remaining: 8.26042 minutes
```

```
Program running...
Iteration: 877
Percentage completed: 29.2333%
Time elapsed: 204.56493 seconds
Estimated time remaining: 8.25335 minutes
```

```
Program running...
Iteration: 878
Percentage completed: 29.2667%
Time elapsed: 204.71954 seconds
Estimated time remaining: 8.24629 minutes
```

```
Program running...
Iteration: 879
Percentage completed: 29.3000%
Time elapsed: 204.87407 seconds
Estimated time remaining: 8.23925 minutes
```

```
Program running...
Iteration: 880
Percentage completed: 29.3333%
Time elapsed: 205.03231 seconds
Estimated time remaining: 8.23236 minutes
```

```
Program running...
Iteration: 881
Percentage completed: 29.3667%
Time elapsed: 205.90600 seconds
Estimated time remaining: 8.25416 minutes
```

```
Program running...
Iteration: 882
Percentage completed: 29.4000%
Time elapsed: 206.06701 seconds
Estimated time remaining: 8.24735 minutes
```

```
Program running...
Iteration: 883
Percentage completed: 29.4333%
Time elapsed: 206.22295 seconds
Estimated time remaining: 8.24035 minutes
```

```
Program running...
Iteration: 884
Percentage completed: 29.4667%
Time elapsed: 206.37909 seconds
Estimated time remaining: 8.23337 minutes
```

```
Program running...
Iteration: 885
Percentage completed: 29.5000%
Time elapsed: 206.53812 seconds
Estimated time remaining: 8.22652 minutes
```

```
Program running...
Iteration: 886
Percentage completed: 29.5333%
Time elapsed: 206.69463 seconds
Estimated time remaining: 8.21957 minutes
```

```
Program running...
Iteration: 887
Percentage completed: 29.5667%
Time elapsed: 206.85046 seconds
Estimated time remaining: 8.21261 minutes
```

```
Program running...
Iteration: 888
Percentage completed: 29.6000%
Time elapsed: 207.00640 seconds
Estimated time remaining: 8.20566 minutes
```

```
Program running...
Iteration: 889
Percentage completed: 29.6333%
Time elapsed: 207.16472 seconds
```

Estimated time remaining: 8.19881 minutes

Program running...

Iteration: 890  
Percentage completed: 29.6667%  
Time elapsed: 207.32312 seconds  
Estimated time remaining: 8.19198 minutes

Program running...

Iteration: 891  
Percentage completed: 29.7000%  
Time elapsed: 208.19614 seconds  
Estimated time remaining: 8.21335 minutes

Program running...

Iteration: 892  
Percentage completed: 29.7333%  
Time elapsed: 208.34985 seconds  
Estimated time remaining: 8.20630 minutes

Program running...

Iteration: 893  
Percentage completed: 29.7667%  
Time elapsed: 208.50862 seconds  
Estimated time remaining: 8.19947 minutes

Program running...

Iteration: 894  
Percentage completed: 29.8000%  
Time elapsed: 208.66580 seconds  
Estimated time remaining: 8.19258 minutes

Program running...

Iteration: 895  
Percentage completed: 29.8333%  
Time elapsed: 208.82643 seconds  
Estimated time remaining: 8.18584 minutes

Program running...

Iteration: 896  
Percentage completed: 29.8667%  
Time elapsed: 208.98493 seconds  
Estimated time remaining: 8.17902 minutes

Program running...  
Iteration: 897  
Percentage completed: 29.9000%  
Time elapsed: 209.14275 seconds  
Estimated time remaining: 8.17219 minutes

Program running...  
Iteration: 898  
Percentage completed: 29.9333%  
Time elapsed: 209.29923 seconds  
Estimated time remaining: 8.16531 minutes

Program running...  
Iteration: 899  
Percentage completed: 29.9667%  
Time elapsed: 209.45459 seconds  
Estimated time remaining: 8.15840 minutes

Program running...  
Iteration: 900  
Percentage completed: 30.0000%  
Time elapsed: 209.60976 seconds  
Estimated time remaining: 8.15149 minutes

Program running...  
Iteration: 901  
Percentage completed: 30.0333%  
Time elapsed: 210.47593 seconds  
Estimated time remaining: 8.17220 minutes

Program running...  
Iteration: 902  
Percentage completed: 30.0667%  
Time elapsed: 210.63191 seconds  
Estimated time remaining: 8.16529 minutes

```
Program running...
Iteration: 903
Percentage completed: 30.1000%
Time elapsed: 210.78841 seconds
Estimated time remaining: 8.15842 minutes
```

```
Program running...
Iteration: 904
Percentage completed: 30.1333%
Time elapsed: 210.94626 seconds
Estimated time remaining: 8.15161 minutes
```

```
Program running...
Iteration: 905
Percentage completed: 30.1667%
Time elapsed: 211.10716 seconds
Estimated time remaining: 8.14493 minutes
```

```
Program running...
Iteration: 906
Percentage completed: 30.2000%
Time elapsed: 211.26469 seconds
Estimated time remaining: 8.13812 minutes
```

```
Program running...
Iteration: 907
Percentage completed: 30.2333%
Time elapsed: 211.42250 seconds
Estimated time remaining: 8.13133 minutes
```

```
Program running...
Iteration: 908
Percentage completed: 30.2667%
Time elapsed: 211.57829 seconds
Estimated time remaining: 8.12448 minutes
```

```
Program running...
Iteration: 909
Percentage completed: 30.3000%
Time elapsed: 211.73594 seconds
Estimated time remaining: 8.11771 minutes
```

```
Program running...
Iteration: 910
Percentage completed: 30.3333%
Time elapsed: 211.89050 seconds
Estimated time remaining: 8.11083 minutes
```

```
Program running...
Iteration: 911
Percentage completed: 30.3667%
Time elapsed: 212.76197 seconds
Estimated time remaining: 8.13135 minutes
```

```
Program running...
Iteration: 912
Percentage completed: 30.4000%
Time elapsed: 212.91811 seconds
Estimated time remaining: 8.12451 minutes
```

```
Program running...
Iteration: 913
Percentage completed: 30.4333%
Time elapsed: 213.07440 seconds
Estimated time remaining: 8.11767 minutes
```

```
Program running...
Iteration: 914
Percentage completed: 30.4667%
Time elapsed: 213.23448 seconds
Estimated time remaining: 8.11100 minutes
```

```
Program running...
Iteration: 915
Percentage completed: 30.5000%
Time elapsed: 213.39161 seconds
Estimated time remaining: 8.10422 minutes
```

```
Program running...
Iteration: 916
Percentage completed: 30.5333%
```

```
Percentage completed: 30.5555%  
Time elapsed: 213.54780 seconds  
Estimated time remaining: 8.09741 minutes
```

```
Program running...  
Iteration: 917  
Percentage completed: 30.5667%  
Time elapsed: 213.70343 seconds  
Estimated time remaining: 8.09059 minutes
```

```
Program running...  
Iteration: 918  
Percentage completed: 30.6000%  
Time elapsed: 213.85955 seconds  
Estimated time remaining: 8.08380 minutes
```

```
Program running...  
Iteration: 919  
Percentage completed: 30.6333%  
Time elapsed: 214.01444 seconds  
Estimated time remaining: 8.07697 minutes
```

```
Program running...  
Iteration: 920  
Percentage completed: 30.6667%  
Time elapsed: 214.17074 seconds  
Estimated time remaining: 8.07020 minutes
```

```
Program running...  
Iteration: 921  
Percentage completed: 30.7000%  
Time elapsed: 215.03737 seconds  
Estimated time remaining: 8.09017 minutes
```

```
Program running...  
Iteration: 922  
Percentage completed: 30.7333%  
Time elapsed: 215.19310 seconds  
Estimated time remaining: 8.08335 minutes
```

```
Program running...
```

```
Program running...
Iteration: 923
Percentage completed: 30.7667%
Time elapsed: 215.34807 seconds
Estimated time remaining: 8.07652 minutes
```

```
Program running...
Iteration: 924
Percentage completed: 30.8000%
Time elapsed: 215.50494 seconds
Estimated time remaining: 8.06977 minutes
```

```
Program running...
Iteration: 925
Percentage completed: 30.8333%
Time elapsed: 215.66220 seconds
Estimated time remaining: 8.06304 minutes
```

```
Program running...
Iteration: 926
Percentage completed: 30.8667%
Time elapsed: 215.81777 seconds
Estimated time remaining: 8.05626 minutes
```

```
Program running...
Iteration: 927
Percentage completed: 30.9000%
Time elapsed: 215.97141 seconds
Estimated time remaining: 8.04942 minutes
```

```
Program running...
Iteration: 928
Percentage completed: 30.9333%
Time elapsed: 216.12725 seconds
Estimated time remaining: 8.04267 minutes
```

```
Program running...
Iteration: 929
Percentage completed: 30.9667%
Time elapsed: 216.28091 seconds
Estimated time remaining: 8.03584 minutes
```

```
Program running...
  Iteration: 930
  Percentage completed: 31.0000%
  Time elapsed: 216.43593 seconds
  Estimated time remaining: 8.02907 minutes
```

```
Program running...
  Iteration: 931
  Percentage completed: 31.0333%
  Time elapsed: 217.29925 seconds
  Estimated time remaining: 8.04855 minutes
```

```
Program running...
  Iteration: 932
  Percentage completed: 31.0667%
  Time elapsed: 217.45626 seconds
  Estimated time remaining: 8.04184 minutes
```

```
Program running...
  Iteration: 933
  Percentage completed: 31.1000%
  Time elapsed: 217.61241 seconds
  Estimated time remaining: 8.03510 minutes
```

```
Program running...
  Iteration: 934
  Percentage completed: 31.1333%
  Time elapsed: 217.76862 seconds
  Estimated time remaining: 8.02837 minutes
```

```
Program running...
  Iteration: 935
  Percentage completed: 31.1667%
  Time elapsed: 217.92758 seconds
  Estimated time remaining: 8.02175 minutes
```

```
Program running...
  Iteration: 936
  Percentage completed: 31.2000%
  Time elapsed: 218.08727 seconds
  Estimated time remaining: 8.01517 minutes
```

LOCATED ON THE FORTRESS, 0.017 MILES

```
Program running...
    Iteration: 937
    Percentage completed: 31.2333%
    Time elapsed: 218.24317 seconds
    Estimated time remaining: 8.00846 minutes
```

```
Program running...
    Iteration: 938
    Percentage completed: 31.2667%
    Time elapsed: 218.39839 seconds
    Estimated time remaining: 8.00173 minutes
```

```
Program running...
    Iteration: 939
    Percentage completed: 31.3000%
    Time elapsed: 218.55519 seconds
    Estimated time remaining: 7.99507 minutes
```

```
Program running...
    Iteration: 940
    Percentage completed: 31.3333%
    Time elapsed: 218.71157 seconds
    Estimated time remaining: 7.98840 minutes
```

```
Program running...
    Iteration: 941
    Percentage completed: 31.3667%
    Time elapsed: 219.57477 seconds
    Estimated time remaining: 8.00752 minutes
```

```
Program running...

Iteration: 942
Percentage completed: 31.4000%
Time elapsed: 219.73032 seconds
Estimated time remaining: 8.00079 minutes
```

Program running...  
Iteration: 943

Program running...  
Iteration: 943  
Percentage completed: 31.4333%  
Time elapsed: 219.88861 seconds  
Estimated time remaining: 7.99418 minutes

Program running...  
Iteration: 944  
Percentage completed: 31.4667%  
Time elapsed: 220.04411 seconds  
Estimated time remaining: 7.98748 minutes

Program running...  
Iteration: 945  
Percentage completed: 31.5000%  
Time elapsed: 220.20305 seconds  
Estimated time remaining: 7.98090 minutes

Program running...  
Iteration: 946  
Percentage completed: 31.5333%  
Time elapsed: 220.36142 seconds  
Estimated time remaining: 7.97432 minutes

Program running...  
Iteration: 947  
Percentage completed: 31.5667%  
Time elapsed: 220.52101 seconds  
Estimated time remaining: 7.96779 minutes

Program running...  
Iteration: 948  
Percentage completed: 31.6000%  
Time elapsed: 220.67632 seconds  
Estimated time remaining: 7.96111 minutes

Program running...  
Iteration: 949  
Percentage completed: 31.6333%  
Time elapsed: 220.83487 seconds  
Estimated time remaining: 7.95455 minutes

```
Program running...
Iteration: 950
Percentage completed: 31.6667%
Time elapsed: 220.99367 seconds
Estimated time remaining: 7.94802 minutes
```

```
Program running...
Iteration: 951
Percentage completed: 31.7000%
Time elapsed: 221.86029 seconds
Estimated time remaining: 7.96691 minutes
```

```
Program running...
Iteration: 952
Percentage completed: 31.7333%
Time elapsed: 222.02324 seconds
Estimated time remaining: 7.96050 minutes
```

```
Program running...
Iteration: 953
Percentage completed: 31.7667%
Time elapsed: 222.17868 seconds
Estimated time remaining: 7.95382 minutes
```

```
Program running...
Iteration: 954
Percentage completed: 31.8000%
Time elapsed: 222.33617 seconds
Estimated time remaining: 7.94723 minutes
```

```
Program running...
Iteration: 955
Percentage completed: 31.8333%
Time elapsed: 222.49555 seconds
Estimated time remaining: 7.94072 minutes
```

```
Program running...
Iteration: 956
Percentage completed: 31.8667%
Time elapsed: 222.65321 seconds
Estimated time remaining: 7.93415 minutes
```

```
Program running...
  Iteration: 957
  Percentage completed: 31.9000%
  Time elapsed: 222.80923 seconds
  Estimated time remaining: 7.92754 minutes
```

```
Program running...
  Iteration: 958
  Percentage completed: 31.9333%
  Time elapsed: 222.96487 seconds
  Estimated time remaining: 7.92091 minutes
```

```
Program running...
  Iteration: 959
  Percentage completed: 31.9667%
  Time elapsed: 223.12224 seconds
  Estimated time remaining: 7.91436 minutes
```

```
Program running...
  Iteration: 960
  Percentage completed: 32.0000%
  Time elapsed: 223.27820 seconds
  Estimated time remaining: 7.90777 minutes
```

```
Program running...
  Iteration: 961
  Percentage completed: 32.0333%
  Time elapsed: 224.15210 seconds
  Estimated time remaining: 7.92657 minutes
```

```
Program running...
  Iteration: 962
  Percentage completed: 32.0667%
  Time elapsed: 224.30700 seconds
  Estimated time remaining: 7.91992 minutes
```

```
Program running...
  Iteration: 963
  Percentage completed: 32.1000%
```

Time elapsed: 224.46245 seconds  
Estimated time remaining: 7.91329 minutes

Program running...  
Iteration: 964  
Percentage completed: 32.1333%  
Time elapsed: 224.61807 seconds  
Estimated time remaining: 7.90668 minutes

Program running...  
Iteration: 965  
Percentage completed: 32.1667%  
Time elapsed: 224.77720 seconds  
Estimated time remaining: 7.90020 minutes

Program running...  
Iteration: 966  
Percentage completed: 32.2000%  
Time elapsed: 224.93332 seconds  
Estimated time remaining: 7.89362 minutes

Program running...  
Iteration: 967  
Percentage completed: 32.2333%  
Time elapsed: 225.08792 seconds  
Estimated time remaining: 7.88700 minutes

Program running...  
Iteration: 968  
Percentage completed: 32.2667%  
Time elapsed: 225.24280 seconds  
Estimated time remaining: 7.88039 minutes

Program running...  
Iteration: 969  
Percentage completed: 32.3000%  
Time elapsed: 225.39837 seconds  
Estimated time remaining: 7.87382 minutes

Program running...

Iteration: 970  
Percentage completed: 32.3333%  
Time elapsed: 225.55341 seconds  
Estimated time remaining: 7.86724 minutes

Program running...  
Iteration: 971  
Percentage completed: 32.3667%  
Time elapsed: 226.43256 seconds  
Estimated time remaining: 7.88588 minutes

Program running...  
Iteration: 972  
Percentage completed: 32.4000%  
Time elapsed: 226.58733 seconds  
Estimated time remaining: 7.87927 minutes

Program running...  
Iteration: 973  
Percentage completed: 32.4333%  
Time elapsed: 226.74157 seconds  
Estimated time remaining: 7.87265 minutes

Program running...  
Iteration: 974  
Percentage completed: 32.4667%  
Time elapsed: 226.89743 seconds  
Estimated time remaining: 7.86609 minutes

Program running...  
Iteration: 975  
Percentage completed: 32.5000%  
Time elapsed: 227.05704 seconds  
Estimated time remaining: 7.85967 minutes

Program running...  
Iteration: 976  
Percentage completed: 32.5333%  
Time elapsed: 227.21460 seconds  
Estimated time remaining: 7.85318 minutes

```
Program running...
Iteration: 977
Percentage completed: 32.5667%
Time elapsed: 227.37036 seconds
Estimated time remaining: 7.84664 minutes
```

```
Program running...
Iteration: 978
Percentage completed: 32.6000%
Time elapsed: 227.52528 seconds
Estimated time remaining: 7.84008 minutes
```

```
Program running...
Iteration: 979
Percentage completed: 32.6333%
Time elapsed: 227.67984 seconds
Estimated time remaining: 7.83352 minutes
```

```
Program running...
Iteration: 980
Percentage completed: 32.6667%
Time elapsed: 227.83639 seconds
Estimated time remaining: 7.82703 minutes
```

```
Program running...
Iteration: 981
Percentage completed: 32.7000%
Time elapsed: 228.70821 seconds
Estimated time remaining: 7.84509 minutes
```

```
Program running...
Iteration: 982
Percentage completed: 32.7333%
Time elapsed: 228.86659 seconds
Estimated time remaining: 7.83864 minutes
```

```
Program running...
Iteration: 983
Percentage completed: 32.7667%
Time elapsed: 229.02503 seconds
Estimated time remaining: 7.83220 minutes
```

```
Program running...
Iteration: 984
Percentage completed: 32.8000%
Time elapsed: 229.18274 seconds
Estimated time remaining: 7.82575 minutes
```

```
Program running...
Iteration: 985
Percentage completed: 32.8333%
Time elapsed: 229.34061 seconds
Estimated time remaining: 7.81931 minutes
```

```
Program running...
Iteration: 986
Percentage completed: 32.8667%
Time elapsed: 229.49772 seconds
Estimated time remaining: 7.81285 minutes
```

```
Program running...
Iteration: 987
Percentage completed: 32.9000%
Time elapsed: 229.65416 seconds
Estimated time remaining: 7.80638 minutes
```

```
Program running...
Iteration: 988
Percentage completed: 32.9333%
Time elapsed: 229.81198 seconds
Estimated time remaining: 7.79996 minutes
```

```
Program running...
Iteration: 989
Percentage completed: 32.9667%
Time elapsed: 229.97060 seconds
Estimated time remaining: 7.79358 minutes
```

```
Program running...
Iteration: 990
```

```
Percentage completed: 33.0000%
Time elapsed: 230.12598 seconds
Estimated time remaining: 7.78709 minutes
```

```
Program running...
Iteration: 991
Percentage completed: 33.0333%
Time elapsed: 230.98533 seconds
Estimated time remaining: 7.80440 minutes
```

```
Program running...
Iteration: 992
Percentage completed: 33.0667%
Time elapsed: 231.14052 seconds
Estimated time remaining: 7.79788 minutes
```

```
Program running...
Iteration: 993
Percentage completed: 33.1000%
Time elapsed: 231.29717 seconds
Estimated time remaining: 7.79143 minutes
```

```
Program running...
Iteration: 994
Percentage completed: 33.1333%
Time elapsed: 231.45157 seconds
Estimated time remaining: 7.78491 minutes
```

```
Program running...
Iteration: 995
Percentage completed: 33.1667%
Time elapsed: 231.60866 seconds
Estimated time remaining: 7.77848 minutes
```

```
Program running...
Iteration: 996
Percentage completed: 33.2000%
Time elapsed: 231.76673 seconds
Estimated time remaining: 7.77210 minutes
```

```
Program running...
```

Program running...

Iteration: 997  
Percentage completed: 33.2333%  
Time elapsed: 231.92376 seconds  
Estimated time remaining: 7.76568 minutes

Program running...

Iteration: 998  
Percentage completed: 33.2667%  
Time elapsed: 232.08015 seconds  
Estimated time remaining: 7.75926 minutes

Program running...

Iteration: 999  
Percentage completed: 33.3000%  
Time elapsed: 232.23589 seconds  
Estimated time remaining: 7.75282 minutes

Program running...

Iteration: 1000  
Percentage completed: 33.3333%  
Time elapsed: 232.39125 seconds  
Estimated time remaining: 7.74637 minutes

Program running...

Iteration: 1001  
Percentage completed: 33.3667%  
Time elapsed: 233.27426 seconds  
Estimated time remaining: 7.76416 minutes

Program running...

Iteration: 1002  
Percentage completed: 33.4000%  
Time elapsed: 233.43168 seconds  
Estimated time remaining: 7.75776 minutes

Program running...

Iteration: 1003  
Percentage completed: 33.4333%  
Time elapsed: 233.58715 seconds  
Estimated time remaining: 7.75130 minutes

```
Program running...
  Iteration: 1004
  Percentage completed: 33.4667%
  Time elapsed: 233.74324 seconds
  Estimated time remaining: 7.74488 minutes
```

```
Program running...
  Iteration: 1005
  Percentage completed: 33.5000%
  Time elapsed: 233.90251 seconds
  Estimated time remaining: 7.73856 minutes
```

```
Program running...
  Iteration: 1006
  Percentage completed: 33.5333%
  Time elapsed: 234.06049 seconds
  Estimated time remaining: 7.73222 minutes
```

```
Program running...
  Iteration: 1007
  Percentage completed: 33.5667%
  Time elapsed: 234.21626 seconds
  Estimated time remaining: 7.72580 minutes
```

```
Program running...
  Iteration: 1008
  Percentage completed: 33.6000%
  Time elapsed: 234.37553 seconds
  Estimated time remaining: 7.71951 minutes
```

```
Program running...
  Iteration: 1009
  Percentage completed: 33.6333%
  Time elapsed: 234.53105 seconds
  Estimated time remaining: 7.71310 minutes
```

```
Program running...
  Iteration: 1010
  Percentage completed: 33.6667%
```

```
Time elapsed: 234.68715 seconds
Estimated time remaining: 7.70672 minutes
```

```
Program running...
Iteration: 1011
Percentage completed: 33.7000%
Time elapsed: 235.55751 seconds
Estimated time remaining: 7.72377 minutes
```

```
Program running...
Iteration: 1012
Percentage completed: 33.7333%
Time elapsed: 235.71267 seconds
Estimated time remaining: 7.71734 minutes
```

```
Program running...
Iteration: 1013
Percentage completed: 33.7667%
Time elapsed: 235.86928 seconds
Estimated time remaining: 7.71096 minutes
```

```
Program running...
Iteration: 1014
Percentage completed: 33.8000%
Time elapsed: 236.02537 seconds
Estimated time remaining: 7.70457 minutes
```

```
Program running...
Iteration: 1015
Percentage completed: 33.8333%
Time elapsed: 236.18648 seconds
Estimated time remaining: 7.69836 minutes
```

```
Program running...
Iteration: 1016
Percentage completed: 33.8667%
Time elapsed: 236.34323 seconds
Estimated time remaining: 7.69201 minutes
```

```
Program running...
```

```
Iteration: 1017
Percentage completed: 33.9000%
Time elapsed: 236.49836 seconds
Estimated time remaining: 7.68561 minutes
```

```
Program running...
Iteration: 1018
Percentage completed: 33.9333%
Time elapsed: 236.65350 seconds
Estimated time remaining: 7.67923 minutes
```

```
Program running...
Iteration: 1019
Percentage completed: 33.9667%
Time elapsed: 236.80857 seconds
Estimated time remaining: 7.67284 minutes
```

```
Program running...
Iteration: 1020
Percentage completed: 34.0000%
Time elapsed: 236.96440 seconds
Estimated time remaining: 7.66649 minutes
```

```
Program running...
Iteration: 1021
Percentage completed: 34.0333%
Time elapsed: 237.83841 seconds
Estimated time remaining: 7.68335 minutes
```

```
Program running...
Iteration: 1022
Percentage completed: 34.0667%
Time elapsed: 237.99369 seconds
Estimated time remaining: 7.67696 minutes
```

```
Program running...
Iteration: 1023
Percentage completed: 34.1000%
Time elapsed: 238.14840 seconds
Estimated time remaining: 7.67057 minutes
```

```
Program running...
Iteration: 1024
Percentage completed: 34.1333%
Time elapsed: 238.30344 seconds
Estimated time remaining: 7.66418 minutes
```

```
Program running...
Iteration: 1025
Percentage completed: 34.1667%
Time elapsed: 238.45949 seconds
Estimated time remaining: 7.65784 minutes
```

```
Program running...
Iteration: 1026
Percentage completed: 34.2000%
Time elapsed: 238.61815 seconds
Estimated time remaining: 7.65159 minutes
```

```
Program running...
Iteration: 1027
Percentage completed: 34.2333%
Time elapsed: 238.77287 seconds
Estimated time remaining: 7.64523 minutes
```

```
Program running...
Iteration: 1028
Percentage completed: 34.2667%
Time elapsed: 238.92882 seconds
Estimated time remaining: 7.63890 minutes
```

```
Program running...
Iteration: 1029
Percentage completed: 34.3000%
Time elapsed: 239.08473 seconds
Estimated time remaining: 7.63259 minutes
```

```
Program running...
Iteration: 1030
Percentage completed: 34.3333%
Time elapsed: 239.24352 seconds
Estimated time remaining: 7.62637 minutes
```

```
Program running...
Iteration: 1031
Percentage completed: 34.3667%
Time elapsed: 240.11842 seconds
Estimated time remaining: 7.64295 minutes
```

```
Program running...
Iteration: 1032
Percentage completed: 34.4000%
Time elapsed: 240.27418 seconds
Estimated time remaining: 7.63662 minutes
```

```
Program running...
Iteration: 1033
Percentage completed: 34.4333%
Time elapsed: 240.42915 seconds
Estimated time remaining: 7.63027 minutes
```

```
Program running...
Iteration: 1034
Percentage completed: 34.4667%
Time elapsed: 240.58599 seconds
Estimated time remaining: 7.62398 minutes
```

```
Program running...
Iteration: 1035
Percentage completed: 34.5000%
Time elapsed: 240.74356 seconds
Estimated time remaining: 7.61773 minutes
```

```
Program running...
Iteration: 1036
Percentage completed: 34.5333%
Time elapsed: 240.90213 seconds
Estimated time remaining: 7.61151 minutes
```

```
Program running...
Iteration: 1037
Percentage completed: 34.5667%
```

percentage completed: 34.5000%  
Time elapsed: 241.05806 seconds  
Estimated time remaining: 7.60522 minutes

Program running...  
Iteration: 1038  
Percentage completed: 34.6000%  
Time elapsed: 241.21656 seconds  
Estimated time remaining: 7.59902 minutes

Program running...  
Iteration: 1039  
Percentage completed: 34.6333%  
Time elapsed: 241.37337 seconds  
Estimated time remaining: 7.59277 minutes

Program running...  
Iteration: 1040  
Percentage completed: 34.6667%  
Time elapsed: 241.52935 seconds  
Estimated time remaining: 7.58650 minutes

Program running...  
Iteration: 1041  
Percentage completed: 34.7000%  
Time elapsed: 242.40241 seconds  
Estimated time remaining: 7.60273 minutes

Program running...  
Iteration: 1042  
Percentage completed: 34.7333%  
Time elapsed: 242.56315 seconds  
Estimated time remaining: 7.59659 minutes

Program running...  
Iteration: 1043  
Percentage completed: 34.7667%  
Time elapsed: 242.71966 seconds  
Estimated time remaining: 7.59032 minutes

Program running...

```
Iteration: 1044
Percentage completed: 34.8000%
Time elapsed: 242.87585 seconds
Estimated time remaining: 7.58405 minutes
```

```
Program running...
Iteration: 1045
Percentage completed: 34.8333%
Time elapsed: 243.03344 seconds
Estimated time remaining: 7.57784 minutes
```

```
Program running...
Iteration: 1046
Percentage completed: 34.8667%
Time elapsed: 243.18940 seconds
Estimated time remaining: 7.57157 minutes
```

```
Program running...
Iteration: 1047
Percentage completed: 34.9000%
Time elapsed: 243.34624 seconds
Estimated time remaining: 7.56535 minutes
```

```
Program running...
Iteration: 1048
Percentage completed: 34.9333%
Time elapsed: 243.50352 seconds
Estimated time remaining: 7.55914 minutes
```

```
Program running...
Iteration: 1049
Percentage completed: 34.9667%
Time elapsed: 243.66055 seconds
Estimated time remaining: 7.55293 minutes
```

```
Program running...
Iteration: 1050
Percentage completed: 35.0000%
Time elapsed: 243.81717 seconds
Estimated time remaining: 7.54672 minutes
```

```
Program running...
Iteration: 1051
Percentage completed: 35.0333%
Time elapsed: 244.69078 seconds
Estimated time remaining: 7.56267 minutes
```

```
Program running...
Iteration: 1052
Percentage completed: 35.0667%
Time elapsed: 244.84496 seconds
Estimated time remaining: 7.55637 minutes
```

```
Program running...
Iteration: 1053
Percentage completed: 35.1000%
Time elapsed: 244.99939 seconds
Estimated time remaining: 7.55007 minutes
```

```
Program running...
Iteration: 1054
Percentage completed: 35.1333%
Time elapsed: 245.15608 seconds
Estimated time remaining: 7.54386 minutes
```

```
Program running...
Iteration: 1055
Percentage completed: 35.1667%
Time elapsed: 245.31447 seconds
Estimated time remaining: 7.53770 minutes
```

```
Program running...
Iteration: 1056
Percentage completed: 35.2000%
Time elapsed: 245.47398 seconds
Estimated time remaining: 7.53159 minutes
```

```
Program running...
Iteration: 1057
Percentage completed: 35.2333%
Time elapsed: 245.63192 seconds
```

-----  
Estimated time remaining: 7.52543 minutes

Program running...  
Iteration: 1058  
Percentage completed: 35.2667%  
Time elapsed: 245.78807 seconds  
Estimated time remaining: 7.51922 minutes

Program running...  
Iteration: 1059  
Percentage completed: 35.3000%  
Time elapsed: 245.94412 seconds  
Estimated time remaining: 7.51302 minutes

Program running...  
Iteration: 1060  
Percentage completed: 35.3333%  
Time elapsed: 246.09979 seconds  
Estimated time remaining: 7.50682 minutes

Program running...  
Iteration: 1061  
Percentage completed: 35.3667%  
Time elapsed: 246.96620 seconds  
Estimated time remaining: 7.52226 minutes

Program running...  
Iteration: 1062  
Percentage completed: 35.4000%  
Time elapsed: 247.12168 seconds  
Estimated time remaining: 7.51603 minutes

Program running...  
Iteration: 1063  
Percentage completed: 35.4333%  
Time elapsed: 247.27703 seconds  
Estimated time remaining: 7.50981 minutes

Program running...  
Iteration: 1064

```
Percentage completed: 35.4667%
Time elapsed: 247.43157 seconds
Estimated time remaining: 7.50356 minutes
```

```
Program running...
Iteration: 1065
Percentage completed: 35.5000%
Time elapsed: 247.59042 seconds
Estimated time remaining: 7.49746 minutes
```

```
Program running...
Iteration: 1066
Percentage completed: 35.5333%
Time elapsed: 247.75065 seconds
Estimated time remaining: 7.49140 minutes
```

```
Program running...
Iteration: 1067
Percentage completed: 35.5667%
Time elapsed: 247.90623 seconds
Estimated time remaining: 7.48520 minutes
```

```
Program running...
Iteration: 1068
Percentage completed: 35.6000%
Time elapsed: 248.05921 seconds
Estimated time remaining: 7.47894 minutes
```

```
Program running...
Iteration: 1069
Percentage completed: 35.6333%
Time elapsed: 248.21416 seconds
Estimated time remaining: 7.47274 minutes
```

```
Program running...
Iteration: 1070
Percentage completed: 35.6667%
Time elapsed: 248.36908 seconds
Estimated time remaining: 7.46655 minutes
```

```
Program running...
Iteration: 1071
Percentage completed: 35.7000%
Time elapsed: 249.24559 seconds
Estimated time remaining: 7.48202 minutes
```

```
Program running...
Iteration: 1072
Percentage completed: 35.7333%
Time elapsed: 249.40308 seconds
Estimated time remaining: 7.47589 minutes
```

```
Program running...
Iteration: 1073
Percentage completed: 35.7667%
Time elapsed: 249.55533 seconds
Estimated time remaining: 7.46960 minutes
```

```
Program running...
Iteration: 1074
Percentage completed: 35.8000%
Time elapsed: 249.71248 seconds
Estimated time remaining: 7.46347 minutes
```

```
Program running...
Iteration: 1075
Percentage completed: 35.8333%
Time elapsed: 249.87087 seconds
Estimated time remaining: 7.45738 minutes
```

```
Program running...
Iteration: 1076
Percentage completed: 35.8667%
Time elapsed: 250.02949 seconds
Estimated time remaining: 7.45131 minutes
```

```
Program running...
Iteration: 1077
Percentage completed: 35.9000%
Time elapsed: 250.18594 seconds
Estimated time remaining: 7.44518 minutes
```

```
Program running...
Iteration: 1078
Percentage completed: 35.9333%
Time elapsed: 250.34216 seconds
Estimated time remaining: 7.43905 minutes
```

```
Program running...
Iteration: 1079
Percentage completed: 35.9667%
Time elapsed: 250.49968 seconds
Estimated time remaining: 7.43296 minutes
```

```
Program running...
Iteration: 1080
Percentage completed: 36.0000%
Time elapsed: 250.65712 seconds
Estimated time remaining: 7.42688 minutes
```

```
Program running...
Iteration: 1081
Percentage completed: 36.0333%
Time elapsed: 251.53345 seconds
Estimated time remaining: 7.44207 minutes
```

```
Program running...
Iteration: 1082
Percentage completed: 36.0667%
Time elapsed: 251.69026 seconds
Estimated time remaining: 7.43595 minutes
```

```
Program running...
Iteration: 1083
Percentage completed: 36.1000%
Time elapsed: 251.84782 seconds
Estimated time remaining: 7.42986 minutes
```

```
Program running...
Iteration: 1084
Percentage completed: 36.1333%
```

```
Time elapsed: 252.00172 seconds
Estimated time remaining: 7.42367 minutes
```

```
Program running...
Iteration: 1085
Percentage completed: 36.1667%
Time elapsed: 252.15881 seconds
Estimated time remaining: 7.41757 minutes
```

```
Program running...
Iteration: 1086
Percentage completed: 36.2000%
Time elapsed: 252.31655 seconds
Estimated time remaining: 7.41151 minutes
```

```
Program running...
Iteration: 1087
Percentage completed: 36.2333%
Time elapsed: 252.47087 seconds
Estimated time remaining: 7.40535 minutes
```

```
Program running...
Iteration: 1088
Percentage completed: 36.2667%
Time elapsed: 252.62532 seconds
Estimated time remaining: 7.39920 minutes
```

```
Program running...
Iteration: 1089
Percentage completed: 36.3000%
Time elapsed: 252.78358 seconds
Estimated time remaining: 7.39316 minutes
```

```
Program running...
Iteration: 1090
Percentage completed: 36.3333%
Time elapsed: 252.93869 seconds
Estimated time remaining: 7.38705 minutes
```

```
Program running...
Iteration: 1091
```

```
iteration: 1091
Percentage completed: 36.3667%
Time elapsed: 253.81666 seconds
Estimated time remaining: 7.40202 minutes
```

```
Program running...
Iteration: 1092
Percentage completed: 36.4000%
Time elapsed: 253.97193 seconds
Estimated time remaining: 7.39588 minutes
```

```
Program running...
Iteration: 1093
Percentage completed: 36.4333%
Time elapsed: 254.12844 seconds
Estimated time remaining: 7.38980 minutes
```

```
Program running...
Iteration: 1094
Percentage completed: 36.4667%
Time elapsed: 254.28553 seconds
Estimated time remaining: 7.38373 minutes
```

```
Program running...
Iteration: 1095
Percentage completed: 36.5000%
Time elapsed: 254.44281 seconds
Estimated time remaining: 7.37768 minutes
```

```
Program running...
Iteration: 1096
Percentage completed: 36.5333%
Time elapsed: 254.60165 seconds
Estimated time remaining: 7.37168 minutes
```

```
Program running...
Iteration: 1097
Percentage completed: 36.5667%
Time elapsed: 254.75932 seconds
Estimated time remaining: 7.36565 minutes
```

```
Program running...
  Iteration: 1098
  Percentage completed: 36.6000%
  Time elapsed: 254.91746 seconds
  Estimated time remaining: 7.35964 minutes
```

```
Program running...
  Iteration: 1099
  Percentage completed: 36.6333%
  Time elapsed: 255.07355 seconds
  Estimated time remaining: 7.35357 minutes
```

```
Program running...
  Iteration: 1100
  Percentage completed: 36.6667%
  Time elapsed: 255.22952 seconds
  Estimated time remaining: 7.34752 minutes
```

```
Program running...
  Iteration: 1101
  Percentage completed: 36.7000%
  Time elapsed: 256.09346 seconds
  Estimated time remaining: 7.36181 minutes
```

```
Program running...
  Iteration: 1102
  Percentage completed: 36.7333%
  Time elapsed: 256.25109 seconds
  Estimated time remaining: 7.35578 minutes
```

```
Program running...
  Iteration: 1103
  Percentage completed: 36.7667%
  Time elapsed: 256.40889 seconds
  Estimated time remaining: 7.34977 minutes
```

```
Program running...
  Iteration: 1104
  Percentage completed: 36.8000%
  Time elapsed: 256.56458 seconds
```

Estimated time remaining: 7.34369 minutes

Program running...  
Iteration: 1105  
Percentage completed: 36.8333%  
Time elapsed: 256.72503 seconds  
Estimated time remaining: 7.33777 minutes

Program running...  
Iteration: 1106  
Percentage completed: 36.8667%  
Time elapsed: 256.88139 seconds  
Estimated time remaining: 7.33172 minutes

Program running...  
Iteration: 1107  
Percentage completed: 36.9000%  
Time elapsed: 257.03752 seconds  
Estimated time remaining: 7.32568 minutes

Program running...  
Iteration: 1108  
Percentage completed: 36.9333%  
Time elapsed: 257.19548 seconds  
Estimated time remaining: 7.31970 minutes

Program running...  
Iteration: 1109  
Percentage completed: 36.9667%  
Time elapsed: 257.35307 seconds  
Estimated time remaining: 7.31371 minutes

Program running...  
Iteration: 1110  
Percentage completed: 37.0000%  
Time elapsed: 257.51034 seconds  
Estimated time remaining: 7.30772 minutes

Program running...  
Iteration: 1111

```
Percentage completed: 37.0333%
Time elapsed: 258.37772 seconds
Estimated time remaining: 7.32186 minutes
```

```
Program running...
Iteration: 1112
Percentage completed: 37.0667%
Time elapsed: 258.53214 seconds
Estimated time remaining: 7.31578 minutes
```

```
Program running...
Iteration: 1113
Percentage completed: 37.1000%
Time elapsed: 258.69095 seconds
Estimated time remaining: 7.30982 minutes
```

```
Program running...
Iteration: 1114
Percentage completed: 37.1333%
Time elapsed: 258.84660 seconds
Estimated time remaining: 7.30378 minutes
```

```
Program running...
Iteration: 1115
Percentage completed: 37.1667%
Time elapsed: 259.00483 seconds
Estimated time remaining: 7.29782 minutes
```

```
Program running...
Iteration: 1116
Percentage completed: 37.2000%
Time elapsed: 259.16214 seconds
Estimated time remaining: 7.29184 minutes
```

```
Program running...
Iteration: 1117
Percentage completed: 37.2333%
Time elapsed: 259.31653 seconds
Estimated time remaining: 7.28578 minutes
```

```
Program running...
Iteration: 1118
Percentage completed: 37.2667%
Time elapsed: 259.47190 seconds
Estimated time remaining: 7.27976 minutes
```

```
Program running...
Iteration: 1119
Percentage completed: 37.3000%
Time elapsed: 259.62709 seconds
Estimated time remaining: 7.27373 minutes
```

```
Program running...
Iteration: 1120
Percentage completed: 37.3333%
Time elapsed: 259.78176 seconds
Estimated time remaining: 7.26770 minutes
```

```
Program running...
Iteration: 1121
Percentage completed: 37.3667%
Time elapsed: 260.65267 seconds
Estimated time remaining: 7.28169 minutes
```

```
Program running...
Iteration: 1122
Percentage completed: 37.4000%
Time elapsed: 260.80789 seconds
Estimated time remaining: 7.27566 minutes
```

```
Program running...
Iteration: 1123
Percentage completed: 37.4333%
Time elapsed: 260.96296 seconds
Estimated time remaining: 7.26963 minutes
```

```
Program running...
Iteration: 1124
Percentage completed: 37.4667%
Time elapsed: 261.11738 seconds
Estimated time remaining: 7.26358 minutes
```

```
Program running...
Iteration: 1125
Percentage completed: 37.5000%
Time elapsed: 261.27599 seconds
Estimated time remaining: 7.25767 minutes
```

```
Program running...
Iteration: 1126
Percentage completed: 37.5333%
Time elapsed: 261.43281 seconds
Estimated time remaining: 7.25170 minutes
```

```
Program running...
Iteration: 1127
Percentage completed: 37.5667%
Time elapsed: 261.58715 seconds
Estimated time remaining: 7.24568 minutes
```

```
Program running...
Iteration: 1128
Percentage completed: 37.6000%
Time elapsed: 261.74136 seconds
Estimated time remaining: 7.23965 minutes
```

```
Program running...
Iteration: 1129
Percentage completed: 37.6333%
Time elapsed: 261.89685 seconds
Estimated time remaining: 7.23367 minutes
```

```
Program running...
Iteration: 1130
Percentage completed: 37.6667%
Time elapsed: 262.05241 seconds
Estimated time remaining: 7.22770 minutes
```

```
Program running...
Iteration: 1131
Percentage completed: 37.7000%
Time elapsed: 262.01400 seconds
```

```
Time elapsed: 262.91408 seconds
Estimated time remaining: 7.24118 minutes
```

```
Program running...
Iteration: 1132
Percentage completed: 37.7333%
Time elapsed: 263.07183 seconds
Estimated time remaining: 7.23525 minutes
```

```
Program running...
Iteration: 1133
Percentage completed: 37.7667%
Time elapsed: 263.23094 seconds
Estimated time remaining: 7.22936 minutes
```

```
Program running...
Iteration: 1134
Percentage completed: 37.8000%
Time elapsed: 263.39239 seconds
Estimated time remaining: 7.22355 minutes
```

```
Program running...
Iteration: 1135
Percentage completed: 37.8333%
Time elapsed: 263.55103 seconds
Estimated time remaining: 7.21766 minutes
```

```
Program running...
Iteration: 1136
Percentage completed: 37.8667%
Time elapsed: 263.70900 seconds
Estimated time remaining: 7.21176 minutes
```

```
Program running...
Iteration: 1137
Percentage completed: 37.9000%
Time elapsed: 263.86443 seconds
Estimated time remaining: 7.20579 minutes
```

```
Program running...
Iteration: 1138
```

```
Percentage completed: 37.9333%
Time elapsed: 264.02003 seconds
Estimated time remaining: 7.19984 minutes
```

```
Program running...
Iteration: 1139
Percentage completed: 37.9667%
Time elapsed: 264.17810 seconds
Estimated time remaining: 7.19396 minutes
```

```
Program running...
Iteration: 1140
Percentage completed: 38.0000%
Time elapsed: 264.33394 seconds
Estimated time remaining: 7.18803 minutes
```

```
Program running...
Iteration: 1141
Percentage completed: 38.0333%
Time elapsed: 265.19490 seconds
Estimated time remaining: 7.20125 minutes
```

```
Program running...
Iteration: 1142
Percentage completed: 38.0667%
Time elapsed: 265.35040 seconds
Estimated time remaining: 7.19529 minutes
```

```
Program running...
Iteration: 1143
Percentage completed: 38.1000%
Time elapsed: 265.50442 seconds
Estimated time remaining: 7.18929 minutes
```

```
Program running...
Iteration: 1144
Percentage completed: 38.1333%
Time elapsed: 265.65921 seconds
Estimated time remaining: 7.18332 minutes
```

```
Program running...
Iteration: 1145
Percentage completed: 38.1667%
Time elapsed: 265.81516 seconds
Estimated time remaining: 7.17739 minutes
```

```
Program running...
Iteration: 1146
Percentage completed: 38.2000%
Time elapsed: 265.97282 seconds
Estimated time remaining: 7.17152 minutes
```

```
Program running...
Iteration: 1147
Percentage completed: 38.2333%
Time elapsed: 266.12866 seconds
Estimated time remaining: 7.16560 minutes
```

```
Program running...
Iteration: 1148
Percentage completed: 38.2667%
Time elapsed: 266.28502 seconds
Estimated time remaining: 7.15969 minutes
```

```
Program running...
Iteration: 1149
Percentage completed: 38.3000%
Time elapsed: 266.44488 seconds
Estimated time remaining: 7.15389 minutes
```

```
Program running...
Iteration: 1150
Percentage completed: 38.3333%
Time elapsed: 266.59974 seconds
Estimated time remaining: 7.14796 minutes
```

```
Program running...
Iteration: 1151
Percentage completed: 38.3667%
Time elapsed: 267.46799 seconds
Estimated time remaining: 7.16114 minutes
```

```
Program running...
Iteration: 1152
Percentage completed: 38.4000%
Time elapsed: 267.62406 seconds
Estimated time remaining: 7.15523 minutes
```

```
Program running...
Iteration: 1153
Percentage completed: 38.4333%
Time elapsed: 267.77949 seconds
Estimated time remaining: 7.14930 minutes
```

```
Program running...
Iteration: 1154
Percentage completed: 38.4667%
Time elapsed: 267.93492 seconds
Estimated time remaining: 7.14338 minutes
```

```
Program running...
Iteration: 1155
Percentage completed: 38.5000%
Time elapsed: 268.09229 seconds
Estimated time remaining: 7.13752 minutes
```

```
Program running...
Iteration: 1156
Percentage completed: 38.5333%
Time elapsed: 268.25031 seconds
Estimated time remaining: 7.13168 minutes
```

```
Program running...
Iteration: 1157
Percentage completed: 38.5667%
Time elapsed: 268.40431 seconds
Estimated time remaining: 7.12574 minutes
```

```
Program running...
Iteration: 1158
Percentage completed: 38.6000%
```

Percentage completed: 38.000%  
Time elapsed: 268.56042 seconds  
Estimated time remaining: 7.11986 minutes

Program running...  
Iteration: 1159  
Percentage completed: 38.6333%  
Time elapsed: 268.71511 seconds  
Estimated time remaining: 7.11395 minutes

Program running...  
Iteration: 1160  
Percentage completed: 38.6667%  
Time elapsed: 268.87091 seconds  
Estimated time remaining: 7.10808 minutes

Program running...  
Iteration: 1161  
Percentage completed: 38.7000%  
Time elapsed: 269.73959 seconds  
Estimated time remaining: 7.12103 minutes

Program running...  
Iteration: 1162  
Percentage completed: 38.7333%  
Time elapsed: 269.89881 seconds  
Estimated time remaining: 7.11523 minutes

Program running...  
Iteration: 1163  
Percentage completed: 38.7667%  
Time elapsed: 270.05262 seconds  
Estimated time remaining: 7.10929 minutes

Program running...  
Iteration: 1164  
Percentage completed: 38.8000%  
Time elapsed: 270.20722 seconds  
Estimated time remaining: 7.10338 minutes

Program running...

Program running...  
Iteration: 1165  
Percentage completed: 38.8333%  
Time elapsed: 270.39493 seconds  
Estimated time remaining: 7.09835 minutes

Program running...  
Iteration: 1166  
Percentage completed: 38.8667%  
Time elapsed: 270.55352 seconds  
Estimated time remaining: 7.09255 minutes

Program running...  
Iteration: 1167  
Percentage completed: 38.9000%  
Time elapsed: 270.71328 seconds  
Estimated time remaining: 7.08679 minutes

Program running...  
Iteration: 1168  
Percentage completed: 38.9333%  
Time elapsed: 270.86827 seconds  
Estimated time remaining: 7.08092 minutes

Program running...  
Iteration: 1169  
Percentage completed: 38.9667%  
Time elapsed: 271.02422 seconds  
Estimated time remaining: 7.07507 minutes

Program running...  
Iteration: 1170  
Percentage completed: 39.0000%  
Time elapsed: 271.17797 seconds  
Estimated time remaining: 7.06917 minutes

Program running...  
Iteration: 1171  
Percentage completed: 39.0333%  
Time elapsed: 272.05986 seconds  
Estimated time remaining: 7.08223 minutes

```
Program running...
Iteration: 1172
Percentage completed: 39.0667%
Time elapsed: 272.21645 seconds
Estimated time remaining: 7.07639 minutes
```

```
Program running...
Iteration: 1173
Percentage completed: 39.1000%
Time elapsed: 272.36997 seconds
Estimated time remaining: 7.07047 minutes
```

```
Program running...
Iteration: 1174
Percentage completed: 39.1333%
Time elapsed: 272.52285 seconds
Estimated time remaining: 7.06455 minutes
```

```
Program running...
Iteration: 1175
Percentage completed: 39.1667%
Time elapsed: 272.68100 seconds
Estimated time remaining: 7.05876 minutes
```

```
Program running...
Iteration: 1176
Percentage completed: 39.2000%
Time elapsed: 272.83914 seconds
Estimated time remaining: 7.05298 minutes
```

```
Program running...
Iteration: 1177
Percentage completed: 39.2333%
Time elapsed: 272.99249 seconds
Estimated time remaining: 7.04709 minutes
```

```
Program running...
Iteration: 1178
Percentage completed: 39.2667%
Time elapsed: 273.14784 seconds
```

Estimated time remaining: 7.04125 minutes

Program running...  
Iteration: 1179  
Percentage completed: 39.3000%  
Time elapsed: 273.30264 seconds  
Estimated time remaining: 7.03540 minutes

Program running...  
Iteration: 1180  
Percentage completed: 39.3333%  
Time elapsed: 273.45730 seconds  
Estimated time remaining: 7.02955 minutes

Program running...  
Iteration: 1181  
Percentage completed: 39.3667%  
Time elapsed: 274.32389 seconds  
Estimated time remaining: 7.04199 minutes

Program running...  
Iteration: 1182  
Percentage completed: 39.4000%  
Time elapsed: 274.47900 seconds  
Estimated time remaining: 7.03614 minutes

Program running...  
Iteration: 1183  
Percentage completed: 39.4333%  
Time elapsed: 274.63677 seconds  
Estimated time remaining: 7.03036 minutes

Program running...  
Iteration: 1184  
Percentage completed: 39.4667%  
Time elapsed: 274.79110 seconds  
Estimated time remaining: 7.02450 minutes

Program running...  
Iteration: 1185

```
Percentage completed: 39.5000%
Time elapsed: 274.95067 seconds
Estimated time remaining: 7.01878 minutes
```

```
Program running...
Iteration: 1186
Percentage completed: 39.5333%
Time elapsed: 275.10892 seconds
Estimated time remaining: 7.01303 minutes
```

```
Program running...
Iteration: 1187
Percentage completed: 39.5667%
Time elapsed: 275.26364 seconds
Estimated time remaining: 7.00720 minutes
```

```
Program running...
Iteration: 1188
Percentage completed: 39.6000%
Time elapsed: 275.41829 seconds
Estimated time remaining: 7.00137 minutes
```

```
Program running...
Iteration: 1189
Percentage completed: 39.6333%
Time elapsed: 275.57401 seconds
Estimated time remaining: 6.99558 minutes
```

```
Program running...
Iteration: 1190
Percentage completed: 39.6667%
Time elapsed: 275.72833 seconds
Estimated time remaining: 6.98975 minutes
```

```
Program running...
Iteration: 1191
Percentage completed: 39.7000%
Time elapsed: 276.59354 seconds
Estimated time remaining: 7.00193 minutes
```

```
Program running...
Iteration: 1192
Percentage completed: 39.7333%
Time elapsed: 276.74976 seconds
Estimated time remaining: 6.99613 minutes
```

```
Program running...
Iteration: 1193
Percentage completed: 39.7667%
Time elapsed: 276.90679 seconds
Estimated time remaining: 6.99037 minutes
```

```
Program running...
Iteration: 1194
Percentage completed: 39.8000%
Time elapsed: 277.06256 seconds
Estimated time remaining: 6.98457 minutes
```

```
Program running...
Iteration: 1195
Percentage completed: 39.8333%
Time elapsed: 277.21938 seconds
Estimated time remaining: 6.97881 minutes
```

```
Program running...
Iteration: 1196
Percentage completed: 39.8667%
Time elapsed: 277.37608 seconds
Estimated time remaining: 6.97305 minutes
```

```
Program running...
Iteration: 1197
Percentage completed: 39.9000%
Time elapsed: 277.53300 seconds
Estimated time remaining: 6.96731 minutes
```

```
Program running...
Iteration: 1198
Percentage completed: 39.9333%
Time elapsed: 277.68965 seconds
Estimated time remaining: 6.96156 minutes
```

```
Program running...
Iteration: 1199
Percentage completed: 39.9667%
Time elapsed: 277.84716 seconds
Estimated time remaining: 6.95583 minutes
```

```
Program running...
Iteration: 1200
Percentage completed: 40.0000%
Time elapsed: 278.00734 seconds
Estimated time remaining: 6.95018 minutes
```

```
Program running...
Iteration: 1201
Percentage completed: 40.0333%
Time elapsed: 278.88199 seconds
Estimated time remaining: 6.96237 minutes
```

```
Program running...
Iteration: 1202
Percentage completed: 40.0667%
Time elapsed: 279.03749 seconds
Estimated time remaining: 6.95659 minutes
```

```
Program running...
Iteration: 1203
Percentage completed: 40.1000%
Time elapsed: 279.19224 seconds
Estimated time remaining: 6.95079 minutes
```

```
Program running...
Iteration: 1204
Percentage completed: 40.1333%
Time elapsed: 279.34683 seconds
Estimated time remaining: 6.94500 minutes
```

```
Program running...
Iteration: 1205
Percentage completed: 40.1667%
```

```
Time elapsed: 279.50176 seconds
Estimated time remaining: 6.93922 minutes
```

```
Program running...
Iteration: 1206
Percentage completed: 40.2000%
Time elapsed: 279.65534 seconds
Estimated time remaining: 6.93341 minutes
```

```
Program running...
Iteration: 1207
Percentage completed: 40.2333%
Time elapsed: 279.81083 seconds
Estimated time remaining: 6.92765 minutes
```

```
Program running...
Iteration: 1208
Percentage completed: 40.2667%
Time elapsed: 279.96857 seconds
Estimated time remaining: 6.92196 minutes
```

```
Program running...
Iteration: 1209
Percentage completed: 40.3000%
Time elapsed: 280.12305 seconds
Estimated time remaining: 6.91619 minutes
```

```
Program running...
Iteration: 1210
Percentage completed: 40.3333%
Time elapsed: 280.27855 seconds
Estimated time remaining: 6.91045 minutes
```

```
Program running...
Iteration: 1211
Percentage completed: 40.3667%
Time elapsed: 281.13867 seconds
Estimated time remaining: 6.92206 minutes
```

```
Program running...
```

```
Iteration: 1212
Percentage completed: 40.4000%
Time elapsed: 281.29758 seconds
Estimated time remaining: 6.91639 minutes
```

```
Program running...
Iteration: 1213
Percentage completed: 40.4333%
Time elapsed: 281.45429 seconds
Estimated time remaining: 6.91067 minutes
```

```
Program running...
Iteration: 1214
Percentage completed: 40.4667%
Time elapsed: 281.61100 seconds
Estimated time remaining: 6.90496 minutes
```

```
Program running...
Iteration: 1215
Percentage completed: 40.5000%
Time elapsed: 281.76925 seconds
Estimated time remaining: 6.89929 minutes
```

```
Program running...
Iteration: 1216
Percentage completed: 40.5333%
Time elapsed: 281.92618 seconds
Estimated time remaining: 6.89359 minutes
```

```
Program running...
Iteration: 1217
Percentage completed: 40.5667%
Time elapsed: 282.08217 seconds
Estimated time remaining: 6.88787 minutes
```

```
Program running...
Iteration: 1218
Percentage completed: 40.6000%
Time elapsed: 282.24427 seconds
Estimated time remaining: 6.88231 minutes
```

```
Program running...
Iteration: 1219
Percentage completed: 40.6333%
Time elapsed: 282.39939 seconds
Estimated time remaining: 6.87658 minutes
```

```
Program running...
Iteration: 1220
Percentage completed: 40.6667%
Time elapsed: 282.55615 seconds
Estimated time remaining: 6.87090 minutes
```

```
Program running...
Iteration: 1221
Percentage completed: 40.7000%
Time elapsed: 283.42131 seconds
Estimated time remaining: 6.88242 minutes
```

```
Program running...
Iteration: 1222
Percentage completed: 40.7333%
Time elapsed: 283.57351 seconds
Estimated time remaining: 6.87662 minutes
```

```
Program running...
Iteration: 1223
Percentage completed: 40.7667%
Time elapsed: 283.73012 seconds
Estimated time remaining: 6.87092 minutes
```

```
Program running...
Iteration: 1224
Percentage completed: 40.8000%
Time elapsed: 283.88558 seconds
Estimated time remaining: 6.86521 minutes
```

```
Program running...
Iteration: 1225
Percentage completed: 40.8333%
Time elapsed: 284.04189 seconds
```

Estimated time remaining: 6.85951 minutes

Program running...  
Iteration: 1226  
Percentage completed: 40.8667%  
Time elapsed: 284.20516 seconds  
Estimated time remaining: 6.85399 minutes

Program running...  
Iteration: 1227  
Percentage completed: 40.9000%  
Time elapsed: 284.36106 seconds  
Estimated time remaining: 6.84830 minutes

Program running...  
Iteration: 1228  
Percentage completed: 40.9333%  
Time elapsed: 284.51567 seconds  
Estimated time remaining: 6.84259 minutes

Program running...  
Iteration: 1229  
Percentage completed: 40.9667%  
Time elapsed: 284.67042 seconds  
Estimated time remaining: 6.83688 minutes

Program running...  
Iteration: 1230  
Percentage completed: 41.0000%  
Time elapsed: 284.82486 seconds  
Estimated time remaining: 6.83116 minutes

Program running...  
Iteration: 1231  
Percentage completed: 41.0333%  
Time elapsed: 285.68788 seconds  
Estimated time remaining: 6.84243 minutes

Program running...  
Iteration: 1232  
Percentage completed: 41.0667%

Time elapsed: 285.84528 seconds  
Estimated time remaining: 6.83677 minutes

Program running...  
Iteration: 1233  
Percentage completed: 41.1000%  
Time elapsed: 285.99879 seconds  
Estimated time remaining: 6.83103 minutes

Program running...  
Iteration: 1234  
Percentage completed: 41.1333%  
Time elapsed: 286.15575 seconds  
Estimated time remaining: 6.82538 minutes

Program running...  
Iteration: 1235  
Percentage completed: 41.1667%  
Time elapsed: 286.31492 seconds  
Estimated time remaining: 6.81978 minutes

Program running...  
Iteration: 1236  
Percentage completed: 41.2000%  
Time elapsed: 286.47366 seconds  
Estimated time remaining: 6.81418 minutes

Program running...  
Iteration: 1237  
Percentage completed: 41.2333%  
Time elapsed: 286.63241 seconds  
Estimated time remaining: 6.80858 minutes

Program running...  
Iteration: 1238  
Percentage completed: 41.2667%  
Time elapsed: 286.78874 seconds  
Estimated time remaining: 6.80293 minutes

```
Program running...
Iteration: 1239
Percentage completed: 41.3000%
Time elapsed: 286.94649 seconds
Estimated time remaining: 6.79732 minutes
```

```
Program running...
Iteration: 1240
Percentage completed: 41.3333%
Time elapsed: 287.10995 seconds
Estimated time remaining: 6.79185 minutes
```

```
Program running...
Iteration: 1241
Percentage completed: 41.3667%
Time elapsed: 289.43442 seconds
Estimated time remaining: 6.83743 minutes
```

```
Program running...
Iteration: 1242
Percentage completed: 41.4000%
Time elapsed: 289.59250 seconds
Estimated time remaining: 6.83177 minutes
```

```
Program running...
Iteration: 1243
Percentage completed: 41.4333%
Time elapsed: 289.74586 seconds
Estimated time remaining: 6.82600 minutes
```

```
Program running...
Iteration: 1244
Percentage completed: 41.4667%
Time elapsed: 289.90007 seconds
Estimated time remaining: 6.82026 minutes
```

```
Program running...
Iteration: 1245
Percentage completed: 41.5000%
Time elapsed: 290.05483 seconds
Estimated time remaining: 6.81454 minutes
```

```
Program running...
Iteration: 1246
Percentage completed: 41.5333%
Time elapsed: 290.20800 seconds
Estimated time remaining: 6.80878 minutes
```

```
Program running...
Iteration: 1247
Percentage completed: 41.5667%
Time elapsed: 290.36298 seconds
Estimated time remaining: 6.80308 minutes
```

```
Program running...
Iteration: 1248
Percentage completed: 41.6000%
Time elapsed: 290.51723 seconds
Estimated time remaining: 6.79736 minutes
```

```
Program running...
Iteration: 1249
Percentage completed: 41.6333%
Time elapsed: 290.66905 seconds
Estimated time remaining: 6.79159 minutes
```

```
Program running...
Iteration: 1250
Percentage completed: 41.6667%
Time elapsed: 290.82568 seconds
Estimated time remaining: 6.78593 minutes
```

```
Program running...
Iteration: 1251
Percentage completed: 41.7000%
Time elapsed: 291.69335 seconds
Estimated time remaining: 6.79685 minutes
```

```
Program running...
Iteration: 1252
Percentage completed: 41.7333%
Time elapsed: 291.94555 seconds
```

Time elapsed: 291.84555 seconds  
Estimated time remaining: 6.79108 minutes

Program running...  
Iteration: 1253  
Percentage completed: 41.7667%  
Time elapsed: 292.00032 seconds  
Estimated time remaining: 6.78537 minutes

Program running...  
Iteration: 1254  
Percentage completed: 41.8000%  
Time elapsed: 292.15844 seconds  
Estimated time remaining: 6.77975 minutes

Program running...  
Iteration: 1255  
Percentage completed: 41.8333%  
Time elapsed: 292.31540 seconds  
Estimated time remaining: 6.77411 minutes

Program running...  
Iteration: 1256  
Percentage completed: 41.8667%  
Time elapsed: 292.47540 seconds  
Estimated time remaining: 6.76854 minutes

Program running...  
Iteration: 1257  
Percentage completed: 41.9000%  
Time elapsed: 292.62825 seconds  
Estimated time remaining: 6.76281 minutes

Program running...  
Iteration: 1258  
Percentage completed: 41.9333%  
Time elapsed: 292.78431 seconds  
Estimated time remaining: 6.75716 minutes

Program running...  
Iteration: 1259

Iteration: 1257  
Percentage completed: 41.9667%  
Time elapsed: 292.93988 seconds  
Estimated time remaining: 6.75150 minutes

Program running...  
Iteration: 1260  
Percentage completed: 42.0000%  
Time elapsed: 293.09625 seconds  
Estimated time remaining: 6.74586 minutes

Program running...  
Iteration: 1261  
Percentage completed: 42.0333%  
Time elapsed: 293.97163 seconds  
Estimated time remaining: 6.75676 minutes

Program running...  
Iteration: 1262  
Percentage completed: 42.0667%  
Time elapsed: 294.12523 seconds  
Estimated time remaining: 6.75105 minutes

Program running...  
Iteration: 1263  
Percentage completed: 42.1000%  
Time elapsed: 294.27978 seconds  
Estimated time remaining: 6.74537 minutes

Program running...  
Iteration: 1264  
Percentage completed: 42.1333%  
Time elapsed: 294.43808 seconds  
Estimated time remaining: 6.73977 minutes

Program running...  
Iteration: 1265  
Percentage completed: 42.1667%  
Time elapsed: 294.59685 seconds  
Estimated time remaining: 6.73420 minutes

```
Program running...
Iteration: 1266
Percentage completed: 42.2000%
Time elapsed: 294.75855 seconds
Estimated time remaining: 6.72869 minutes
```

```
Program running...
Iteration: 1267
Percentage completed: 42.2333%
Time elapsed: 294.91576 seconds
Estimated time remaining: 6.72308 minutes
```

```
Program running...
Iteration: 1268
Percentage completed: 42.2667%
Time elapsed: 295.06980 seconds
Estimated time remaining: 6.71741 minutes
```

```
Program running...
Iteration: 1269
Percentage completed: 42.3000%
Time elapsed: 295.22646 seconds
Estimated time remaining: 6.71181 minutes
```

```
Program running...
Iteration: 1270
Percentage completed: 42.3333%
Time elapsed: 295.38481 seconds
Estimated time remaining: 6.70624 minutes
```

```
Program running...
Iteration: 1271
Percentage completed: 42.3667%
Time elapsed: 296.25294 seconds
Estimated time remaining: 6.71677 minutes
```

```
Program running...
Iteration: 1272
Percentage completed: 42.4000%
Time elapsed: 296.41164 seconds
Estimated time remaining: 6.71121 minutes
```

Program running...  
Iteration: 1273  
Percentage completed: 42.4333%  
Time elapsed: 296.56557 seconds  
Estimated time remaining: 6.70553 minutes

Program running...  
Iteration: 1274  
Percentage completed: 42.4667%  
Time elapsed: 296.72180 seconds  
Estimated time remaining: 6.69992 minutes

Program running...  
Iteration: 1275  
Percentage completed: 42.5000%  
Time elapsed: 296.87889 seconds  
Estimated time remaining: 6.69433 minutes

Program running...  
Iteration: 1276  
Percentage completed: 42.5333%  
Time elapsed: 297.03667 seconds  
Estimated time remaining: 6.68876 minutes

Program running...  
Iteration: 1277  
Percentage completed: 42.5667%  
Time elapsed: 297.19211 seconds  
Estimated time remaining: 6.68314 minutes

Program running...  
Iteration: 1278  
Percentage completed: 42.6000%  
Time elapsed: 297.35030 seconds  
Estimated time remaining: 6.67758 minutes

Program running...  
Iteration: 1279  
Percentage completed: 42.6333%

```
Time elapsed: 297.50446 seconds
Estimated time remaining: 6.67195 minutes
```

```
Program running...
Iteration: 1280
Percentage completed: 42.6667%
Time elapsed: 297.65937 seconds
Estimated time remaining: 6.66633 minutes
```

```
Program running...
Iteration: 1281
Percentage completed: 42.7000%
Time elapsed: 298.52975 seconds
Estimated time remaining: 6.67672 minutes
```

```
Program running...
Iteration: 1282
Percentage completed: 42.7333%
Time elapsed: 298.68518 seconds
Estimated time remaining: 6.67110 minutes
```

```
Program running...
Iteration: 1283
Percentage completed: 42.7667%
Time elapsed: 298.84158 seconds
Estimated time remaining: 6.66551 minutes
```

```
Program running...
Iteration: 1284
Percentage completed: 42.8000%
Time elapsed: 298.99721 seconds
Estimated time remaining: 6.65991 minutes
```

```
Program running...
Iteration: 1285
Percentage completed: 42.8333%
Time elapsed: 299.15587 seconds
Estimated time remaining: 6.65437 minutes
```

Program running...  
Iteration: 1286  
Percentage completed: 42.8667%  
Time elapsed: 299.31847 seconds  
Estimated time remaining: 6.64893 minutes

Program running...  
Iteration: 1287  
Percentage completed: 42.9000%  
Time elapsed: 299.48059 seconds  
Estimated time remaining: 6.64349 minutes

Program running...  
Iteration: 1288  
Percentage completed: 42.9333%  
Time elapsed: 299.63694 seconds  
Estimated time remaining: 6.63792 minutes

Program running...  
Iteration: 1289  
Percentage completed: 42.9667%  
Time elapsed: 299.79614 seconds  
Estimated time remaining: 6.63242 minutes

Program running...  
Iteration: 1290  
Percentage completed: 43.0000%  
Time elapsed: 299.95255 seconds  
Estimated time remaining: 6.62686 minutes

Program running...  
Iteration: 1291  
Percentage completed: 43.0333%  
Time elapsed: 300.82618 seconds  
Estimated time remaining: 6.63713 minutes

Program running...  
Iteration: 1292  
Percentage completed: 43.0667%  
Time elapsed: 300.98165 seconds  
Estimated time remaining: 6.63153 minutes

```
Program running...
  Iteration: 1293
  Percentage completed: 43.1000%
  Time elapsed: 301.13806 seconds
  Estimated time remaining: 6.62597 minutes
```

```
Program running...
  Iteration: 1294
  Percentage completed: 43.1333%
  Time elapsed: 301.29592 seconds
  Estimated time remaining: 6.62044 minutes
```

```
Program running...
  Iteration: 1295
  Percentage completed: 43.1667%
  Time elapsed: 301.45205 seconds
  Estimated time remaining: 6.61487 minutes
```

```
Program running...
  Iteration: 1296
  Percentage completed: 43.2000%
  Time elapsed: 301.60908 seconds
  Estimated time remaining: 6.60933 minutes
```

```
Program running...
  Iteration: 1297
  Percentage completed: 43.2333%
  Time elapsed: 301.76535 seconds
  Estimated time remaining: 6.60378 minutes
```

```
Program running...
  Iteration: 1298
  Percentage completed: 43.2667%
  Time elapsed: 301.92070 seconds
  Estimated time remaining: 6.59821 minutes
```

```
Program running...
  Iteration: 1299
  Percentage completed: 43.3000%
  Time elapsed: 302.07660 seconds
```

Estimated time remaining: 6.59266 minutes

Program running...  
Iteration: 1300  
Percentage completed: 43.3333%  
Time elapsed: 302.23325 seconds  
Estimated time remaining: 6.58713 minutes

Program running...  
Iteration: 1301  
Percentage completed: 43.3667%  
Time elapsed: 303.09507 seconds  
Estimated time remaining: 6.59696 minutes

Program running...  
Iteration: 1302  
Percentage completed: 43.4000%  
Time elapsed: 303.24981 seconds  
Estimated time remaining: 6.59137 minutes

Program running...  
Iteration: 1303  
Percentage completed: 43.4333%  
Time elapsed: 303.40573 seconds  
Estimated time remaining: 6.58582 minutes

Program running...  
Iteration: 1304  
Percentage completed: 43.4667%  
Time elapsed: 303.56119 seconds  
Estimated time remaining: 6.58026 minutes

Program running...  
Iteration: 1305  
Percentage completed: 43.5000%  
Time elapsed: 303.72458 seconds  
Estimated time remaining: 6.57488 minutes

Program running...  
Iteration: 1306

```
Percentage completed: 43.5333%
Time elapsed: 303.88232 seconds
Estimated time remaining: 6.56938 minutes
```

```
Program running...
Iteration: 1307
Percentage completed: 43.5667%
Time elapsed: 304.03915 seconds
Estimated time remaining: 6.56386 minutes
```

```
Program running...
Iteration: 1308
Percentage completed: 43.6000%
Time elapsed: 304.19395 seconds
Estimated time remaining: 6.55831 minutes
```

```
Program running...
Iteration: 1309
Percentage completed: 43.6333%
Time elapsed: 304.34869 seconds
Estimated time remaining: 6.55276 minutes
```

```
Program running...
Iteration: 1310
Percentage completed: 43.6667%
Time elapsed: 304.50518 seconds
Estimated time remaining: 6.54725 minutes
```

```
Program running...
Iteration: 1311
Percentage completed: 43.7000%
Time elapsed: 305.37608 seconds
Estimated time remaining: 6.55708 minutes
```

```
Program running...
Iteration: 1312
Percentage completed: 43.7333%
Time elapsed: 305.53016 seconds
Estimated time remaining: 6.55151 minutes
```

```
Program running...
Iteration: 1313
Percentage completed: 43.7667%
Time elapsed: 305.68613 seconds
Estimated time remaining: 6.54598 minutes
```

```
Program running...
Iteration: 1314
Percentage completed: 43.8000%
Time elapsed: 305.83865 seconds
Estimated time remaining: 6.54038 minutes
```

```
Program running...
Iteration: 1315
Percentage completed: 43.8333%
Time elapsed: 305.99632 seconds
Estimated time remaining: 6.53490 minutes
```

```
Program running...
Iteration: 1316
Percentage completed: 43.8667%
Time elapsed: 306.15531 seconds
Estimated time remaining: 6.52945 minutes
```

```
Program running...
Iteration: 1317
Percentage completed: 43.9000%
Time elapsed: 306.30812 seconds
Estimated time remaining: 6.52387 minutes
```

```
Program running...
Iteration: 1318
Percentage completed: 43.9333%
Time elapsed: 306.46525 seconds
Estimated time remaining: 6.51839 minutes
```

```
Program running...
Iteration: 1319
Percentage completed: 43.9667%
Time elapsed: 306.61918 seconds
Estimated time remaining: 6.51285 minutes
```

```
Program running...
Iteration: 1320
Percentage completed: 44.0000%
Time elapsed: 306.77835 seconds
Estimated time remaining: 6.50742 minutes
```

```
Program running...
Iteration: 1321
Percentage completed: 44.0333%
Time elapsed: 307.64359 seconds
Estimated time remaining: 6.51695 minutes
```

```
Program running...
Iteration: 1322
Percentage completed: 44.0667%
Time elapsed: 307.80056 seconds
Estimated time remaining: 6.51146 minutes
```

```
Program running...
Iteration: 1323
Percentage completed: 44.1000%
Time elapsed: 307.95997 seconds
Estimated time remaining: 6.50603 minutes
```

```
Program running...
Iteration: 1324
Percentage completed: 44.1333%
Time elapsed: 308.11593 seconds
Estimated time remaining: 6.50053 minutes
```

```
Program running...
Iteration: 1325
Percentage completed: 44.1667%
Time elapsed: 308.27671 seconds
Estimated time remaining: 6.49514 minutes
```

```
Program running...
Iteration: 1326
Percentage completed: 44.2000%
Time elapsed: 308.43430 seconds
```

Program running...  
Iteration: 1327  
Percentage completed: 44.2333%  
Time elapsed: 308.58849 seconds  
Estimated time remaining: 6.48416 minutes

-  
Iteration: 1333  
Percentage completed: 44.4333%  
Time elapsed: 310.22636 seconds  
Estimated time remaining: 6.46596 minutes

Program running...  
Iteration: 1334  
Percentage completed: 44.4667%  
Time elapsed: 310.38188 seconds  
Estimated time remaining: 6.46047 minutes

Program running...  
Iteration: 1335  
Percentage completed: 44.5000%  
Time elapsed: 310.53557 seconds  
Estimated time remaining: 6.45495 minutes

Program running...  
Iteration: 1336  
Percentage completed: 44.5333%  
Time elapsed: 310.69306 seconds  
Estimated time remaining: 6.44952 minutes

Program running...  
Iteration: 1337  
Percentage completed: 44.5667%  
Time elapsed: 310.85083 seconds  
Estimated time remaining: 6.44409 minutes

Program running...  
Iteration: 1338  
Percentage completed: 44.6000%  
Time elapsed: 311.00398 seconds  
Estimated time remaining: 6.43857 minutes

Program running...  
Iteration: 1339  
Percentage completed: 44.6333%  
Time elapsed: 311.15901 seconds  
Estimated time remaining: 6.43310 minutes

```
Program running...
Iteration: 1340
Percentage completed: 44.6667%
Time elapsed: 311.31483 seconds
Estimated time remaining: 6.42764 minutes
```

```
Program running...
Iteration: 1341
Percentage completed: 44.7000%
Time elapsed: 312.19436 seconds
Estimated time remaining: 6.43712 minutes
```

```
Program running...
Iteration: 1342
Percentage completed: 44.7333%
Time elapsed: 312.35203 seconds
Estimated time remaining: 6.43169 minutes
```

```
Program running...
Iteration: 1343
Percentage completed: 44.7667%
Time elapsed: 312.50844 seconds
Estimated time remaining: 6.42624 minutes
```

```
Program running...
Iteration: 1344
Percentage completed: 44.8000%
Time elapsed: 312.66441 seconds
Estimated time remaining: 6.42079 minutes
```

```
Program running...
Iteration: 1345
Percentage completed: 44.8333%
Time elapsed: 312.82208 seconds
Estimated time remaining: 6.41537 minutes
```

```
Program running...
Iteration: 1346
Percentage completed: 44.8667%
Time elapsed: 312.97905 seconds
Estimated time remaining: 6.41000 minutes
```

Estimated time remaining: 6.40995 minutes

Program running...  
Iteration: 1347  
Percentage completed: 44.9000%  
Time elapsed: 313.13503 seconds  
Estimated time remaining: 6.40451 minutes

Program running...  
Iteration: 1348  
Percentage completed: 44.9333%  
Time elapsed: 313.28994 seconds  
Estimated time remaining: 6.39905 minutes

Program running...  
Iteration: 1349  
Percentage completed: 44.9667%  
Time elapsed: 313.44443 seconds  
Estimated time remaining: 6.39358 minutes

Program running...  
Iteration: 1350  
Percentage completed: 45.0000%  
Time elapsed: 313.60161 seconds  
Estimated time remaining: 6.38818 minutes

Program running...  
Iteration: 1351  
Percentage completed: 45.0333%  
Time elapsed: 314.47211 seconds  
Estimated time remaining: 6.39729 minutes

Program running...  
Iteration: 1352  
Percentage completed: 45.0667%  
Time elapsed: 314.62953 seconds  
Estimated time remaining: 6.39188 minutes

Program running...  
Iteration: 1353  
Percentage completed: 45.1000%

```
Percentage completed: 45.1000%  
Time elapsed: 314.78639 seconds  
Estimated time remaining: 6.38646 minutes
```

```
Program running...  
Iteration: 1354  
Percentage completed: 45.1333%  
Time elapsed: 314.94746 seconds  
Estimated time remaining: 6.38114 minutes
```

```
Program running...  
Iteration: 1355  
Percentage completed: 45.1667%  
Time elapsed: 315.10887 seconds  
Estimated time remaining: 6.37582 minutes
```

```
Program running...  
Iteration: 1356  
Percentage completed: 45.2000%  
Time elapsed: 315.26612 seconds  
Estimated time remaining: 6.37042 minutes
```

```
Program running...  
Iteration: 1357  
Percentage completed: 45.2333%  
Time elapsed: 315.42341 seconds  
Estimated time remaining: 6.36503 minutes
```

```
Program running...  
Iteration: 1358  
Percentage completed: 45.2667%  
Time elapsed: 315.57999 seconds  
Estimated time remaining: 6.35962 minutes
```

```
Program running...  
Iteration: 1359  
Percentage completed: 45.3000%  
Time elapsed: 315.73828 seconds  
Estimated time remaining: 6.35426 minutes
```

```
Program running...
Iteration: 1360
Percentage completed: 45.3333%
Time elapsed: 315.89179 seconds
Estimated time remaining: 6.34880 minutes
```

```
Program running...
Iteration: 1361
Percentage completed: 45.3667%
Time elapsed: 316.76232 seconds
Estimated time remaining: 6.35774 minutes
```

```
Program running...
Iteration: 1362
Percentage completed: 45.4000%
Time elapsed: 316.92077 seconds
Estimated time remaining: 6.35238 minutes
```

```
Program running...
Iteration: 1363
Percentage completed: 45.4333%
Time elapsed: 317.07705 seconds
Estimated time remaining: 6.34697 minutes
```

```
Program running...
Iteration: 1364
Percentage completed: 45.4667%
Time elapsed: 317.23435 seconds
Estimated time remaining: 6.34158 minutes
```

```
Program running...
Iteration: 1365
Percentage completed: 45.5000%
Time elapsed: 317.39625 seconds
Estimated time remaining: 6.33630 minutes
```

```
Program running...
Iteration: 1366
Percentage completed: 45.5333%
Time elapsed: 317.55412 seconds
Estimated time remaining: 6.33093 minutes
```

```
Program running...
Iteration: 1367
Percentage completed: 45.5667%
Time elapsed: 317.71103 seconds
Estimated time remaining: 6.32555 minutes
```

```
Program running...
Iteration: 1368
Percentage completed: 45.6000%
Time elapsed: 317.87538 seconds
Estimated time remaining: 6.32033 minutes
```

```
Program running...
Iteration: 1369
Percentage completed: 45.6333%
Time elapsed: 318.03235 seconds
Estimated time remaining: 6.31496 minutes
```

```
Program running...
Iteration: 1370
Percentage completed: 45.6667%
Time elapsed: 318.19181 seconds
Estimated time remaining: 6.30964 minutes
```

```
Program running...
Iteration: 1371
Percentage completed: 45.7000%
Time elapsed: 319.06070 seconds
Estimated time remaining: 6.31838 minutes
```

```
Program running...
Iteration: 1372
Percentage completed: 45.7333%
Time elapsed: 319.21488 seconds
Estimated time remaining: 6.31295 minutes
```

```
Program running...
Iteration: 1373
Percentage completed: 45.7667%
Time elapsed: 319.37198 seconds
```

Estimated time remaining: 6.30758 minutes

Program running...  
Iteration: 1374  
Percentage completed: 45.8000%  
Time elapsed: 319.53031 seconds  
Estimated time remaining: 6.30223 minutes

Program running...  
Iteration: 1375  
Percentage completed: 45.8333%  
Time elapsed: 319.68877 seconds  
Estimated time remaining: 6.29690 minutes

Program running...  
Iteration: 1376  
Percentage completed: 45.8667%  
Time elapsed: 319.84664 seconds  
Estimated time remaining: 6.29156 minutes

Program running...  
Iteration: 1377  
Percentage completed: 45.9000%  
Time elapsed: 320.00220 seconds  
Estimated time remaining: 6.28617 minutes

Program running...  
Iteration: 1378  
Percentage completed: 45.9333%  
Time elapsed: 320.15639 seconds  
Estimated time remaining: 6.28076 minutes

Program running...  
Iteration: 1379  
Percentage completed: 45.9667%  
Time elapsed: 320.31147 seconds  
Estimated time remaining: 6.27538 minutes

Program running...

```
Iteration: 1380
Percentage completed: 46.0000%
Time elapsed: 320.46787 seconds
Estimated time remaining: 6.27002 minutes
```

```
Program running...
Iteration: 1381
Percentage completed: 46.0333%
Time elapsed: 321.33735 seconds
Estimated time remaining: 6.27860 minutes
```

```
Program running...
Iteration: 1382
Percentage completed: 46.0667%
Time elapsed: 321.49189 seconds
Estimated time remaining: 6.27320 minutes
```

```
Program running...
Iteration: 1383
Percentage completed: 46.1000%
Time elapsed: 321.64671 seconds
Estimated time remaining: 6.26781 minutes
```

```
Program running...
Iteration: 1384
Percentage completed: 46.1333%
Time elapsed: 321.80223 seconds
Estimated time remaining: 6.26243 minutes
```

```
Program running...
Iteration: 1385
Percentage completed: 46.1667%
Time elapsed: 321.95848 seconds
Estimated time remaining: 6.25707 minutes
```

```
Program running...
Iteration: 1386
Percentage completed: 46.2000%
Time elapsed: 322.11861 seconds
Estimated time remaining: 6.25180 minutes
```

```
Program running...
  Iteration: 1387
  Percentage completed: 46.2333%
  Time elapsed: 322.27214 seconds
  Estimated time remaining: 6.24639 minutes
```

```
Program running...
  Iteration: 1388
  Percentage completed: 46.2667%
  Time elapsed: 322.42759 seconds
  Estimated time remaining: 6.24103 minutes
```

```
Program running...
  Iteration: 1389
  Percentage completed: 46.3000%
  Time elapsed: 322.58408 seconds
  Estimated time remaining: 6.23570 minutes
```

```
Program running...
  Iteration: 1390
  Percentage completed: 46.3333%
  Time elapsed: 322.73795 seconds
  Estimated time remaining: 6.23031 minutes
```

```
Program running...
  Iteration: 1391
  Percentage completed: 46.3667%
  Time elapsed: 323.61805 seconds
  Estimated time remaining: 6.23893 minutes
```

```
Program running...
  Iteration: 1392
  Percentage completed: 46.4000%
  Time elapsed: 323.77535 seconds
  Estimated time remaining: 6.23360 minutes
```

```
Program running...
  Iteration: 1393
  Percentage completed: 46.4333%
  Time elapsed: 323.93242 seconds
  Estimated time remaining: 6.22828 minutes
```

Program running...  
Iteration: 1394  
Percentage completed: 46.4667%  
Time elapsed: 324.08972 seconds  
Estimated time remaining: 6.22296 minutes

Program running...  
Iteration: 1395  
Percentage completed: 46.5000%  
Time elapsed: 324.24870 seconds  
Estimated time remaining: 6.21767 minutes

Program running...  
Iteration: 1396  
Percentage completed: 46.5333%  
Time elapsed: 324.40685 seconds  
Estimated time remaining: 6.21237 minutes

Program running...  
Iteration: 1397  
Percentage completed: 46.5667%  
Time elapsed: 324.56297 seconds  
Estimated time remaining: 6.20704 minutes

Program running...  
Iteration: 1398  
Percentage completed: 46.6000%  
Time elapsed: 324.71843 seconds  
Estimated time remaining: 6.20170 minutes

Program running...  
Iteration: 1399  
Percentage completed: 46.6333%  
Time elapsed: 324.87527 seconds  
Estimated time remaining: 6.19639 minutes

Program running...  
Iteration: 1400  
Percentage completed: 46.6667%

```
Time elapsed: 325.03340 seconds
Estimated time remaining: 6.19111 minutes
```

```
Program running...
Iteration: 1401
Percentage completed: 46.7000%
Time elapsed: 325.90496 seconds
Estimated time remaining: 6.19940 minutes
```

```
Program running...
Iteration: 1402
Percentage completed: 46.7333%
Time elapsed: 326.06268 seconds
Estimated time remaining: 6.19410 minutes
```

```
Program running...
Iteration: 1403
Percentage completed: 46.7667%
Time elapsed: 326.21768 seconds
Estimated time remaining: 6.18876 minutes
```

```
Program running...
Iteration: 1404
Percentage completed: 46.8000%
Time elapsed: 326.37451 seconds
Estimated time remaining: 6.18345 minutes
```

```
Program running...
Iteration: 1405
Percentage completed: 46.8333%
Time elapsed: 326.53258 seconds
Estimated time remaining: 6.17817 minutes
```

```
Program running...
Iteration: 1406
Percentage completed: 46.8667%
Time elapsed: 326.69148 seconds
Estimated time remaining: 6.17290 minutes
```

```
Program running...
```

Program running...

Iteration: 1407  
Percentage completed: 46.9000%  
Time elapsed: 326.84906 seconds  
Estimated time remaining: 6.16762 minutes

Program running...

Iteration: 1408  
Percentage completed: 46.9333%  
Time elapsed: 327.00820 seconds  
Estimated time remaining: 6.16237 minutes

Program running...

Iteration: 1409  
Percentage completed: 46.9667%  
Time elapsed: 327.16278 seconds  
Estimated time remaining: 6.15704 minutes

Program running...

Iteration: 1410  
Percentage completed: 47.0000%  
Time elapsed: 327.32078 seconds  
Estimated time remaining: 6.15177 minutes

Program running...

Iteration: 1411  
Percentage completed: 47.0333%  
Time elapsed: 328.20751 seconds  
Estimated time remaining: 6.16019 minutes

Program running...

Iteration: 1412  
Percentage completed: 47.0667%  
Time elapsed: 328.36449 seconds  
Estimated time remaining: 6.15489 minutes

Program running...

Iteration: 1413  
Percentage completed: 47.1000%  
Time elapsed: 328.52100 seconds  
Estimated time remaining: 6.14960 minutes

```
Program running...
Iteration: 1414
Percentage completed: 47.1333%
Time elapsed: 328.67753 seconds
Estimated time remaining: 6.14430 minutes
```

```
Program running...
Iteration: 1415
Percentage completed: 47.1667%
Time elapsed: 328.83819 seconds
Estimated time remaining: 6.13909 minutes
```

```
Program running...
Iteration: 1416
Percentage completed: 47.2000%
Time elapsed: 328.99480 seconds
Estimated time remaining: 6.13380 minutes
```

```
Program running...
Iteration: 1417
Percentage completed: 47.2333%
Time elapsed: 329.15260 seconds
Estimated time remaining: 6.12854 minutes
```

```
Program running...
Iteration: 1418
Percentage completed: 47.2667%
Time elapsed: 329.30992 seconds
Estimated time remaining: 6.12327 minutes
```

```
Program running...
Iteration: 1419
Percentage completed: 47.3000%
Time elapsed: 329.46859 seconds
Estimated time remaining: 6.11804 minutes
```

```
Program running...
Iteration: 1420
Percentage completed: 47.3333%
Time elapsed: 329.62600 seconds
Estimated time remaining: 6.11278 minutes
```

ESTIMATED TIME REMAINING: 6.12460 MINUTES

Program running...  
Iteration: 1421  
Percentage completed: 47.3667%  
Time elapsed: 330.70528 seconds  
Estimated time remaining: 6.12460 minutes

Program running...  
Iteration: 1422  
Percentage completed: 47.4000%  
Time elapsed: 330.86143 seconds  
Estimated time remaining: 6.11931 minutes

Program running...  
Iteration: 1423  
Percentage completed: 47.4333%  
Time elapsed: 331.01674 seconds  
Estimated time remaining: 6.11400 minutes

Program running...  
Iteration: 1424  
Percentage completed: 47.4667%  
Time elapsed: 331.17607 seconds  
Estimated time remaining: 6.10877 minutes

Program running...  
Iteration: 1425  
Percentage completed: 47.5000%  
Time elapsed: 331.33137 seconds  
Estimated time remaining: 6.10347 minutes

Program running...  
Iteration: 1426  
Percentage completed: 47.5333%  
Time elapsed: 331.48677 seconds  
Estimated time remaining: 6.09818 minutes

Program running...  
Iteration: 1427

Percentage completed: 47.5667%  
Time elapsed: 331.64259 seconds  
Estimated time remaining: 6.09289 minutes

Program running...  
Iteration: 1428  
Percentage completed: 47.6000%  
Time elapsed: 331.79585 seconds  
Estimated time remaining: 6.08757 minutes

Program running...  
Iteration: 1429  
Percentage completed: 47.6333%  
Time elapsed: 331.95145 seconds  
Estimated time remaining: 6.08229 minutes

Program running...  
Iteration: 1430  
Percentage completed: 47.6667%  
Time elapsed: 332.10860 seconds  
Estimated time remaining: 6.07704 minutes

Program running...  
Iteration: 1431  
Percentage completed: 47.7000%  
Time elapsed: 332.98160 seconds  
Estimated time remaining: 6.08488 minutes

Program running...  
Iteration: 1432  
Percentage completed: 47.7333%  
Time elapsed: 333.13823 seconds  
Estimated time remaining: 6.07962 minutes

Program running...  
Iteration: 1433  
Percentage completed: 47.7667%  
Time elapsed: 333.29513 seconds  
Estimated time remaining: 6.07436 minutes

```
Program running...
Iteration: 1434
Percentage completed: 47.8000%
Time elapsed: 333.45098 seconds
Estimated time remaining: 6.06909 minutes
```

```
Program running...
Iteration: 1435
Percentage completed: 47.8333%
Time elapsed: 333.61299 seconds
Estimated time remaining: 6.06393 minutes
```

```
Program running...
Iteration: 1436
Percentage completed: 47.8667%
Time elapsed: 333.77090 seconds
Estimated time remaining: 6.05870 minutes
```

```
Program running...
Iteration: 1437
Percentage completed: 47.9000%
Time elapsed: 333.92612 seconds
Estimated time remaining: 6.05343 minutes
```

```
Program running...
Iteration: 1438
Percentage completed: 47.9333%
Time elapsed: 334.08129 seconds
Estimated time remaining: 6.04816 minutes
```

```
Program running...
Iteration: 1439
Percentage completed: 47.9667%
Time elapsed: 334.23588 seconds
Estimated time remaining: 6.04288 minutes
```

```
Program running...
Iteration: 1440
Percentage completed: 48.0000%
Time elapsed: 334.39042 seconds
Estimated time remaining: 6.03760 minutes
```

```
Program running...
Iteration: 1441
Percentage completed: 48.0333%
Time elapsed: 335.25704 seconds
Estimated time remaining: 6.04517 minutes
```

```
Program running...
Iteration: 1442
Percentage completed: 48.0667%
Time elapsed: 335.41313 seconds
Estimated time remaining: 6.03992 minutes
```

```
Program running...
Iteration: 1443
Percentage completed: 48.1000%
Time elapsed: 335.57183 seconds
Estimated time remaining: 6.03471 minutes
```

```
Program running...
Iteration: 1444
Percentage completed: 48.1333%
Time elapsed: 335.71899 seconds
Estimated time remaining: 6.02930 minutes
```

```
Program running...
Iteration: 1445
Percentage completed: 48.1667%
Time elapsed: 335.87539 seconds
Estimated time remaining: 6.02406 minutes
```

```
Program running...
Iteration: 1446
Percentage completed: 48.2000%
Time elapsed: 336.03606 seconds
Estimated time remaining: 6.01890 minutes
```

```
Program running...
Iteration: 1447
Percentage completed: 48.2333%
```

```
Time elapsed: 336.18824 seconds
Estimated time remaining: 6.01359 minutes
```

```
Program running...
Iteration: 1448
Percentage completed: 48.2667%
Time elapsed: 336.34404 seconds
Estimated time remaining: 6.00835 minutes
```

```
Program running...
Iteration: 1449
Percentage completed: 48.3000%
Time elapsed: 336.50055 seconds
Estimated time remaining: 6.00313 minutes
```

```
Program running...
Iteration: 1450
Percentage completed: 48.3333%
Time elapsed: 336.65391 seconds
Estimated time remaining: 5.99786 minutes
```

```
Program running...
Iteration: 1451
Percentage completed: 48.3667%
Time elapsed: 337.53396 seconds
Estimated time remaining: 6.00551 minutes
```

```
Program running...
Iteration: 1452
Percentage completed: 48.4000%
Time elapsed: 337.68621 seconds
Estimated time remaining: 6.00021 minutes
```

```
Program running...
Iteration: 1453
Percentage completed: 48.4333%
Time elapsed: 337.84223 seconds
Estimated time remaining: 5.99497 minutes
```

```
Program running...
```

```
Iteration: 1454
Percentage completed: 48.4667%
Time elapsed: 337.99781 seconds
Estimated time remaining: 5.98974 minutes
```

```
Program running...
Iteration: 1455
Percentage completed: 48.5000%
Time elapsed: 338.15403 seconds
Estimated time remaining: 5.98451 minutes
```

```
Program running...
Iteration: 1456
Percentage completed: 48.5333%
Time elapsed: 338.31307 seconds
Estimated time remaining: 5.97934 minutes
```

```
Program running...
Iteration: 1457
Percentage completed: 48.5667%
Time elapsed: 338.46980 seconds
Estimated time remaining: 5.97413 minutes
```

```
Program running...
Iteration: 1458
Percentage completed: 48.6000%
Time elapsed: 338.62506 seconds
Estimated time remaining: 5.96890 minutes
```

```
Program running...
Iteration: 1459
Percentage completed: 48.6333%
Time elapsed: 338.78034 seconds
Estimated time remaining: 5.96368 minutes
```

```
Program running...
Iteration: 1460
Percentage completed: 48.6667%
Time elapsed: 338.93468 seconds
Estimated time remaining: 5.95844 minutes
```

```
Program running...
Iteration: 1461
Percentage completed: 48.7000%
Time elapsed: 339.80544 seconds
Estimated time remaining: 5.96578 minutes
```

```
Program running...
Iteration: 1462
Percentage completed: 48.7333%
Time elapsed: 339.96312 seconds
Estimated time remaining: 5.96059 minutes
```

```
Program running...
Iteration: 1463
Percentage completed: 48.7667%
Time elapsed: 340.11354 seconds
Estimated time remaining: 5.95528 minutes
```

```
Program running...
Iteration: 1464
Percentage completed: 48.8000%
Time elapsed: 340.26878 seconds
Estimated time remaining: 5.95005 minutes
```

```
Program running...
Iteration: 1465
Percentage completed: 48.8333%
Time elapsed: 340.42479 seconds
Estimated time remaining: 5.94485 minutes
```

```
Program running...
Iteration: 1466
Percentage completed: 48.8667%
Time elapsed: 340.58599 seconds
Estimated time remaining: 5.93973 minutes
```

```
Program running...
Iteration: 1467
Percentage completed: 48.9000%
Time elapsed: 340.74146 seconds
Estimated time remaining: 5.93452 minutes
```

```
Program running...
Iteration: 1468
Percentage completed: 48.9333%
Time elapsed: 340.89535 seconds
Estimated time remaining: 5.92929 minutes
```

```
Program running...
Iteration: 1469
Percentage completed: 48.9667%
Time elapsed: 341.04850 seconds
Estimated time remaining: 5.92404 minutes
```

```
Program running...
Iteration: 1470
Percentage completed: 49.0000%
Time elapsed: 341.20230 seconds
Estimated time remaining: 5.91881 minutes
```

```
Program running...
Iteration: 1471
Percentage completed: 49.0333%
Time elapsed: 342.06384 seconds
Estimated time remaining: 5.92585 minutes
```

```
Program running...
Iteration: 1472
Percentage completed: 49.0667%
Time elapsed: 342.22157 seconds
Estimated time remaining: 5.92068 minutes
```

```
Program running...
Iteration: 1473
Percentage completed: 49.1000%
Time elapsed: 342.37545 seconds
Estimated time remaining: 5.91545 minutes
```

```
Program running...
Iteration: 1474
```

```
Percentage completed: 49.1333%
Time elapsed: 342.53320 seconds
Estimated time remaining: 5.91028 minutes
```

```
Program running...
Iteration: 1475
Percentage completed: 49.1667%
Time elapsed: 342.69235 seconds
Estimated time remaining: 5.90515 minutes
```

```
Program running...
Iteration: 1476
Percentage completed: 49.2000%
Time elapsed: 342.84636 seconds
Estimated time remaining: 5.89993 minutes
```

```
Program running...
Iteration: 1477
Percentage completed: 49.2333%
Time elapsed: 343.00111 seconds
Estimated time remaining: 5.89473 minutes
```

```
Program running...
Iteration: 1478
Percentage completed: 49.2667%
Time elapsed: 343.15531 seconds
Estimated time remaining: 5.88952 minutes
```

```
Program running...
Iteration: 1479
Percentage completed: 49.3000%
Time elapsed: 343.30927 seconds
Estimated time remaining: 5.88431 minutes
```

```
Program running...
Iteration: 1480
Percentage completed: 49.3333%
Time elapsed: 343.46404 seconds
Estimated time remaining: 5.87911 minutes
```

```
Program running...
Iteration: 1481
Percentage completed: 49.3667%
Time elapsed: 344.33466 seconds
Estimated time remaining: 5.88616 minutes
```

```
Program running...
Iteration: 1482
Percentage completed: 49.4000%
Time elapsed: 344.49147 seconds
Estimated time remaining: 5.88099 minutes
```

```
Program running...
Iteration: 1483
Percentage completed: 49.4333%
Time elapsed: 344.64652 seconds
Estimated time remaining: 5.87580 minutes
```

```
Program running...
Iteration: 1484
Percentage completed: 49.4667%
Time elapsed: 344.80100 seconds
Estimated time remaining: 5.87060 minutes
```

```
Program running...
Iteration: 1485
Percentage completed: 49.5000%
Time elapsed: 344.95956 seconds
Estimated time remaining: 5.86547 minutes
```

```
Program running...
Iteration: 1486
Percentage completed: 49.5333%
Time elapsed: 345.11637 seconds
Estimated time remaining: 5.86032 minutes
```

```
Program running...
Iteration: 1487
Percentage completed: 49.5667%
Time elapsed: 345.27399 seconds
Estimated time remaining: 5.85518 minutes
```

```
Program running...
Iteration: 1488
Percentage completed: 49.6000%
Time elapsed: 345.42897 seconds
Estimated time remaining: 5.85001 minutes
```

```
Program running...
Iteration: 1489
Percentage completed: 49.6333%
Time elapsed: 345.58575 seconds
Estimated time remaining: 5.84486 minutes
```

```
Program running...
Iteration: 1490
Percentage completed: 49.6667%
Time elapsed: 345.74065 seconds
Estimated time remaining: 5.83969 minutes
```

```
Program running...
Iteration: 1491
Percentage completed: 49.7000%
Time elapsed: 346.60178 seconds
Estimated time remaining: 5.84643 minutes
```

```
Program running...
Iteration: 1492
Percentage completed: 49.7333%
Time elapsed: 346.76067 seconds
Estimated time remaining: 5.84132 minutes
```

```
Program running...
Iteration: 1493
Percentage completed: 49.7667%
Time elapsed: 346.91401 seconds
Estimated time remaining: 5.83612 minutes
```

```
Program running...
Iteration: 1494
Percentage completed: 49.8000%
Time elapsed: 347.06625 seconds
```

Estimated time remaining: 5.83090 minutes

Program running...  
Iteration: 1495  
Percentage completed: 49.8333%  
Time elapsed: 347.22424 seconds  
Estimated time remaining: 5.82578 minutes

Program running...  
Iteration: 1496  
Percentage completed: 49.8667%  
Time elapsed: 347.38203 seconds  
Estimated time remaining: 5.82066 minutes

Program running...  
Iteration: 1497  
Percentage completed: 49.9000%  
Time elapsed: 347.53758 seconds  
Estimated time remaining: 5.81551 minutes

Program running...  
Iteration: 1498  
Percentage completed: 49.9333%  
Time elapsed: 347.69038 seconds  
Estimated time remaining: 5.81031 minutes

Program running...  
Iteration: 1499  
Percentage completed: 49.9667%  
Time elapsed: 347.84542 seconds  
Estimated time remaining: 5.80516 minutes

Program running...  
Iteration: 1500  
Percentage completed: 50.0000%  
Time elapsed: 348.00033 seconds  
Estimated time remaining: 5.80000 minutes

Program running...  
Iteration: 1501

```
Iteration: 1501
Percentage completed: 50.0333%
Time elapsed: 348.86562 seconds
Estimated time remaining: 5.80668 minutes
```

```
Program running...
Iteration: 1502
Percentage completed: 50.0667%
Time elapsed: 349.02154 seconds
Estimated time remaining: 5.80153 minutes
```

```
Program running...
Iteration: 1503
Percentage completed: 50.1000%
Time elapsed: 349.17727 seconds
Estimated time remaining: 5.79639 minutes
```

```
Program running...
Iteration: 1504
Percentage completed: 50.1333%
Time elapsed: 349.33326 seconds
Estimated time remaining: 5.79125 minutes
```

```
Program running...
Iteration: 1505
Percentage completed: 50.1667%
Time elapsed: 349.49099 seconds
Estimated time remaining: 5.78615 minutes
```

```
Program running...
Iteration: 1506
Percentage completed: 50.2000%
Time elapsed: 349.64891 seconds
Estimated time remaining: 5.78105 minutes
```

```
Program running...
Iteration: 1507
Percentage completed: 50.2333%
Time elapsed: 349.80397 seconds
Estimated time remaining: 5.77590 minutes
```

```
Program running...
  Iteration: 1508
  Percentage completed: 50.2667%
  Time elapsed: 349.96007 seconds
  Estimated time remaining: 5.77078 minutes
```

```
Program running...
  Iteration: 1509
  Percentage completed: 50.3000%
  Time elapsed: 350.11579 seconds
  Estimated time remaining: 5.76566 minutes
```

```
Program running...
  Iteration: 1510
  Percentage completed: 50.3333%
  Time elapsed: 350.27299 seconds
  Estimated time remaining: 5.76056 minutes
```

```
Program running...
  Iteration: 1511
  Percentage completed: 50.3667%
  Time elapsed: 351.14475 seconds
  Estimated time remaining: 5.76720 minutes
```

```
Program running...
  Iteration: 1512
  Percentage completed: 50.4000%
  Time elapsed: 351.30311 seconds
  Estimated time remaining: 5.76211 minutes
```

```
Program running...
  Iteration: 1513
  Percentage completed: 50.4333%
  Time elapsed: 351.45749 seconds
  Estimated time remaining: 5.75696 minutes
```

```
Program running...
  Iteration: 1514
  Percentage completed: 50.4667%
  Time elapsed: 351.61391 seconds
  Estimated time remaining: 5.75185 minutes
```

```
Program running...
Iteration: 1515
Percentage completed: 50.5000%
Time elapsed: 351.77001 seconds
Estimated time remaining: 5.74674 minutes
```

```
Program running...
Iteration: 1516
Percentage completed: 50.5333%
Time elapsed: 351.92808 seconds
Estimated time remaining: 5.74166 minutes
```

```
Program running...
Iteration: 1517
Percentage completed: 50.5667%
Time elapsed: 352.08409 seconds
Estimated time remaining: 5.73655 minutes
```

```
Program running...
Iteration: 1518
Percentage completed: 50.6000%
Time elapsed: 352.24014 seconds
Estimated time remaining: 5.73144 minutes
```

```
Program running...
Iteration: 1519
Percentage completed: 50.6333%
Time elapsed: 352.39261 seconds
Estimated time remaining: 5.72628 minutes
```

```
Program running...
Iteration: 1520
Percentage completed: 50.6667%
Time elapsed: 352.54793 seconds
Estimated time remaining: 5.72117 minutes
```

```
Program running...
Iteration: 1521
Percentage completed: 50.7000%
```

Percentage completed: 50.7333%  
Time elapsed: 353.41268 seconds  
Estimated time remaining: 5.72756 minutes

Program running...  
Iteration: 1522  
Percentage completed: 50.7333%  
Time elapsed: 353.56784 seconds  
Estimated time remaining: 5.72244 minutes

Program running...  
Iteration: 1523  
Percentage completed: 50.7667%  
Time elapsed: 353.72323 seconds  
Estimated time remaining: 5.71732 minutes

Program running...  
Iteration: 1524  
Percentage completed: 50.8000%  
Time elapsed: 353.87957 seconds  
Estimated time remaining: 5.71223 minutes

Program running...  
Iteration: 1525  
Percentage completed: 50.8333%  
Time elapsed: 354.03592 seconds  
Estimated time remaining: 5.70714 minutes

Program running...  
Iteration: 1526  
Percentage completed: 50.8667%  
Time elapsed: 354.19370 seconds  
Estimated time remaining: 5.70207 minutes

Program running...  
Iteration: 1527  
Percentage completed: 50.9000%  
Time elapsed: 354.34966 seconds  
Estimated time remaining: 5.69698 minutes

```
Program running...
Iteration: 1528
Percentage completed: 50.9333%
Time elapsed: 354.50438 seconds
Estimated time remaining: 5.69187 minutes
```

```
Program running...
Iteration: 1529
Percentage completed: 50.9667%
Time elapsed: 354.66175 seconds
Estimated time remaining: 5.68680 minutes
```

```
Program running...
Iteration: 1530
Percentage completed: 51.0000%
Time elapsed: 354.81396 seconds
Estimated time remaining: 5.68166 minutes
```

```
Program running...
Iteration: 1531
Percentage completed: 51.0333%
Time elapsed: 355.70456 seconds
Estimated time remaining: 5.68833 minutes
```

```
Program running...
Iteration: 1532
Percentage completed: 51.0667%
Time elapsed: 355.86349 seconds
Estimated time remaining: 5.68328 minutes
```

```
Program running...
Iteration: 1533
Percentage completed: 51.1000%
Time elapsed: 356.01431 seconds
Estimated time remaining: 5.67811 minutes
```

```
Program running...
Iteration: 1534
Percentage completed: 51.1333%
Time elapsed: 356.16846 seconds
Estimated time remaining: 5.67300 minutes
```

```
Program running...
  Iteration: 1535
  Percentage completed: 51.1667%
  Time elapsed: 356.32812 seconds
  Estimated time remaining: 5.66798 minutes
```

```
Program running...
  Iteration: 1536
  Percentage completed: 51.2000%
  Time elapsed: 356.48307 seconds
  Estimated time remaining: 5.66288 minutes
```

```
Program running...
  Iteration: 1537
  Percentage completed: 51.2333%
  Time elapsed: 356.63783 seconds
  Estimated time remaining: 5.65779 minutes
```

```
Program running...
  Iteration: 1538
  Percentage completed: 51.2667%
  Time elapsed: 356.79490 seconds
  Estimated time remaining: 5.65273 minutes
```

```
Program running...
  Iteration: 1539
  Percentage completed: 51.3000%
  Time elapsed: 356.95050 seconds
  Estimated time remaining: 5.64766 minutes
```

```
Program running...
  Iteration: 1540
  Percentage completed: 51.3333%
  Time elapsed: 357.10781 seconds
  Estimated time remaining: 5.64261 minutes
```

```
Program running...
  Iteration: 1541
  Percentage completed: 51.3667%
  Time elapsed: 357.98407 seconds
```

Estimated time remaining: 5.64891 minutes

Program running...  
Iteration: 1542  
Percentage completed: 51.4000%  
Time elapsed: 358.13861 seconds  
Estimated time remaining: 5.64382 minutes

Program running...  
Iteration: 1543  
Percentage completed: 51.4333%  
Time elapsed: 358.29494 seconds  
Estimated time remaining: 5.63875 minutes

Program running...  
Iteration: 1544  
Percentage completed: 51.4667%  
Time elapsed: 358.44926 seconds  
Estimated time remaining: 5.63366 minutes

Program running...  
Iteration: 1545  
Percentage completed: 51.5000%  
Time elapsed: 358.60902 seconds  
Estimated time remaining: 5.62865 minutes

Program running...  
Iteration: 1546  
Percentage completed: 51.5333%  
Time elapsed: 358.76541 seconds  
Estimated time remaining: 5.62360 minutes

Program running...  
Iteration: 1547  
Percentage completed: 51.5667%  
Time elapsed: 358.92007 seconds  
Estimated time remaining: 5.61852 minutes

Program running...  
Iteration: 1548

```
Percentage completed: 51.6000%
Time elapsed: 359.07678 seconds
Estimated time remaining: 5.61347 minutes
```

```
Program running...
Iteration: 1549
Percentage completed: 51.6333%
Time elapsed: 359.23264 seconds
Estimated time remaining: 5.60842 minutes
```

```
Program running...
Iteration: 1550
Percentage completed: 51.6667%
Time elapsed: 359.38864 seconds
Estimated time remaining: 5.60337 minutes
```

```
Program running...
Iteration: 1551
Percentage completed: 51.7000%
Time elapsed: 360.24824 seconds
Estimated time remaining: 5.60928 minutes
```

```
Program running...
Iteration: 1552
Percentage completed: 51.7333%
Time elapsed: 360.40320 seconds
Estimated time remaining: 5.60421 minutes
```

```
Program running...
Iteration: 1553
Percentage completed: 51.7667%
Time elapsed: 360.55675 seconds
Estimated time remaining: 5.59911 minutes
```

```
Program running...
Iteration: 1554
Percentage completed: 51.8000%
Time elapsed: 360.71374 seconds
Estimated time remaining: 5.59408 minutes
```

```
Program running...
Iteration: 1555
Percentage completed: 51.8333%
Time elapsed: 360.86951 seconds
Estimated time remaining: 5.58903 minutes
```

```
Program running...
Iteration: 1556
Percentage completed: 51.8667%
Time elapsed: 361.02583 seconds
Estimated time remaining: 5.58399 minutes
```

```
Program running...
Iteration: 1557
Percentage completed: 51.9000%
Time elapsed: 361.17862 seconds
Estimated time remaining: 5.57890 minutes
```

```
Program running...
Iteration: 1558
Percentage completed: 51.9333%
Time elapsed: 361.33264 seconds
Estimated time remaining: 5.57383 minutes
```

```
Program running...
Iteration: 1559
Percentage completed: 51.9667%
Time elapsed: 361.48557 seconds
Estimated time remaining: 5.56875 minutes
```

```
Program running...
Iteration: 1560
Percentage completed: 52.0000%
Time elapsed: 361.63844 seconds
Estimated time remaining: 5.56367 minutes
```

```
Program running...
Iteration: 1561
Percentage completed: 52.0333%
Time elapsed: 362.51985 seconds
Estimated time remaining: 5.56978 minutes
```

```
Program running...
Iteration: 1562
Percentage completed: 52.0667%
Time elapsed: 362.67561 seconds
Estimated time remaining: 5.56474 minutes
```

```
Program running...
Iteration: 1563
Percentage completed: 52.1000%
Time elapsed: 362.83019 seconds
Estimated time remaining: 5.55968 minutes
```

```
Program running...
Iteration: 1564
Percentage completed: 52.1333%
Time elapsed: 362.98646 seconds
Estimated time remaining: 5.55465 minutes
```

```
Program running...
Iteration: 1565
Percentage completed: 52.1667%
Time elapsed: 363.14352 seconds
Estimated time remaining: 5.54963 minutes
```

```
Program running...
Iteration: 1566
Percentage completed: 52.2000%
Time elapsed: 363.30105 seconds
Estimated time remaining: 5.54463 minutes
```

```
Program running...
Iteration: 1567
Percentage completed: 52.2333%
Time elapsed: 363.45475 seconds
Estimated time remaining: 5.53957 minutes
```

```
Program running...
Iteration: 1568
Percentage completed: 52.2667%
```

```
Time elapsed: 363.61010 seconds
Estimated time remaining: 5.53454 minutes
```

```
Program running...
Iteration: 1569
Percentage completed: 52.3000%
Time elapsed: 363.76663 seconds
Estimated time remaining: 5.52953 minutes
```

```
Program running...
Iteration: 1570
Percentage completed: 52.3333%
Time elapsed: 363.92234 seconds
Estimated time remaining: 5.52451 minutes
```

```
Program running...
Iteration: 1571
Percentage completed: 52.3667%
Time elapsed: 364.79165 seconds
Estimated time remaining: 5.53031 minutes
```

```
Program running...
Iteration: 1572
Percentage completed: 52.4000%
Time elapsed: 364.94905 seconds
Estimated time remaining: 5.52531 minutes
```

```
Program running...
Iteration: 1573
Percentage completed: 52.4333%
Time elapsed: 365.10049 seconds
Estimated time remaining: 5.52022 minutes
```

```
Program running...
Iteration: 1574
Percentage completed: 52.4667%
Time elapsed: 365.25663 seconds
Estimated time remaining: 5.51520 minutes
```

```
Program running...
Iteration: 1575
Percentage completed: 52.5000%
Time elapsed: 365.41142 seconds
Estimated time remaining: 5.51017 minutes
```

```
Program running...
Iteration: 1576
Percentage completed: 52.5333%
Time elapsed: 365.56711 seconds
Estimated time remaining: 5.50515 minutes
```

```
Program running...
Iteration: 1577
Percentage completed: 52.5667%
Time elapsed: 365.72084 seconds
Estimated time remaining: 5.50011 minutes
```

```
Program running...
Iteration: 1578
Percentage completed: 52.6000%
Time elapsed: 365.87541 seconds
Estimated time remaining: 5.49509 minutes
```

```
Program running...
Iteration: 1579
Percentage completed: 52.6333%
Time elapsed: 366.02955 seconds
Estimated time remaining: 5.49006 minutes
```

```
Program running...
Iteration: 1580
Percentage completed: 52.6667%
Time elapsed: 366.18414 seconds
Estimated time remaining: 5.48504 minutes
```

```
Program running...
Iteration: 1581
Percentage completed: 52.7000%
Time elapsed: 367.05683 seconds
Estimated time remaining: 5.49076 minutes
```

```
Program running...
Iteration: 1582
Percentage completed: 52.7333%
Time elapsed: 367.21281 seconds
Estimated time remaining: 5.48575 minutes
```

```
Program running...
Iteration: 1583
Percentage completed: 52.7667%
Time elapsed: 367.36933 seconds
Estimated time remaining: 5.48076 minutes
```

```
Program running...
Iteration: 1584
Percentage completed: 52.8000%
Time elapsed: 367.52194 seconds
Estimated time remaining: 5.47570 minutes
```

```
Program running...
Iteration: 1585
Percentage completed: 52.8333%
Time elapsed: 367.67902 seconds
Estimated time remaining: 5.47072 minutes
```

```
Program running...
Iteration: 1586
Percentage completed: 52.8667%
Time elapsed: 367.83671 seconds
Estimated time remaining: 5.46575 minutes
```

```
Program running...
Iteration: 1587
Percentage completed: 52.9000%
Time elapsed: 367.99162 seconds
Estimated time remaining: 5.46074 minutes
```

```
Program running...
Iteration: 1588
Percentage completed: 52.9333%
Time elapsed: 368.14646 seconds
Estimated time remaining: 5.45574 minutes
```

```
Program running...
Iteration: 1589
Percentage completed: 52.9667%
Time elapsed: 368.30072 seconds
Estimated time remaining: 5.45073 minutes
```

```
Program running...
Iteration: 1590
Percentage completed: 53.0000%
Time elapsed: 368.45545 seconds
Estimated time remaining: 5.44572 minutes
```

```
Program running...
Iteration: 1591
Percentage completed: 53.0333%
Time elapsed: 369.33174 seconds
Estimated time remaining: 5.45138 minutes
```

```
Program running...
Iteration: 1592
Percentage completed: 53.0667%
Time elapsed: 369.48704 seconds
Estimated time remaining: 5.44637 minutes
```

```
Program running...
Iteration: 1593
Percentage completed: 53.1000%
Time elapsed: 369.64244 seconds
Estimated time remaining: 5.44138 minutes
```

```
Program running...
Iteration: 1594
Percentage completed: 53.1333%
Time elapsed: 369.79919 seconds
Estimated time remaining: 5.43640 minutes
```

```
Program running...
Iteration: 1595
```

```
Percentage completed: 53.166%
Time elapsed: 369.95722 seconds
Estimated time remaining: 5.43145 minutes
```

```
Program running...
Iteration: 1596
Percentage completed: 53.2000%
Time elapsed: 370.11465 seconds
Estimated time remaining: 5.42649 minutes
```

```
Program running...
Iteration: 1597
Percentage completed: 53.2333%
Time elapsed: 370.26892 seconds
Estimated time remaining: 5.42149 minutes
```

```
Program running...
Iteration: 1598
Percentage completed: 53.2667%
Time elapsed: 370.42374 seconds
Estimated time remaining: 5.41650 minutes
```

```
Program running...
Iteration: 1599
Percentage completed: 53.3000%
Time elapsed: 370.57951 seconds
Estimated time remaining: 5.41153 minutes
```

```
Program running...
Iteration: 1600
Percentage completed: 53.3333%
Time elapsed: 370.73450 seconds
Estimated time remaining: 5.40654 minutes
```

```
Program running...
Iteration: 1601
Percentage completed: 53.3667%
Time elapsed: 371.60574 seconds
Estimated time remaining: 5.41200 minutes
```

```
Program running...
Iteration: 1602
Percentage completed: 53.4000%
Time elapsed: 371.76287 seconds
Estimated time remaining: 5.40704 minutes
```

```
Program running...
Iteration: 1603
Percentage completed: 53.4333%
Time elapsed: 371.91874 seconds
Estimated time remaining: 5.40206 minutes
```

```
Program running...
Iteration: 1604
Percentage completed: 53.4667%
Time elapsed: 372.07562 seconds
Estimated time remaining: 5.39711 minutes
```

```
Program running...
Iteration: 1605
Percentage completed: 53.5000%
Time elapsed: 372.23363 seconds
Estimated time remaining: 5.39217 minutes
```

```
Program running...
Iteration: 1606
Percentage completed: 53.5333%
Time elapsed: 372.39109 seconds
Estimated time remaining: 5.38723 minutes
```

```
Program running...
Iteration: 1607
Percentage completed: 53.5667%
Time elapsed: 372.54822 seconds
Estimated time remaining: 5.38228 minutes
```

```
Program running...
Iteration: 1608
Percentage completed: 53.6000%
Time elapsed: 372.70527 seconds
Estimated time remaining: 5.37734 minutes
```

```
Program running...
Iteration: 1609
Percentage completed: 53.6333%
Time elapsed: 372.86234 seconds
Estimated time remaining: 5.37240 minutes
```

```
Program running...
Iteration: 1610
Percentage completed: 53.6667%
Time elapsed: 373.01672 seconds
Estimated time remaining: 5.36742 minutes
```

```
Program running...
Iteration: 1611
Percentage completed: 53.7000%
Time elapsed: 373.89109 seconds
Estimated time remaining: 5.37280 minutes
```

```
Program running...
Iteration: 1612
Percentage completed: 53.7333%
Time elapsed: 374.04703 seconds
Estimated time remaining: 5.36784 minutes
```

```
Program running...
Iteration: 1613
Percentage completed: 53.7667%
Time elapsed: 374.20098 seconds
Estimated time remaining: 5.36285 minutes
```

```
Program running...
Iteration: 1614
Percentage completed: 53.8000%
Time elapsed: 374.35757 seconds
Estimated time remaining: 5.35790 minutes
```

```
Program running...
Iteration: 1615
Percentage completed: 53.8333%
Time elapsed: 374.51295 seconds
```

Time elapsed: 374.119 seconds  
Estimated time remaining: 5.35296 minutes

Program running...  
Iteration: 1616  
Percentage completed: 53.8667%  
Time elapsed: 374.66945 seconds  
Estimated time remaining: 5.34800 minutes

Program running...  
Iteration: 1617  
Percentage completed: 53.9000%  
Time elapsed: 374.82206 seconds  
Estimated time remaining: 5.34301 minutes

Program running...  
Iteration: 1618  
Percentage completed: 53.9333%  
Time elapsed: 374.97597 seconds  
Estimated time remaining: 5.33804 minutes

Program running...  
Iteration: 1619  
Percentage completed: 53.9667%  
Time elapsed: 375.12708 seconds  
Estimated time remaining: 5.33303 minutes

Program running...  
Iteration: 1620  
Percentage completed: 54.0000%  
Time elapsed: 375.28362 seconds  
Estimated time remaining: 5.32810 minutes

Program running...  
Iteration: 1621  
Percentage completed: 54.0333%  
Time elapsed: 376.15325 seconds  
Estimated time remaining: 5.33328 minutes

Program running...

Program running...  
Iteration: 1622  
Percentage completed: 54.0667%  
Time elapsed: 376.30888 seconds  
Estimated time remaining: 5.32833 minutes

Program running...  
Iteration: 1623  
Percentage completed: 54.1000%  
Time elapsed: 376.46480 seconds  
Estimated time remaining: 5.32339 minutes

Program running...  
Iteration: 1624  
Percentage completed: 54.1333%  
Time elapsed: 376.61941 seconds  
Estimated time remaining: 5.31843 minutes

Program running...  
Iteration: 1625  
Percentage completed: 54.1667%  
Time elapsed: 376.77722 seconds  
Estimated time remaining: 5.31352 minutes

Program running...  
Iteration: 1626  
Percentage completed: 54.2000%  
Time elapsed: 376.93636 seconds  
Estimated time remaining: 5.30863 minutes

Program running...  
Iteration: 1627  
Percentage completed: 54.2333%  
Time elapsed: 377.09036 seconds  
Estimated time remaining: 5.30368 minutes

Program running...  
Iteration: 1628  
Percentage completed: 54.2667%  
Time elapsed: 377.24507 seconds  
Estimated time remaining: 5.29873 minutes

```
Program running...
  Iteration: 1629
  Percentage completed: 54.3000%
  Time elapsed: 377.40190 seconds
  Estimated time remaining: 5.29382 minutes
```

```
Program running...
  Iteration: 1630
  Percentage completed: 54.3333%
  Time elapsed: 377.55813 seconds
  Estimated time remaining: 5.28890 minutes
```

```
Program running...
  Iteration: 1631
  Percentage completed: 54.3667%
  Time elapsed: 378.41926 seconds
  Estimated time remaining: 5.29385 minutes
```

```
Program running...
  Iteration: 1632
  Percentage completed: 54.4000%
  Time elapsed: 378.57501 seconds
  Estimated time remaining: 5.28891 minutes
```

```
Program running...
  Iteration: 1633
  Percentage completed: 54.4333%
  Time elapsed: 378.72960 seconds
  Estimated time remaining: 5.28397 minutes
```

```
Program running...
  Iteration: 1634
  Percentage completed: 54.4667%
  Time elapsed: 378.88388 seconds
  Estimated time remaining: 5.27902 minutes
```

```
Program running...
  Iteration: 1635
  Percentage completed: 54.5000%
  Time elapsed: 379.04263 seconds
  Estimated time remaining: 5.27414 minutes
```

```
Program running...
Iteration: 1636
Percentage completed: 54.5333%
Time elapsed: 379.20113 seconds
Estimated time remaining: 5.26926 minutes
```

```
Program running...
Iteration: 1637
Percentage completed: 54.5667%
Time elapsed: 379.35941 seconds
Estimated time remaining: 5.26437 minutes
```

```
Program running...
Iteration: 1638
Percentage completed: 54.6000%
Time elapsed: 379.51263 seconds
Estimated time remaining: 5.25942 minutes
```

```
Program running...
Iteration: 1639
Percentage completed: 54.6333%
Time elapsed: 379.66903 seconds
Estimated time remaining: 5.25452 minutes
```

```
Program running...
Iteration: 1640
Percentage completed: 54.6667%
Time elapsed: 379.82188 seconds
Estimated time remaining: 5.24957 minutes
```

```
Program running...
Iteration: 1641
Percentage completed: 54.7000%
Time elapsed: 380.70435 seconds
Estimated time remaining: 5.25469 minutes
```

```
Program running...
Iteration: 1642
Percentage completed: 54.7333%
```

Time elapsed: 380.86111 seconds  
Estimated time remaining: 5.24979 minutes

Program running...  
Iteration: 1643  
Percentage completed: 54.7667%  
Time elapsed: 381.01701 seconds  
Estimated time remaining: 5.24488 minutes

Program running...  
Iteration: 1644  
Percentage completed: 54.8000%  
Time elapsed: 381.17282 seconds  
Estimated time remaining: 5.23997 minutes

Program running...  
Iteration: 1645  
Percentage completed: 54.8333%  
Time elapsed: 381.33183 seconds  
Estimated time remaining: 5.23510 minutes

Program running...  
Iteration: 1646  
Percentage completed: 54.8667%  
Time elapsed: 381.49306 seconds  
Estimated time remaining: 5.23027 minutes

Program running...  
Iteration: 1647  
Percentage completed: 54.9000%  
Time elapsed: 381.64882 seconds  
Estimated time remaining: 5.22537 minutes

Program running...  
Iteration: 1648  
Percentage completed: 54.9333%  
Time elapsed: 381.80465 seconds  
Estimated time remaining: 5.22047 minutes

```
Program running...
Iteration: 1649
Percentage completed: 54.9667%
Time elapsed: 381.96049 seconds
Estimated time remaining: 5.21557 minutes
```

```
Program running...
Iteration: 1650
Percentage completed: 55.0000%
Time elapsed: 382.11765 seconds
Estimated time remaining: 5.21069 minutes
```

```
Program running...
Iteration: 1651
Percentage completed: 55.0333%
Time elapsed: 382.99586 seconds
Estimated time remaining: 5.21564 minutes
```

```
Program running...
Iteration: 1652
Percentage completed: 55.0667%
Time elapsed: 383.14848 seconds
Estimated time remaining: 5.21069 minutes
```

```
Program running...
Iteration: 1653
Percentage completed: 55.1000%
Time elapsed: 383.30255 seconds
Estimated time remaining: 5.20577 minutes
```

```
Program running...
Iteration: 1654
Percentage completed: 55.1333%
Time elapsed: 383.45574 seconds
Estimated time remaining: 5.20084 minutes
```

```
Program running...
Iteration: 1655
Percentage completed: 55.1667%
Time elapsed: 383.61332 seconds
Estimated time remaining: 5.19597 minutes
```

```
Program running...
Iteration: 1656
Percentage completed: 55.2000%
Time elapsed: 383.76953 seconds
Estimated time remaining: 5.19108 minutes
```

```
Program running...
Iteration: 1657
Percentage completed: 55.2333%
Time elapsed: 383.92322 seconds
Estimated time remaining: 5.18617 minutes
```

```
Program running...
Iteration: 1658
Percentage completed: 55.2667%
Time elapsed: 384.07861 seconds
Estimated time remaining: 5.18128 minutes
```

```
Program running...
Iteration: 1659
Percentage completed: 55.3000%
Time elapsed: 384.23506 seconds
Estimated time remaining: 5.17640 minutes
```

```
Program running...
Iteration: 1660
Percentage completed: 55.3333%
Time elapsed: 384.39135 seconds
Estimated time remaining: 5.17153 minutes
```

```
Program running...
Iteration: 1661
Percentage completed: 55.3667%
Time elapsed: 385.26371 seconds
Estimated time remaining: 5.17628 minutes
```

```
Program running...
Iteration: 1662
Percentage completed: 55.4000%
Time elapsed: 385.42193 seconds
```

Estimated time remaining: 5.17142 minutes

Program running...  
Iteration: 1663  
Percentage completed: 55.4333%  
Time elapsed: 385.57861 seconds  
Estimated time remaining: 5.16655 minutes

Program running...  
Iteration: 1664  
Percentage completed: 55.4667%  
Time elapsed: 385.73570 seconds  
Estimated time remaining: 5.16169 minutes

Program running...  
Iteration: 1665  
Percentage completed: 55.5000%  
Time elapsed: 385.89537 seconds  
Estimated time remaining: 5.15686 minutes

Program running...  
Iteration: 1666  
Percentage completed: 55.5333%  
Time elapsed: 386.05190 seconds  
Estimated time remaining: 5.15199 minutes

Program running...  
Iteration: 1667  
Percentage completed: 55.5667%  
Time elapsed: 386.20847 seconds  
Estimated time remaining: 5.14713 minutes

Program running...  
Iteration: 1668  
Percentage completed: 55.6000%  
Time elapsed: 386.36608 seconds  
Estimated time remaining: 5.14228 minutes

Program running...

```
Iteration: 1669
Percentage completed: 55.6333%
Time elapsed: 386.52344 seconds
Estimated time remaining: 5.13743 minutes
```

```
Program running...
Iteration: 1670
Percentage completed: 55.6667%
Time elapsed: 386.68467 seconds
Estimated time remaining: 5.13264 minutes
```

```
Program running...
Iteration: 1671
Percentage completed: 55.7000%
Time elapsed: 387.55133 seconds
Estimated time remaining: 5.13720 minutes
```

```
Program running...
Iteration: 1672
Percentage completed: 55.7333%
Time elapsed: 387.70663 seconds
Estimated time remaining: 5.13232 minutes
```

```
Program running...
Iteration: 1673
Percentage completed: 55.7667%
Time elapsed: 387.86038 seconds
Estimated time remaining: 5.12742 minutes
```

```
Program running...
Iteration: 1674
Percentage completed: 55.8000%
Time elapsed: 388.01472 seconds
Estimated time remaining: 5.12253 minutes
```

```
Program running...
Iteration: 1675
Percentage completed: 55.8333%
Time elapsed: 388.17207 seconds
Estimated time remaining: 5.11769 minutes
```

```
Program running...
Iteration: 1676
Percentage completed: 55.8667%
Time elapsed: 388.32882 seconds
Estimated time remaining: 5.11284 minutes
```

```
Program running...
Iteration: 1677
Percentage completed: 55.9000%
Time elapsed: 388.48324 seconds
Estimated time remaining: 5.10796 minutes
```

```
Program running...
Iteration: 1678
Percentage completed: 55.9333%
Time elapsed: 388.64147 seconds
Estimated time remaining: 5.10314 minutes
```

```
Program running...
Iteration: 1679
Percentage completed: 55.9667%
Time elapsed: 388.79537 seconds
Estimated time remaining: 5.09826 minutes
```

```
Program running...
Iteration: 1680
Percentage completed: 56.0000%
Time elapsed: 388.95142 seconds
Estimated time remaining: 5.09341 minutes
```

```
Program running...
Iteration: 1681
Percentage completed: 56.0333%
Time elapsed: 389.87066 seconds
Estimated time remaining: 5.09855 minutes
```

```
Program running...
Iteration: 1682
Percentage completed: 56.0667%
Time elapsed: 390.02552 seconds
Estimated time remaining: 5.09367 minutes
```

```
Program running...
Iteration: 1683
Percentage completed: 56.1000%
Time elapsed: 390.18097 seconds
Estimated time remaining: 5.08881 minutes
```

```
Program running...
Iteration: 1684
Percentage completed: 56.1333%
Time elapsed: 390.33751 seconds
Estimated time remaining: 5.08397 minutes
```

```
Program running...
Iteration: 1685
Percentage completed: 56.1667%
Time elapsed: 390.49392 seconds
Estimated time remaining: 5.07912 minutes
```

```
Program running...
Iteration: 1686
Percentage completed: 56.2000%
Time elapsed: 390.65282 seconds
Estimated time remaining: 5.07431 minutes
```

```
Program running...
Iteration: 1687
Percentage completed: 56.2333%
Time elapsed: 390.81001 seconds
Estimated time remaining: 5.06949 minutes
```

```
Program running...
Iteration: 1688
Percentage completed: 56.2667%
Time elapsed: 390.96557 seconds
Estimated time remaining: 5.06464 minutes
```

```
Program running...
Iteration: 1689
Percentage completed: 56.3000%
```

```
Time elapsed: 391.13339 seconds
Estimated time remaining: 5.05995 minutes
```

```
Program running...
Iteration: 1690
Percentage completed: 56.3333%
Time elapsed: 391.30962 seconds
Estimated time remaining: 5.05538 minutes
```

```
Program running...
Iteration: 1691
Percentage completed: 56.3667%
Time elapsed: 392.17834 seconds
Estimated time remaining: 5.05974 minutes
```

```
Program running...
Iteration: 1692
Percentage completed: 56.4000%
Time elapsed: 392.33415 seconds
Estimated time remaining: 5.05489 minutes
```

```
Program running...
Iteration: 1693
Percentage completed: 56.4333%
Time elapsed: 392.48926 seconds
Estimated time remaining: 5.05004 minutes
```

```
Program running...

Iteration: 1694
Percentage completed: 56.4667%
Time elapsed: 392.64633 seconds
Estimated time remaining: 5.04522 minutes
```

```
Program running...
Iteration: 1695
Percentage completed: 56.5000%
Time elapsed: 392.80390 seconds
Estimated time remaining: 5.04040 minutes
```

Program running...  
Iteration: 1696  
Percentage completed: 56.5333%  
Time elapsed: 392.96076 seconds  
Estimated time remaining: 5.03558 minutes

Program running...  
Iteration: 1697  
Percentage completed: 56.5667%  
Time elapsed: 393.12009 seconds  
Estimated time remaining: 5.03079 minutes

Program running...  
Iteration: 1698  
Percentage completed: 56.6000%  
Time elapsed: 393.27482 seconds  
Estimated time remaining: 5.02595 minutes

Program running...  
Iteration: 1699  
Percentage completed: 56.6333%  
Time elapsed: 393.43022 seconds  
Estimated time remaining: 5.02112 minutes

Program running...  
Iteration: 1700  
Percentage completed: 56.6667%  
Time elapsed: 393.58769 seconds  
Estimated time remaining: 5.01631 minutes

Program running...  
Iteration: 1701  
Percentage completed: 56.7000%  
Time elapsed: 394.45500 seconds  
Estimated time remaining: 5.02055 minutes

Program running...  
Iteration: 1702  
Percentage completed: 56.7333%  
Time elapsed: 394.60921 seconds  
Estimated time remaining: 5.01569 minutes

```
Program running...
Iteration: 1703
Percentage completed: 56.7667%
Time elapsed: 394.76585 seconds
Estimated time remaining: 5.01087 minutes
```

```
Program running...
Iteration: 1704
Percentage completed: 56.8000%
Time elapsed: 394.92202 seconds
Estimated time remaining: 5.00605 minutes
```

```
Program running...
Iteration: 1705
Percentage completed: 56.8333%
Time elapsed: 395.08453 seconds
Estimated time remaining: 5.00131 minutes
```

```
Program running...
Iteration: 1706
Percentage completed: 56.8667%
Time elapsed: 395.24455 seconds
Estimated time remaining: 4.99654 minutes
```

```
Program running...
Iteration: 1707
Percentage completed: 56.9000%
Time elapsed: 395.40146 seconds
Estimated time remaining: 4.99174 minutes
```

```
Program running...
Iteration: 1708
Percentage completed: 56.9333%
Time elapsed: 395.55778 seconds
Estimated time remaining: 4.98693 minutes
```

```
Program running...
Iteration: 1709
Percentage completed: 56.9667%
Time elapsed: 395.71418 seconds
```

Estimated time remaining: 4.97731 minutes

Program running...  
Iteration: 1710  
Percentage completed: 57.0000%  
Time elapsed: 395.86992 seconds  
Estimated time remaining: 4.97731 minutes

Program running...  
Iteration: 1711  
Percentage completed: 57.0333%  
Time elapsed: 396.73653 seconds  
Estimated time remaining: 4.98143 minutes

Program running...  
Iteration: 1712  
Percentage completed: 57.0667%  
Time elapsed: 396.89179 seconds  
Estimated time remaining: 4.97660 minutes

Program running...  
Iteration: 1713  
Percentage completed: 57.1000%  
Time elapsed: 397.04629 seconds  
Estimated time remaining: 4.97177 minutes

Program running...  
Iteration: 1714  
Percentage completed: 57.1333%  
Time elapsed: 397.20093 seconds  
Estimated time remaining: 4.96694 minutes

Program running...  
Iteration: 1715  
Percentage completed: 57.1667%  
Time elapsed: 397.35891 seconds  
Estimated time remaining: 4.96216 minutes

Program running...  
Iteration: 1716

Iteration: 1710  
Percentage completed: 57.2000%  
Time elapsed: 397.51606 seconds  
Estimated time remaining: 4.95737 minutes

Program running...  
Iteration: 1711  
Percentage completed: 57.2333%  
Time elapsed: 397.67004 seconds  
Estimated time remaining: 4.95254 minutes

Program running...  
Iteration: 1712  
Percentage completed: 57.2667%  
Time elapsed: 397.82977 seconds  
Estimated time remaining: 4.94778 minutes

Program running...  
Iteration: 1713  
Percentage completed: 57.3000%  
Time elapsed: 397.98578 seconds  
Estimated time remaining: 4.94299 minutes

Program running...  
Iteration: 1714  
Percentage completed: 57.3333%  
Time elapsed: 398.14343 seconds  
Estimated time remaining: 4.93821 minutes

Program running...  
Iteration: 1715  
Percentage completed: 57.3667%  
Time elapsed: 399.01025 seconds  
Estimated time remaining: 4.94222 minutes

Program running...  
Iteration: 1716  
Percentage completed: 57.4000%  
Time elapsed: 399.16577 seconds  
Estimated time remaining: 4.93742 minutes

```
Program running...
Iteration: 1723
Percentage completed: 57.4333%
Time elapsed: 399.31914 seconds
Estimated time remaining: 4.93258 minutes
```

```
Program running...
Iteration: 1724
Percentage completed: 57.4667%
Time elapsed: 399.47338 seconds
Estimated time remaining: 4.92776 minutes
```

```
Program running...
Iteration: 1725
Percentage completed: 57.5000%
Time elapsed: 399.62889 seconds
Estimated time remaining: 4.92296 minutes
```

```
Program running...
Iteration: 1726
Percentage completed: 57.5333%
Time elapsed: 399.78564 seconds
Estimated time remaining: 4.91818 minutes
```

```
Program running...
Iteration: 1727
Percentage completed: 57.5667%
Time elapsed: 399.94184 seconds
Estimated time remaining: 4.91339 minutes
```

```
Program running...
Iteration: 1728
Percentage completed: 57.6000%
Time elapsed: 400.09755 seconds
Estimated time remaining: 4.90860 minutes
```

```
Program running...
Iteration: 1729
Percentage completed: 57.6333%
Time elapsed: 400.25230 seconds
Estimated time remaining: 4.90380 minutes
```

```
Program running...
  Iteration: 1730
  Percentage completed: 57.6667%
  Time elapsed: 400.40503 seconds
  Estimated time remaining: 4.89898 minutes
```

```
Program running...
  Iteration: 1731
  Percentage completed: 57.7000%
  Time elapsed: 401.26559 seconds
  Estimated time remaining: 4.90281 minutes
```

```
Program running...
  Iteration: 1732
  Percentage completed: 57.7333%
  Time elapsed: 401.42585 seconds
  Estimated time remaining: 4.89807 minutes
```

```
Program running...
  Iteration: 1733
  Percentage completed: 57.7667%
  Time elapsed: 401.57915 seconds
  Estimated time remaining: 4.89325 minutes
```

```
Program running...
  Iteration: 1734
  Percentage completed: 57.8000%
  Time elapsed: 401.73651 seconds
  Estimated time remaining: 4.88849 minutes
```

```
Program running...
  Iteration: 1735
  Percentage completed: 57.8333%
  Time elapsed: 401.89331 seconds
  Estimated time remaining: 4.88372 minutes
```

```
Program running...
  Iteration: 1736
  Percentage completed: 57.8667%
  Time elapsed: 402.04911 seconds
```

-----  
Estimated time remaining: 4.87894 minutes

Program running...  
Iteration: 1737  
Percentage completed: 57.9000%  
Time elapsed: 402.20432 seconds  
Estimated time remaining: 4.87415 minutes

Program running...  
Iteration: 1738  
Percentage completed: 57.9333%  
Time elapsed: 402.35928 seconds  
Estimated time remaining: 4.86936 minutes

Program running...  
Iteration: 1739  
Percentage completed: 57.9667%  
Time elapsed: 402.51411 seconds  
Estimated time remaining: 4.86458 minutes

Program running...  
Iteration: 1740  
Percentage completed: 58.0000%  
Time elapsed: 402.67033 seconds  
Estimated time remaining: 4.85981 minutes

Program running...  
Iteration: 1741  
Percentage completed: 58.0333%  
Time elapsed: 403.54186 seconds  
Estimated time remaining: 4.86367 minutes

Program running...  
Iteration: 1742  
Percentage completed: 58.0667%  
Time elapsed: 403.69751 seconds  
Estimated time remaining: 4.85889 minutes

Program running...

Iteration: 1743  
Percentage completed: 58.1000%  
Time elapsed: 403.85193 seconds  
Estimated time remaining: 4.85410 minutes

Program running...  
Iteration: 1744  
Percentage completed: 58.1333%  
Time elapsed: 404.00798 seconds  
Estimated time remaining: 4.84933 minutes

Program running...  
Iteration: 1745  
Percentage completed: 58.1667%  
Time elapsed: 404.16418 seconds  
Estimated time remaining: 4.84456 minutes

Program running...  
Iteration: 1746  
Percentage completed: 58.2000%  
Time elapsed: 404.32234 seconds  
Estimated time remaining: 4.83982 minutes

Program running...  
Iteration: 1747  
Percentage completed: 58.2333%  
Time elapsed: 404.47704 seconds  
Estimated time remaining: 4.83505 minutes

Program running...  
Iteration: 1748  
Percentage completed: 58.2667%  
Time elapsed: 404.63670 seconds  
Estimated time remaining: 4.83033 minutes

Program running...  
Iteration: 1749  
Percentage completed: 58.3000%  
Time elapsed: 404.79058 seconds  
Estimated time remaining: 4.82555 minutes

```
Program running...
Iteration: 1750
Percentage completed: 58.3333%
Time elapsed: 404.94456 seconds
Estimated time remaining: 4.82077 minutes
```

```
Program running...
Iteration: 1751
Percentage completed: 58.3667%
Time elapsed: 405.81695 seconds
Estimated time remaining: 4.82453 minutes
```

```
Program running...
Iteration: 1752
Percentage completed: 58.4000%
Time elapsed: 405.97488 seconds
Estimated time remaining: 4.81979 minutes
```

```
Program running...
Iteration: 1753
Percentage completed: 58.4333%
Time elapsed: 406.13062 seconds
Estimated time remaining: 4.81503 minutes
```

```
Program running...
Iteration: 1754
Percentage completed: 58.4667%
Time elapsed: 406.28474 seconds
Estimated time remaining: 4.81025 minutes
```

```
Program running...
Iteration: 1755
Percentage completed: 58.5000%
Time elapsed: 406.44180 seconds
Estimated time remaining: 4.80551 minutes
```

```
Program running...
Iteration: 1756
Percentage completed: 58.5333%
Time elapsed: 406.59859 seconds
Estimated time remaining: 4.80076 minutes
```

```
Program running...
Iteration: 1757
Percentage completed: 58.5667%
Time elapsed: 406.75593 seconds
Estimated time remaining: 4.79603 minutes
```

```
Program running...
Iteration: 1758
Percentage completed: 58.6000%
Time elapsed: 406.91093 seconds
Estimated time remaining: 4.79127 minutes
```

```
Program running...
Iteration: 1759
Percentage completed: 58.6333%
Time elapsed: 407.06671 seconds
Estimated time remaining: 4.78652 minutes
```

```
Program running...
Iteration: 1760
Percentage completed: 58.6667%
Time elapsed: 407.22446 seconds
Estimated time remaining: 4.78180 minutes
```

```
Program running...
Iteration: 1761
Percentage completed: 58.7000%
Time elapsed: 408.09452 seconds
Estimated time remaining: 4.78543 minutes
```

```
Program running...
Iteration: 1762
Percentage completed: 58.7333%
Time elapsed: 408.25102 seconds
Estimated time remaining: 4.78069 minutes
```

```
Program running...
Iteration: 1763
```

```
Percentage completed: 58.7667%
Time elapsed: 408.40972 seconds
Estimated time remaining: 4.77598 minutes
```

```
Program running...
Iteration: 1764
Percentage completed: 58.8000%
Time elapsed: 408.56583 seconds
Estimated time remaining: 4.77123 minutes
```

```
Program running...
Iteration: 1765
Percentage completed: 58.8333%
Time elapsed: 408.72747 seconds
Estimated time remaining: 4.76656 minutes
```

```
Program running...
Iteration: 1766
Percentage completed: 58.8667%
Time elapsed: 408.88305 seconds
Estimated time remaining: 4.76181 minutes
```

```
Program running...
Iteration: 1767
Percentage completed: 58.9000%
Time elapsed: 409.04135 seconds
Estimated time remaining: 4.75710 minutes
```

```
Program running...
Iteration: 1768
Percentage completed: 58.9333%
Time elapsed: 409.19871 seconds
Estimated time remaining: 4.75238 minutes
```

```
Program running...
Iteration: 1769
Percentage completed: 58.9667%
Time elapsed: 409.35466 seconds
Estimated time remaining: 4.74765 minutes
```

```
Program running...
Iteration: 1770
Percentage completed: 59.0000%
Time elapsed: 409.51201 seconds
Estimated time remaining: 4.74293 minutes
```

```
Program running...
Iteration: 1771
Percentage completed: 59.0333%
Time elapsed: 410.38710 seconds
Estimated time remaining: 4.74652 minutes
```

```
Program running...
Iteration: 1772
Percentage completed: 59.0667%
Time elapsed: 410.54319 seconds
Estimated time remaining: 4.74179 minutes
```

```
Program running...
Iteration: 1773
Percentage completed: 59.1000%
Time elapsed: 410.70081 seconds
Estimated time remaining: 4.73707 minutes
```

```
Program running...
Iteration: 1774
Percentage completed: 59.1333%
Time elapsed: 410.85429 seconds
Estimated time remaining: 4.73231 minutes
```

```
Program running...
Iteration: 1775
Percentage completed: 59.1667%
Time elapsed: 411.01265 seconds
Estimated time remaining: 4.72761 minutes
```

```
Program running...
Iteration: 1776
Percentage completed: 59.2000%
Time elapsed: 411.17113 seconds
Estimated time remaining: 4.72291 minutes
```

```
Program running...
Iteration: 1777
Percentage completed: 59.2333%
Time elapsed: 411.32658 seconds
Estimated time remaining: 4.71818 minutes
```

```
Program running...
Iteration: 1778
Percentage completed: 59.2667%
Time elapsed: 411.48425 seconds
Estimated time remaining: 4.71348 minutes
```

```
Program running...
Iteration: 1779
Percentage completed: 59.3000%
Time elapsed: 411.63937 seconds
Estimated time remaining: 4.70875 minutes
```

```
Program running...
Iteration: 1780
Percentage completed: 59.3333%
Time elapsed: 411.79720 seconds
Estimated time remaining: 4.70405 minutes
```

```
Program running...
Iteration: 1781
Percentage completed: 59.3667%
Time elapsed: 412.66599 seconds
Estimated time remaining: 4.70746 minutes
```

```
Program running...
Iteration: 1782
Percentage completed: 59.4000%
Time elapsed: 412.81988 seconds
Estimated time remaining: 4.70272 minutes
```

```
Program running...
Iteration: 1783
Percentage completed: 59.4333%
Time elapsed: 412.97332 seconds
```

Estimated time remaining: 4.69797 minutes

Program running...  
Iteration: 1784  
Percentage completed: 59.4667%  
Time elapsed: 413.12770 seconds  
Estimated time remaining: 4.69323 minutes

Program running...  
Iteration: 1785  
Percentage completed: 59.5000%  
Time elapsed: 413.28388 seconds  
Estimated time remaining: 4.68851 minutes

Program running...  
Iteration: 1786  
Percentage completed: 59.5333%  
Time elapsed: 413.44091 seconds  
Estimated time remaining: 4.68381 minutes

Program running...  
Iteration: 1787  
Percentage completed: 59.5667%  
Time elapsed: 413.59652 seconds  
Estimated time remaining: 4.67909 minutes

Program running...  
Iteration: 1788  
Percentage completed: 59.6000%  
Time elapsed: 413.75233 seconds  
Estimated time remaining: 4.67438 minutes

Program running...  
Iteration: 1789  
Percentage completed: 59.6333%  
Time elapsed: 413.90795 seconds  
Estimated time remaining: 4.66967 minutes

Program running...

```
Iteration: 1790
Percentage completed: 59.6667%
Time elapsed: 414.06207 seconds
Estimated time remaining: 4.66494 minutes
```

```
Program running...
Iteration: 1791
Percentage completed: 59.7000%
Time elapsed: 414.93402 seconds
Estimated time remaining: 4.66830 minutes
```

```
Program running...
Iteration: 1792
Percentage completed: 59.7333%
Time elapsed: 415.08833 seconds
Estimated time remaining: 4.66357 minutes
```

```
Program running...
Iteration: 1793
Percentage completed: 59.7667%
Time elapsed: 415.24434 seconds
Estimated time remaining: 4.65886 minutes
```

```
Program running...
Iteration: 1794
Percentage completed: 59.8000%
Time elapsed: 415.40046 seconds
Estimated time remaining: 4.65415 minutes
```

```
Program running...
Iteration: 1795
Percentage completed: 59.8333%
Time elapsed: 415.55918 seconds
Estimated time remaining: 4.64948 minutes
```

```
Program running...
Iteration: 1796
Percentage completed: 59.8667%
Time elapsed: 415.71782 seconds
Estimated time remaining: 4.64480 minutes
```

```
Program running...
Iteration: 1797
Percentage completed: 59.9000%
Time elapsed: 415.87376 seconds
Estimated time remaining: 4.64010 minutes
```

```
Program running...
Iteration: 1798
Percentage completed: 59.9333%
Time elapsed: 416.02845 seconds
Estimated time remaining: 4.63539 minutes
```

```
Program running...
Iteration: 1799
Percentage completed: 59.9667%
Time elapsed: 416.18402 seconds
Estimated time remaining: 4.63069 minutes
```

```
Program running...
Iteration: 1800
Percentage completed: 60.0000%
Time elapsed: 416.33928 seconds
Estimated time remaining: 4.62599 minutes
```

```
Program running...
Iteration: 1801
Percentage completed: 60.0333%
Time elapsed: 417.22050 seconds
Estimated time remaining: 4.62935 minutes
```

```
Program running...
Iteration: 1802
Percentage completed: 60.0667%
Time elapsed: 417.37630 seconds
Estimated time remaining: 4.62465 minutes
```

```
Program running...
Iteration: 1803
Percentage completed: 60.1000%
Time elapsed: 417.53164 seconds
Estimated time remaining: 4.61994 minutes
```

```
Program running...
Iteration: 1804
Percentage completed: 60.1333%
Time elapsed: 417.68719 seconds
Estimated time remaining: 4.61524 minutes
```

```
Program running...
Iteration: 1805
Percentage completed: 60.1667%
Time elapsed: 417.84632 seconds
Estimated time remaining: 4.61058 minutes
```

```
Program running...
Iteration: 1806
Percentage completed: 60.2000%
Time elapsed: 418.00469 seconds
Estimated time remaining: 4.60592 minutes
```

```
Program running...
Iteration: 1807
Percentage completed: 60.2333%
Time elapsed: 418.16019 seconds
Estimated time remaining: 4.60123 minutes
```

```
Program running...
Iteration: 1808
Percentage completed: 60.2667%
Time elapsed: 418.31752 seconds
Estimated time remaining: 4.59656 minutes
```

```
Program running...
Iteration: 1809
Percentage completed: 60.3000%
Time elapsed: 418.47500 seconds
Estimated time remaining: 4.59189 minutes
```

```
Program running...
Iteration: 1810
```

```
Percentage completed: 60.3333%
Time elapsed: 418.63045 seconds
Estimated time remaining: 4.58720 minutes
```

```
Program running...
Iteration: 1811
Percentage completed: 60.3667%
Time elapsed: 419.49670 seconds
Estimated time remaining: 4.59029 minutes
```

```
Program running...
Iteration: 1812
Percentage completed: 60.4000%
Time elapsed: 419.65468 seconds
Estimated time remaining: 4.58563 minutes
```

```
Program running...
Iteration: 1813
Percentage completed: 60.4333%
Time elapsed: 419.81236 seconds
Estimated time remaining: 4.58096 minutes
```

```
Program running...
Iteration: 1814
Percentage completed: 60.4667%
Time elapsed: 419.96700 seconds
Estimated time remaining: 4.57627 minutes
```

```
Program running...
Iteration: 1815
Percentage completed: 60.5000%
Time elapsed: 420.12144 seconds
Estimated time remaining: 4.57157 minutes
```

```
Program running...
Iteration: 1816
Percentage completed: 60.5333%
Time elapsed: 420.27822 seconds
Estimated time remaining: 4.56690 minutes
```

```
Program running...
Iteration: 1817
Percentage completed: 60.5667%
Time elapsed: 420.43218 seconds
Estimated time remaining: 4.56220 minutes
```

```
Program running...
Iteration: 1818
Percentage completed: 60.6000%
Time elapsed: 420.58626 seconds
Estimated time remaining: 4.55751 minutes
```

```
Program running...
Iteration: 1819
Percentage completed: 60.6333%
Time elapsed: 420.74805 seconds
Estimated time remaining: 4.55290 minutes
```

```
Program running...
Iteration: 1820
Percentage completed: 60.6667%
Time elapsed: 420.90197 seconds
Estimated time remaining: 4.54821 minutes
```

```
Program running...
Iteration: 1821
Percentage completed: 60.7000%
Time elapsed: 421.76834 seconds
Estimated time remaining: 4.55121 minutes
```

```
Program running...
Iteration: 1822
Percentage completed: 60.7333%
Time elapsed: 421.92411 seconds
Estimated time remaining: 4.54653 minutes
```

```
Program running...
Iteration: 1823
Percentage completed: 60.7667%
Time elapsed: 422.08048 seconds
Estimated time remaining: 4.54186 minutes
```

```
Program running...
Iteration: 1824
Percentage completed: 60.8000%
Time elapsed: 422.23756 seconds
Estimated time remaining: 4.53720 minutes
```

```
Program running...
Iteration: 1825
Percentage completed: 60.8333%
Time elapsed: 422.39597 seconds
Estimated time remaining: 4.53256 minutes
```

```
Program running...
Iteration: 1826
Percentage completed: 60.8667%
Time elapsed: 422.55576 seconds
Estimated time remaining: 4.52793 minutes
```

```
Program running...
Iteration: 1827
Percentage completed: 60.9000%
Time elapsed: 422.71457 seconds
Estimated time remaining: 4.52330 minutes
```

```
Program running...
Iteration: 1828
Percentage completed: 60.9333%
Time elapsed: 422.86960 seconds
Estimated time remaining: 4.51863 minutes
```

```
Program running...
Iteration: 1829
Percentage completed: 60.9667%
Time elapsed: 423.02519 seconds
Estimated time remaining: 4.51396 minutes
```

```
Program running...
Iteration: 1830
Percentage completed: 61.0000%
Time elapsed: 423.17899 seconds
Estimated time remaining: 4.50928 minutes
```

Estimated time remaining: 4.51216 minutes

Program running...  
Iteration: 1831  
Percentage completed: 61.0333%  
Time elapsed: 424.04273 seconds  
Estimated time remaining: 4.51216 minutes

Program running...  
Iteration: 1832  
Percentage completed: 61.0667%  
Time elapsed: 424.19631 seconds  
Estimated time remaining: 4.50747 minutes

Program running...  
Iteration: 1833  
Percentage completed: 61.1000%  
Time elapsed: 424.34923 seconds  
Estimated time remaining: 4.50278 minutes

Program running...  
Iteration: 1834  
Percentage completed: 61.1333%  
Time elapsed: 424.50171 seconds  
Estimated time remaining: 4.49808 minutes

Program running...  
Iteration: 1835  
Percentage completed: 61.1667%  
Time elapsed: 424.65963 seconds  
Estimated time remaining: 4.49345 minutes

Program running...  
Iteration: 1836  
Percentage completed: 61.2000%  
Time elapsed: 424.81456 seconds  
Estimated time remaining: 4.48878 minutes

Program running...  
Iteration: 1837

Program running...  
Iteration: 1838  
Percentage completed: 61.2333%  
Time elapsed: 424.96723 seconds  
Estimated time remaining: 4.48409 minutes

Program running...  
Iteration: 1838  
Percentage completed: 61.2667%  
Time elapsed: 425.11923 seconds  
Estimated time remaining: 4.47940 minutes

Program running...  
Iteration: 1839  
Percentage completed: 61.3000%  
Time elapsed: 425.27247 seconds  
Estimated time remaining: 4.47473 minutes

Program running...  
Iteration: 1840  
Percentage completed: 61.3333%  
Time elapsed: 425.42651 seconds  
Estimated time remaining: 4.47006 minutes

Program running...  
Iteration: 1841  
Percentage completed: 61.3667%  
Time elapsed: 426.29339 seconds  
Estimated time remaining: 4.47288 minutes

Program running...  
Iteration: 1842  
Percentage completed: 61.4000%  
Time elapsed: 426.44729 seconds  
Estimated time remaining: 4.46820 minutes

Program running...  
Iteration: 1843  
Percentage completed: 61.4333%  
Time elapsed: 426.60204 seconds  
Estimated time remaining: 4.46354 minutes

```
Program running...
Iteration: 1844
Percentage completed: 61.4667%
Time elapsed: 426.75649 seconds
Estimated time remaining: 4.45888 minutes
```

```
Program running...
Iteration: 1845
Percentage completed: 61.5000%
Time elapsed: 426.91337 seconds
Estimated time remaining: 4.45424 minutes
```

```
Program running...
Iteration: 1846
Percentage completed: 61.5333%
Time elapsed: 427.06942 seconds
Estimated time remaining: 4.44960 minutes
```

```
Program running...
Iteration: 1847
Percentage completed: 61.5667%
Time elapsed: 427.22671 seconds
Estimated time remaining: 4.44498 minutes
```

```
Program running...
Iteration: 1848
Percentage completed: 61.6000%
Time elapsed: 427.38289 seconds
Estimated time remaining: 4.44034 minutes
```

```
Program running...
Iteration: 1849
Percentage completed: 61.6333%
Time elapsed: 427.53606 seconds
Estimated time remaining: 4.43568 minutes
```

```
Program running...
Iteration: 1850
Percentage completed: 61.6667%
Time elapsed: 427.68902 seconds
Estimated time remaining: 4.43101 minutes
```

```
Program running...
  Iteration: 1851
  Percentage completed: 61.7000%
  Time elapsed: 428.55639 seconds
  Estimated time remaining: 4.43374 minutes
```

```
Program running...
  Iteration: 1852
  Percentage completed: 61.7333%
  Time elapsed: 428.71274 seconds
  Estimated time remaining: 4.42910 minutes
```

```
Program running...
  Iteration: 1853
  Percentage completed: 61.7667%
  Time elapsed: 428.86849 seconds
  Estimated time remaining: 4.42446 minutes
```

```
Program running...
  Iteration: 1854
  Percentage completed: 61.8000%
  Time elapsed: 429.02402 seconds
  Estimated time remaining: 4.41983 minutes
```

```
Program running...
  Iteration: 1855
  Percentage completed: 61.8333%
  Time elapsed: 429.18125 seconds
  Estimated time remaining: 4.41521 minutes
```

```
Program running...
  Iteration: 1856
  Percentage completed: 61.8667%
  Time elapsed: 429.33665 seconds
  Estimated time remaining: 4.41057 minutes
```

```
Program running...
  Iteration: 1857
  Percentage completed: 61.9000%
```

Time elapsed: 429.4900 seconds  
Estimated time remaining: 4.40591 minutes

Program running...  
Iteration: 1858  
Percentage completed: 61.9333%  
Time elapsed: 429.64650 seconds  
Estimated time remaining: 4.40129 minutes

Program running...  
Iteration: 1859  
Percentage completed: 61.9667%  
Time elapsed: 429.80073 seconds  
Estimated time remaining: 4.39665 minutes

Program running...  
Iteration: 1860  
Percentage completed: 62.0000%  
Time elapsed: 429.95549 seconds  
Estimated time remaining: 4.39202 minutes

Program running...  
Iteration: 1861  
Percentage completed: 62.0333%  
Time elapsed: 430.82604 seconds  
Estimated time remaining: 4.39469 minutes

Program running...  
Iteration: 1862  
Percentage completed: 62.0667%  
Time elapsed: 430.98088 seconds  
Estimated time remaining: 4.39005 minutes

Program running...  
Iteration: 1863  
Percentage completed: 62.1000%  
Time elapsed: 431.13551 seconds  
Estimated time remaining: 4.38541 minutes

Program running...

-  
Iteration: 1864  
Percentage completed: 62.1333%  
Time elapsed: 431.29127 seconds  
Estimated time remaining: 4.38078 minutes

Program running...  
Iteration: 1865  
Percentage completed: 62.1667%  
Time elapsed: 431.46457 seconds  
Estimated time remaining: 4.37634 minutes

Program running...  
Iteration: 1866  
Percentage completed: 62.2000%  
Time elapsed: 431.62362 seconds  
Estimated time remaining: 4.37175 minutes

Program running...  
Iteration: 1867  
Percentage completed: 62.2333%  
Time elapsed: 431.78131 seconds  
Estimated time remaining: 4.36715 minutes

Program running...  
Iteration: 1868  
Percentage completed: 62.2667%  
Time elapsed: 431.93749 seconds  
Estimated time remaining: 4.36254 minutes

Program running...  
Iteration: 1869  
Percentage completed: 62.3000%  
Time elapsed: 432.09326 seconds  
Estimated time remaining: 4.35792 minutes

Program running...  
Iteration: 1870  
Percentage completed: 62.3333%  
Time elapsed: 432.25075 seconds  
Estimated time remaining: 4.35333 minutes

```
Program running...
Iteration: 1871
Percentage completed: 62.3667%
Time elapsed: 433.11950 seconds
Estimated time remaining: 4.35589 minutes
```

```
Program running...
Iteration: 1872
Percentage completed: 62.4000%
Time elapsed: 433.27631 seconds
Estimated time remaining: 4.35128 minutes
```

```
Program running...
Iteration: 1873
Percentage completed: 62.4333%
Time elapsed: 433.43156 seconds
Estimated time remaining: 4.34666 minutes
```

```
Program running...
Iteration: 1874
Percentage completed: 62.4667%
Time elapsed: 433.58670 seconds
Estimated time remaining: 4.34204 minutes
```

```
Program running...
Iteration: 1875
Percentage completed: 62.5000%
Time elapsed: 433.74397 seconds
Estimated time remaining: 4.33744 minutes
```

```
Program running...
Iteration: 1876
Percentage completed: 62.5333%
Time elapsed: 433.90141 seconds
Estimated time remaining: 4.33284 minutes
```

```
Program running...
Iteration: 1877
Percentage completed: 62.5667%
Time elapsed: 434.05688 seconds
Estimated time remaining: 4.32823 minutes
```

```
Program running...
Iteration: 1878
Percentage completed: 62.6000%
Time elapsed: 434.21442 seconds
Estimated time remaining: 4.32365 minutes
```

```
Program running...
Iteration: 1879
Percentage completed: 62.6333%
Time elapsed: 434.36119 seconds
Estimated time remaining: 4.31895 minutes
```

```
Program running...
Iteration: 1880
Percentage completed: 62.6667%
Time elapsed: 434.51628 seconds
Estimated time remaining: 4.31434 minutes
```

```
Program running...
Iteration: 1881
Percentage completed: 62.7000%
Time elapsed: 435.39103 seconds
Estimated time remaining: 4.31687 minutes
```

```
Program running...
Iteration: 1882
Percentage completed: 62.7333%
Time elapsed: 435.54518 seconds
Estimated time remaining: 4.31225 minutes
```

```
Program running...
Iteration: 1883
Percentage completed: 62.7667%
Time elapsed: 435.70466 seconds
Estimated time remaining: 4.30768 minutes
```

```
Program running...
Iteration: 1884
```

Percentage completed: 62.8000%  
Time elapsed: 435.85955 seconds  
Estimated time remaining: 4.30307 minutes

Program running...  
Iteration: 1885  
Percentage completed: 62.8333%  
Time elapsed: 436.01856 seconds  
Estimated time remaining: 4.29850 minutes

Program running...  
Iteration: 1886  
Percentage completed: 62.8667%  
Time elapsed: 436.17722 seconds  
Estimated time remaining: 4.29393 minutes

Program running...  
Iteration: 1887  
Percentage completed: 62.9000%  
Time elapsed: 436.33212 seconds  
Estimated time remaining: 4.28933 minutes

Program running...  
Iteration: 1888  
Percentage completed: 62.9333%  
Time elapsed: 436.48867 seconds  
Estimated time remaining: 4.28474 minutes

Program running...  
Iteration: 1889  
Percentage completed: 62.9667%  
Time elapsed: 436.64380 seconds  
Estimated time remaining: 4.28014 minutes

Program running...  
Iteration: 1890  
Percentage completed: 63.0000%  
Time elapsed: 436.79910 seconds  
Estimated time remaining: 4.27555 minutes

Program running...

Program running...  
Iteration: 1891  
Percentage completed: 63.0333%  
Time elapsed: 437.65947 seconds  
Estimated time remaining: 4.27784 minutes

Program running...  
Iteration: 1892  
Percentage completed: 63.0667%  
Time elapsed: 437.81915 seconds  
Estimated time remaining: 4.27329 minutes

Program running...  
Iteration: 1893  
Percentage completed: 63.1000%  
Time elapsed: 437.97386 seconds  
Estimated time remaining: 4.26868 minutes

Program running...  
Iteration: 1894  
Percentage completed: 63.1333%  
Time elapsed: 438.13117 seconds  
Estimated time remaining: 4.26411 minutes

Program running...  
Iteration: 1895  
Percentage completed: 63.1667%  
Time elapsed: 438.28529 seconds  
Estimated time remaining: 4.25950 minutes

Program running...  
Iteration: 1896  
Percentage completed: 63.2000%  
Time elapsed: 438.44250 seconds  
Estimated time remaining: 4.25493 minutes

Program running...  
Iteration: 1897  
Percentage completed: 63.2333%  
Time elapsed: 438.59552 seconds  
Estimated time remaining: 4.25031 minutes

```
Program running...
  Iteration: 1898
  Percentage completed: 63.2667%
  Time elapsed: 438.75011 seconds
  Estimated time remaining: 4.24572 minutes
```

```
Program running...
  Iteration: 1899
  Percentage completed: 63.3000%
  Time elapsed: 438.90589 seconds
  Estimated time remaining: 4.24114 minutes
```

```
Program running...
  Iteration: 1900
  Percentage completed: 63.3333%
  Time elapsed: 439.06282 seconds
  Estimated time remaining: 4.23657 minutes
```

```
Program running...
  Iteration: 1901
  Percentage completed: 63.3667%
  Time elapsed: 439.93612 seconds
  Estimated time remaining: 4.23891 minutes
```

```
Program running...
  Iteration: 1902
  Percentage completed: 63.4000%
  Time elapsed: 440.09153 seconds
  Estimated time remaining: 4.23432 minutes
```

```
Program running...
  Iteration: 1903
  Percentage completed: 63.4333%
  Time elapsed: 440.24432 seconds
  Estimated time remaining: 4.22971 minutes
```

```
Program running...
  Iteration: 1904
  Percentage completed: 63.4667%
```

```
Time elapsed: 440.40037 seconds
Estimated time remaining: 4.22513 minutes
```

```
Program running...
Iteration: 1905
Percentage completed: 63.5000%
Time elapsed: 440.55711 seconds
Estimated time remaining: 4.22056 minutes
```

```
Program running...
Iteration: 1906
Percentage completed: 63.5333%
Time elapsed: 440.71225 seconds
Estimated time remaining: 4.21598 minutes
```

```
Program running...
Iteration: 1907
Percentage completed: 63.5667%
Time elapsed: 440.86891 seconds
Estimated time remaining: 4.21141 minutes
```

```
Program running...
Iteration: 1908
Percentage completed: 63.6000%
Time elapsed: 441.02409 seconds
Estimated time remaining: 4.20683 minutes
```

```
Program running...
Iteration: 1909
Percentage completed: 63.6333%
Time elapsed: 441.17841 seconds
Estimated time remaining: 4.20225 minutes
```

```
Program running...
Iteration: 1910
Percentage completed: 63.6667%
Time elapsed: 441.33506 seconds
Estimated time remaining: 4.19769 minutes
```

```
Program running...
```

```
Iteration: 1911
Percentage completed: 63.7000%
Time elapsed: 442.20950 seconds
Estimated time remaining: 4.19995 minutes
```

```
Program running...
Iteration: 1912
Percentage completed: 63.7333%
Time elapsed: 442.36442 seconds
Estimated time remaining: 4.19537 minutes
```

```
Program running...
Iteration: 1913
Percentage completed: 63.7667%
Time elapsed: 442.51882 seconds
Estimated time remaining: 4.19078 minutes
```

```
Program running...
Iteration: 1914
Percentage completed: 63.8000%
Time elapsed: 442.67251 seconds
Estimated time remaining: 4.18619 minutes
```

```
Program running...
Iteration: 1915
Percentage completed: 63.8333%
Time elapsed: 442.82908 seconds
Estimated time remaining: 4.18163 minutes
```

```
Program running...
Iteration: 1916
Percentage completed: 63.8667%
Time elapsed: 442.98692 seconds
Estimated time remaining: 4.17708 minutes
```

```
Program running...
Iteration: 1917
Percentage completed: 63.9000%
Time elapsed: 443.14165 seconds
Estimated time remaining: 4.17251 minutes
```

```
Program running...
Iteration: 1918
Percentage completed: 63.9333%
Time elapsed: 443.29561 seconds
Estimated time remaining: 4.16793 minutes
```

```
Program running...
Iteration: 1919
Percentage completed: 63.9667%
Time elapsed: 443.45031 seconds
Estimated time remaining: 4.16336 minutes
```

```
Program running...
Iteration: 1920
Percentage completed: 64.0000%
Time elapsed: 443.60645 seconds
Estimated time remaining: 4.15881 minutes
```

```
Program running...
Iteration: 1921
Percentage completed: 64.0333%
Time elapsed: 444.46808 seconds
Estimated time remaining: 4.16086 minutes
```

```
Program running...
Iteration: 1922
Percentage completed: 64.0667%
Time elapsed: 444.62514 seconds
Estimated time remaining: 4.15631 minutes
```

```
Program running...
Iteration: 1923
Percentage completed: 64.1000%
Time elapsed: 444.78528 seconds
Estimated time remaining: 4.15179 minutes
```

```
Program running...
Iteration: 1924
Percentage completed: 64.1333%
Time elapsed: 444.94271 seconds
Estimated time remaining: 4.14725 minutes
```

```
Program running...
Iteration: 1925
Percentage completed: 64.1667%
Time elapsed: 445.10117 seconds
Estimated time remaining: 4.14272 minutes
```

```
Program running...
Iteration: 1926
Percentage completed: 64.2000%
Time elapsed: 445.25886 seconds
Estimated time remaining: 4.13818 minutes
```

```
Program running...
Iteration: 1927
Percentage completed: 64.2333%
Time elapsed: 445.41391 seconds
Estimated time remaining: 4.13362 minutes
```

```
Program running...
Iteration: 1928
Percentage completed: 64.2667%
Time elapsed: 445.57291 seconds
Estimated time remaining: 4.12910 minutes
```

```
Program running...
Iteration: 1929
Percentage completed: 64.3000%
Time elapsed: 445.72883 seconds
Estimated time remaining: 4.12455 minutes
```

```
Program running...
Iteration: 1930
Percentage completed: 64.3333%
Time elapsed: 445.88403 seconds
Estimated time remaining: 4.12000 minutes
```

```
Program running...
Iteration: 1931
Percentage completed: 64.3667%
```

Percentage completed: 64.3000%  
Time elapsed: 446.76520 seconds  
Estimated time remaining: 4.12215 minutes

Program running...  
Iteration: 1932  
Percentage completed: 64.4000%  
Time elapsed: 446.92218 seconds  
Estimated time remaining: 4.11760 minutes

Program running...  
Iteration: 1933  
Percentage completed: 64.4333%  
Time elapsed: 447.07591 seconds  
Estimated time remaining: 4.11303 minutes

Program running...  
Iteration: 1934  
Percentage completed: 64.4667%  
Time elapsed: 447.23165 seconds  
Estimated time remaining: 4.10849 minutes

Program running...  
Iteration: 1935  
Percentage completed: 64.5000%  
Time elapsed: 447.39090 seconds  
Estimated time remaining: 4.10397 minutes

Program running...  
Iteration: 1936  
Percentage completed: 64.5333%  
Time elapsed: 447.54899 seconds  
Estimated time remaining: 4.09945 minutes

Program running...  
Iteration: 1937  
Percentage completed: 64.5667%  
Time elapsed: 447.70329 seconds  
Estimated time remaining: 4.09489 minutes

Program running...

```
Iteration: 1938
Percentage completed: 64.6000%
Time elapsed: 447.85659 seconds
Estimated time remaining: 4.09033 minutes
```

```
Program running...
Iteration: 1939
Percentage completed: 64.6333%
Time elapsed: 448.00974 seconds
Estimated time remaining: 4.08577 minutes
```

```
Program running...
Iteration: 1940
Percentage completed: 64.6667%
Time elapsed: 448.16420 seconds
Estimated time remaining: 4.08122 minutes
```

```
Program running...
Iteration: 1941
Percentage completed: 64.7000%
Time elapsed: 449.03993 seconds
Estimated time remaining: 4.08323 minutes
```

```
Program running...
Iteration: 1942
Percentage completed: 64.7333%
Time elapsed: 449.19476 seconds
Estimated time remaining: 4.07868 minutes
```

```
Program running...
Iteration: 1943
Percentage completed: 64.7667%
Time elapsed: 449.34890 seconds
Estimated time remaining: 4.07413 minutes
```

```
Program running...
Iteration: 1944
Percentage completed: 64.8000%
Time elapsed: 449.50437 seconds
Estimated time remaining: 4.06959 minutes
```

```
Program running...
Iteration: 1945
Percentage completed: 64.8333%
Time elapsed: 449.66423 seconds
Estimated time remaining: 4.06509 minutes
```

```
Program running...
Iteration: 1946
Percentage completed: 64.8667%
Time elapsed: 449.82009 seconds
Estimated time remaining: 4.06055 minutes
```

```
Program running...
Iteration: 1947
Percentage completed: 64.9000%
Time elapsed: 449.97310 seconds
Estimated time remaining: 4.05600 minutes
```

```
Program running...
Iteration: 1948
Percentage completed: 64.9333%
Time elapsed: 450.12692 seconds
Estimated time remaining: 4.05145 minutes
```

```
Program running...
Iteration: 1949
Percentage completed: 64.9667%
Time elapsed: 450.28317 seconds
Estimated time remaining: 4.04693 minutes
```

```
Program running...
Iteration: 1950
Percentage completed: 65.0000%
Time elapsed: 450.43788 seconds
Estimated time remaining: 4.04239 minutes
```

```
Program running...
Iteration: 1951
Percentage completed: 65.0333%
Time elapsed: 451.30789 seconds
```

Estimated time remaining: 4.04427 minutes

Program running...  
Iteration: 1952  
Percentage completed: 65.0667%  
Time elapsed: 451.46334 seconds  
Estimated time remaining: 4.03973 minutes

Program running...  
Iteration: 1953  
Percentage completed: 65.1000%  
Time elapsed: 451.61711 seconds  
Estimated time remaining: 4.03518 minutes

Program running...  
Iteration: 1954  
Percentage completed: 65.1333%  
Time elapsed: 451.77314 seconds  
Estimated time remaining: 4.03066 minutes

Program running...  
Iteration: 1955  
Percentage completed: 65.1667%  
Time elapsed: 451.92694 seconds  
Estimated time remaining: 4.02612 minutes

Program running...  
Iteration: 1956  
Percentage completed: 65.2000%  
Time elapsed: 452.08356 seconds  
Estimated time remaining: 4.02160 minutes

Program running...  
Iteration: 1957  
Percentage completed: 65.2333%  
Time elapsed: 452.23660 seconds  
Estimated time remaining: 4.01706 minutes

Program running...  
Iteration: 1958

Percentage completed: 65.2667%  
Time elapsed: 452.39045 seconds  
Estimated time remaining: 4.01252 minutes

Program running...  
Iteration: 1959  
Percentage completed: 65.3000%  
Time elapsed: 452.54478 seconds  
Estimated time remaining: 4.00799 minutes

Program running...  
Iteration: 1960  
Percentage completed: 65.3333%  
Time elapsed: 452.69966 seconds  
Estimated time remaining: 4.00346 minutes

Program running...  
Iteration: 1961  
Percentage completed: 65.3667%  
Time elapsed: 453.59676 seconds  
Estimated time remaining: 4.00550 minutes

Program running...  
Iteration: 1962  
Percentage completed: 65.4000%  
Time elapsed: 453.75357 seconds  
Estimated time remaining: 4.00099 minutes

Program running...  
Iteration: 1963  
Percentage completed: 65.4333%  
Time elapsed: 453.90831 seconds  
Estimated time remaining: 3.99646 minutes

Program running...  
Iteration: 1964  
Percentage completed: 65.4667%  
Time elapsed: 454.06380 seconds  
Estimated time remaining: 3.99194 minutes

```
Program running...
Iteration: 1965
Percentage completed: 65.5000%
Time elapsed: 454.22197 seconds
Estimated time remaining: 3.98744 minutes
```

```
Program running...
Iteration: 1966
Percentage completed: 65.5333%
Time elapsed: 454.37692 seconds
Estimated time remaining: 3.98292 minutes
```

```
Program running...
Iteration: 1967
Percentage completed: 65.5667%
Time elapsed: 454.53342 seconds
Estimated time remaining: 3.97842 minutes
```

```
Program running...
Iteration: 1968
Percentage completed: 65.6000%
Time elapsed: 454.68887 seconds
Estimated time remaining: 3.97391 minutes
```

```
Program running...
Iteration: 1969
Percentage completed: 65.6333%
Time elapsed: 454.84650 seconds
Estimated time remaining: 3.96941 minutes
```

```
Program running...
Iteration: 1970
Percentage completed: 65.6667%
Time elapsed: 455.00149 seconds
Estimated time remaining: 3.96490 minutes
```

```
Program running...
Iteration: 1971
Percentage completed: 65.7000%
Time elapsed: 455.87340 seconds
Estimated time remaining: 3.96663 minutes
```

```
Program running...
  Iteration: 1972
  Percentage completed: 65.7333%
  Time elapsed: 456.02825 seconds
  Estimated time remaining: 3.96211 minutes
```

```
Program running...
  Iteration: 1973
  Percentage completed: 65.7667%
  Time elapsed: 456.18228 seconds
  Estimated time remaining: 3.95759 minutes
```

```
Program running...
  Iteration: 1974
  Percentage completed: 65.8000%
  Time elapsed: 456.33741 seconds
  Estimated time remaining: 3.95307 minutes
```

```
Program running...
  Iteration: 1975
  Percentage completed: 65.8333%
  Time elapsed: 456.49667 seconds
  Estimated time remaining: 3.94860 minutes
```

```
Program running...
  Iteration: 1976
  Percentage completed: 65.8667%
  Time elapsed: 456.65256 seconds
  Estimated time remaining: 3.94410 minutes
```

```
Program running...
  Iteration: 1977
  Percentage completed: 65.9000%
  Time elapsed: 456.80880 seconds
  Estimated time remaining: 3.93960 minutes
```

```
Program running...
  Iteration: 1978
  Percentage completed: 65.9333%
```

```
Time elapsed: 456.96624 seconds
Estimated time remaining: 3.93511 minutes
```

```
Program running...
Iteration: 1979
Percentage completed: 65.9667%
Time elapsed: 457.12070 seconds
Estimated time remaining: 3.93061 minutes
```

```
Program running...
Iteration: 1980
Percentage completed: 66.0000%
Time elapsed: 457.27555 seconds
Estimated time remaining: 3.92610 minutes
```

```
Program running...
Iteration: 1981
Percentage completed: 66.0333%
Time elapsed: 458.15216 seconds
Estimated time remaining: 3.92779 minutes
```

```
Program running...
Iteration: 1982
Percentage completed: 66.0667%
Time elapsed: 458.30734 seconds
Estimated time remaining: 3.92328 minutes
```

```
Program running...
Iteration: 1983
Percentage completed: 66.1000%
Time elapsed: 458.46173 seconds
Estimated time remaining: 3.91877 minutes
```

```
Program running...
Iteration: 1984
Percentage completed: 66.1333%
Time elapsed: 458.61589 seconds
Estimated time remaining: 3.91426 minutes
```

```
Program running...
```

```
Iteration: 1985
Percentage completed: 66.1667%
Time elapsed: 458.77150 seconds
Estimated time remaining: 3.90976 minutes
```

```
Program running...
Iteration: 1986
Percentage completed: 66.2000%
Time elapsed: 458.92927 seconds
Estimated time remaining: 3.90529 minutes
```

```
Program running...
Iteration: 1987
Percentage completed: 66.2333%
Time elapsed: 459.08319 seconds
Estimated time remaining: 3.90078 minutes
```

```
Program running...
Iteration: 1988
Percentage completed: 66.2667%
Time elapsed: 459.23739 seconds
Estimated time remaining: 3.89628 minutes
```

```
Program running...
Iteration: 1989
Percentage completed: 66.3000%
Time elapsed: 459.39163 seconds
Estimated time remaining: 3.89178 minutes
```

```
Program running...
Iteration: 1990
Percentage completed: 66.3333%
Time elapsed: 459.54577 seconds
Estimated time remaining: 3.88728 minutes
```

```
Program running...
Iteration: 1991
Percentage completed: 66.3667%
Time elapsed: 460.41189 seconds
Estimated time remaining: 3.88879 minutes
```

```
Program running...
Iteration: 1992
Percentage completed: 66.4000%
Time elapsed: 460.56714 seconds
Estimated time remaining: 3.88430 minutes
```

```
Program running...
Iteration: 1993
Percentage completed: 66.4333%
Time elapsed: 460.72291 seconds
Estimated time remaining: 3.87981 minutes
```

```
Program running...
Iteration: 1994
Percentage completed: 66.4667%
Time elapsed: 460.88268 seconds
Estimated time remaining: 3.87536 minutes
```

```
Program running...
Iteration: 1995
Percentage completed: 66.5000%
Time elapsed: 461.03829 seconds
Estimated time remaining: 3.87087 minutes
```

```
Program running...
Iteration: 1996
Percentage completed: 66.5333%
Time elapsed: 461.19516 seconds
Estimated time remaining: 3.86640 minutes
```

```
Program running...
Iteration: 1997
Percentage completed: 66.5667%
Time elapsed: 461.34968 seconds
Estimated time remaining: 3.86191 minutes
```

```
Program running...
Iteration: 1998
Percentage completed: 66.6000%
Time elapsed: 461.50074 seconds
```

Estimated time remaining: 3.85739 minutes

Program running...

Iteration: 1999  
Percentage completed: 66.6333%  
Time elapsed: 461.65710 seconds  
Estimated time remaining: 3.85291 minutes

Program running...

Iteration: 2000  
Percentage completed: 66.6667%  
Time elapsed: 461.81030 seconds  
Estimated time remaining: 3.84842 minutes

Program running...

Iteration: 2001  
Percentage completed: 66.7000%  
Time elapsed: 462.67562 seconds  
Estimated time remaining: 3.84985 minutes

Program running...

Iteration: 2002  
Percentage completed: 66.7333%  
Time elapsed: 462.83434 seconds  
Estimated time remaining: 3.84539 minutes

Program running...

Iteration: 2003  
Percentage completed: 66.7667%  
Time elapsed: 462.98871 seconds  
Estimated time remaining: 3.84090 minutes

Program running...

Iteration: 2004  
Percentage completed: 66.8000%  
Time elapsed: 463.14429 seconds  
Estimated time remaining: 3.83642 minutes

Program running...

Iteration: 2005

```
Percentage completed: 66.8333%
Time elapsed: 463.30408 seconds
Estimated time remaining: 3.83198 minutes
```

```
Program running...
Iteration: 2006
Percentage completed: 66.8667%
Time elapsed: 463.46075 seconds
Estimated time remaining: 3.82752 minutes
```

```
Program running...
Iteration: 2007
Percentage completed: 66.9000%
Time elapsed: 463.61711 seconds
Estimated time remaining: 3.82305 minutes
```

```
Program running...
Iteration: 2008
Percentage completed: 66.9333%
Time elapsed: 463.77985 seconds
Estimated time remaining: 3.81864 minutes
```

```
Program running...
Iteration: 2009
Percentage completed: 66.9667%
Time elapsed: 463.93482 seconds
Estimated time remaining: 3.81416 minutes
```

```
Program running...
Iteration: 2010
Percentage completed: 67.0000%
Time elapsed: 464.09052 seconds
Estimated time remaining: 3.80970 minutes
```

```
Program running...
Iteration: 2011
Percentage completed: 67.0333%
Time elapsed: 464.95209 seconds
Estimated time remaining: 3.81102 minutes
```

Program running...  
Iteration: 2012  
Percentage completed: 67.0667%  
Time elapsed: 465.11008 seconds  
Estimated time remaining: 3.80657 minutes

Program running...  
Iteration: 2013  
Percentage completed: 67.1000%  
Time elapsed: 465.26511 seconds  
Estimated time remaining: 3.80209 minutes

Program running...  
Iteration: 2014  
Percentage completed: 67.1333%  
Time elapsed: 465.42204 seconds  
Estimated time remaining: 3.79763 minutes

Program running...  
Iteration: 2015  
Percentage completed: 67.1667%  
Time elapsed: 465.58050 seconds  
Estimated time remaining: 3.79319 minutes

Program running...  
Iteration: 2016  
Percentage completed: 67.2000%  
Time elapsed: 465.74171 seconds  
Estimated time remaining: 3.78877 minutes

Program running...  
Iteration: 2017  
Percentage completed: 67.2333%  
Time elapsed: 465.89629 seconds  
Estimated time remaining: 3.78430 minutes

Program running...  
Iteration: 2018  
Percentage completed: 67.2667%  
Time elapsed: 466.05579 seconds  
Estimated time remaining: 3.77987 minutes

```
Program running...
Iteration: 2019
Percentage completed: 67.3000%
Time elapsed: 466.21201 seconds
Estimated time remaining: 3.77542 minutes
```

```
Program running...
Iteration: 2020
Percentage completed: 67.3333%
Time elapsed: 466.36828 seconds
Estimated time remaining: 3.77096 minutes
```

```
Program running...
Iteration: 2021
Percentage completed: 67.3667%
Time elapsed: 467.23837 seconds
Estimated time remaining: 3.77228 minutes
```

```
Program running...
Iteration: 2022
Percentage completed: 67.4000%
Time elapsed: 467.39377 seconds
Estimated time remaining: 3.76781 minutes
```

```
Program running...
Iteration: 2023
Percentage completed: 67.4333%
Time elapsed: 467.55033 seconds
Estimated time remaining: 3.76336 minutes
```

```
Program running...
Iteration: 2024
Percentage completed: 67.4667%
Time elapsed: 467.70803 seconds
Estimated time remaining: 3.75892 minutes
```

```
Program running...
Iteration: 2025
Percentage completed: 67.5000%
```

Time elapsed: 468.0000 seconds  
Estimated time remaining: 3.75448 minutes

Program running...  
Iteration: 2026  
Percentage completed: 67.5333%  
Time elapsed: 468.02519 seconds  
Estimated time remaining: 3.75005 minutes

Program running...  
Iteration: 2027  
Percentage completed: 67.5667%  
Time elapsed: 468.18090 seconds  
Estimated time remaining: 3.74560 minutes

Program running...  
Iteration: 2028  
Percentage completed: 67.6000%  
Time elapsed: 468.33808 seconds  
Estimated time remaining: 3.74116 minutes

Program running...  
Iteration: 2029  
Percentage completed: 67.6333%  
Time elapsed: 468.49450 seconds  
Estimated time remaining: 3.73672 minutes

Program running...  
Iteration: 2030  
Percentage completed: 67.6667%  
Time elapsed: 468.65031 seconds  
Estimated time remaining: 3.73227 minutes

Program running...  
Iteration: 2031  
Percentage completed: 67.7000%  
Time elapsed: 469.53484 seconds  
Estimated time remaining: 3.73362 minutes

Program running...  
Iteration: 2032

Percentage completed: 67.7333%  
Time elapsed: 469.68909 seconds  
Estimated time remaining: 3.72916 minutes

Program running...  
Iteration: 2033  
Percentage completed: 67.7667%  
Time elapsed: 469.84176 seconds  
Estimated time remaining: 3.72468 minutes

Program running...  
Iteration: 2034  
Percentage completed: 67.8000%  
Time elapsed: 469.99551 seconds  
Estimated time remaining: 3.72022 minutes

Program running...  
Iteration: 2035  
Percentage completed: 67.8333%  
Time elapsed: 470.15042 seconds  
Estimated time remaining: 3.71577 minutes

Program running...  
Iteration: 2036  
Percentage completed: 67.8667%  
Time elapsed: 470.30637 seconds  
Estimated time remaining: 3.71132 minutes

Program running...  
Iteration: 2037  
Percentage completed: 67.9000%  
Time elapsed: 470.46072 seconds  
Estimated time remaining: 3.70687 minutes

Program running...  
Iteration: 2038  
Percentage completed: 67.9333%  
Time elapsed: 470.61527 seconds  
Estimated time remaining: 3.70242 minutes

```
Program running...
Iteration: 2039
Percentage completed: 67.9667%
Time elapsed: 470.76874 seconds
Estimated time remaining: 3.69796 minutes
```

```
Program running...
Iteration: 2040
Percentage completed: 68.0000%
Time elapsed: 470.92271 seconds
Estimated time remaining: 3.69351 minutes
```

```
Program running...
Iteration: 2041
Percentage completed: 68.0333%
Time elapsed: 471.78591 seconds
Estimated time remaining: 3.69461 minutes
```

```
Program running...
Iteration: 2042
Percentage completed: 68.0667%
Time elapsed: 471.94421 seconds
Estimated time remaining: 3.69019 minutes
```

```
Program running...
Iteration: 2043

Percentage completed: 68.1000%
Time elapsed: 472.09961 seconds
Estimated time remaining: 3.68575 minutes
```

```
Program running...
Iteration: 2044
Percentage completed: 68.1333%
Time elapsed: 472.25564 seconds
Estimated time remaining: 3.68131 minutes
```

```
Program running...
Iteration: 2045
Percentage completed: 68.1667%
Time elapsed: 472.41276 seconds
Estimated time remaining: 3.67689 minutes
```

Program running...  
Iteration: 2046  
Percentage completed: 68.2000%  
Time elapsed: 472.56995 seconds  
Estimated time remaining: 3.67246 minutes

Program running...  
Iteration: 2047  
Percentage completed: 68.2333%  
Time elapsed: 472.72373 seconds  
Estimated time remaining: 3.66801 minutes

Program running...  
Iteration: 2048  
Percentage completed: 68.2667%  
Time elapsed: 472.87976 seconds  
Estimated time remaining: 3.66359 minutes

Program running...  
Iteration: 2049  
Percentage completed: 68.3000%  
Time elapsed: 473.03299 seconds  
Estimated time remaining: 3.65914 minutes

Program running...  
Iteration: 2050  
Percentage completed: 68.3333%  
Time elapsed: 473.18711 seconds  
Estimated time remaining: 3.65470 minutes

Program running...  
Iteration: 2051  
Percentage completed: 68.3667%  
Time elapsed: 474.04122 seconds  
Estimated time remaining: 3.65566 minutes

Program running...  
Iteration: 2052  
Percentage completed: 68.4000%

Percentage completed: 68.000%  
Time elapsed: 474.19699 seconds  
Estimated time remaining: 3.65122 minutes

Program running...  
Iteration: 2053  
Percentage completed: 68.4333%  
Time elapsed: 474.34846 seconds  
Estimated time remaining: 3.64676 minutes

Program running...  
Iteration: 2054  
Percentage completed: 68.4667%  
Time elapsed: 474.50506 seconds  
Estimated time remaining: 3.64234 minutes

Program running...  
Iteration: 2055  
Percentage completed: 68.5000%  
Time elapsed: 474.66006 seconds  
Estimated time remaining: 3.63790 minutes

Program running...  
Iteration: 2056  
Percentage completed: 68.5333%  
Time elapsed: 474.82156 seconds  
Estimated time remaining: 3.63352 minutes

Program running...  
Iteration: 2057  
Percentage completed: 68.5667%  
Time elapsed: 474.97891 seconds  
Estimated time remaining: 3.62911 minutes

Program running...  
Iteration: 2058  
Percentage completed: 68.6000%  
Time elapsed: 475.13685 seconds  
Estimated time remaining: 3.62471 minutes

Program running...

Program running...  
Iteration: 2059  
Percentage completed: 68.6333%  
Time elapsed: 475.29307 seconds  
Estimated time remaining: 3.62029 minutes

Program running...  
Iteration: 2060  
Percentage completed: 68.6667%  
Time elapsed: 475.44701 seconds  
Estimated time remaining: 3.61586 minutes

Program running...  
Iteration: 2061  
Percentage completed: 68.7000%  
Time elapsed: 476.32028 seconds  
Estimated time remaining: 3.61689 minutes

Program running...  
Iteration: 2062  
Percentage completed: 68.7333%  
Time elapsed: 476.47801 seconds  
Estimated time remaining: 3.61248 minutes

Program running...  
Iteration: 2063  
Percentage completed: 68.7667%  
Time elapsed: 476.63753 seconds  
Estimated time remaining: 3.60809 minutes

Program running...  
Iteration: 2064  
Percentage completed: 68.8000%  
Time elapsed: 476.79375 seconds  
Estimated time remaining: 3.60367 minutes

Program running...  
Iteration: 2065  
Percentage completed: 68.8333%  
Time elapsed: 476.95472 seconds  
Estimated time remaining: 3.59929 minutes

```
Program running...
Iteration: 2066
Percentage completed: 68.8667%
Time elapsed: 477.11546 seconds
Estimated time remaining: 3.59491 minutes
```

```
Program running...
Iteration: 2067
Percentage completed: 68.9000%
Time elapsed: 477.27397 seconds
Estimated time remaining: 3.59052 minutes
```

```
Program running...
Iteration: 2068
Percentage completed: 68.9333%
Time elapsed: 477.42968 seconds
Estimated time remaining: 3.58611 minutes
```

```
Program running...
Iteration: 2069
Percentage completed: 68.9667%
Time elapsed: 477.58659 seconds
Estimated time remaining: 3.58171 minutes
```

```
Program running...
Iteration: 2070
Percentage completed: 69.0000%
Time elapsed: 477.74352 seconds
Estimated time remaining: 3.57731 minutes
```

```
Program running...
Iteration: 2071
Percentage completed: 69.0333%
Time elapsed: 478.61661 seconds
Estimated time remaining: 3.57826 minutes
```

```
Program running...
Iteration: 2072
Percentage completed: 69.0667%
Time elapsed: 478.77605 seconds
```

Estimated time remaining: 3.57387 minutes

Program running...  
Iteration: 2073  
Percentage completed: 69.1000%  
Time elapsed: 478.93083 seconds  
Estimated time remaining: 3.56945 minutes

Program running...  
Iteration: 2074  
Percentage completed: 69.1333%  
Time elapsed: 479.08598 seconds  
Estimated time remaining: 3.56504 minutes

Program running...  
Iteration: 2075  
Percentage completed: 69.1667%  
Time elapsed: 479.24308 seconds  
Estimated time remaining: 3.56064 minutes

Program running...  
Iteration: 2076  
Percentage completed: 69.2000%  
Time elapsed: 479.39916 seconds  
Estimated time remaining: 3.55624 minutes

Program running...  
Iteration: 2077  
Percentage completed: 69.2333%  
Time elapsed: 479.55395 seconds  
Estimated time remaining: 3.55182 minutes

Program running...  
Iteration: 2078  
Percentage completed: 69.2667%  
Time elapsed: 479.70890 seconds  
Estimated time remaining: 3.54741 minutes

Program running...  
Iteration: 2079

```
Percentage completed: 69.3000%  
Time elapsed: 479.86111 seconds  
Estimated time remaining: 3.54298 minutes
```

```
Program running...  
Iteration: 2080  
Percentage completed: 69.3333%  
Time elapsed: 480.01780 seconds  
Estimated time remaining: 3.53859 minutes
```

```
Program running...  
Iteration: 2081  
Percentage completed: 69.3667%  
Time elapsed: 480.88986 seconds  
Estimated time remaining: 3.53947 minutes
```

```
Program running...  
Iteration: 2082  
Percentage completed: 69.4000%  
Time elapsed: 481.04854 seconds  
Estimated time remaining: 3.53508 minutes
```

```
Program running...  
Iteration: 2083  
Percentage completed: 69.4333%  
Time elapsed: 481.20655 seconds  
Estimated time remaining: 3.53069 minutes
```

```
Program running...  
Iteration: 2084  
Percentage completed: 69.4667%  
Time elapsed: 481.36100 seconds  
Estimated time remaining: 3.52628 minutes
```

```
Program running...  
Iteration: 2085  
Percentage completed: 69.5000%  
Time elapsed: 481.51766 seconds  
Estimated time remaining: 3.52189 minutes
```

Program running...  
Iteration: 2086  
Percentage completed: 69.5333%  
Time elapsed: 481.67526 seconds  
Estimated time remaining: 3.51751 minutes

Program running...  
Iteration: 2087  
Percentage completed: 69.5667%  
Time elapsed: 481.83006 seconds  
Estimated time remaining: 3.51310 minutes

Program running...  
Iteration: 2088  
Percentage completed: 69.6000%  
Time elapsed: 481.98510 seconds  
Estimated time remaining: 3.50870 minutes

Program running...  
Iteration: 2089  
Percentage completed: 69.6333%  
Time elapsed: 482.14157 seconds  
Estimated time remaining: 3.50431 minutes

Program running...  
Iteration: 2090  
  
Percentage completed: 69.6667%  
Time elapsed: 482.29819 seconds  
Estimated time remaining: 3.49993 minutes

Program running...  
Iteration: 2091  
Percentage completed: 69.7000%  
Time elapsed: 483.16456 seconds  
Estimated time remaining: 3.50069 minutes

Program running...  
Iteration: 2092  
Percentage completed: 69.7333%  
Time elapsed: 483.31880 seconds  
Estimated time remaining: 3.49628 minutes

```
Program running...
Iteration: 2093
Percentage completed: 69.7667%
Time elapsed: 483.47592 seconds
Estimated time remaining: 3.49190 minutes
```

```
Program running...
Iteration: 2094
Percentage completed: 69.8000%
Time elapsed: 483.63605 seconds
Estimated time remaining: 3.48754 minutes
```

```
Program running...
Iteration: 2095
Percentage completed: 69.8333%
Time elapsed: 483.79331 seconds
Estimated time remaining: 3.48316 minutes
```

```
Program running...
Iteration: 2096
Percentage completed: 69.8667%
Time elapsed: 483.95177 seconds
Estimated time remaining: 3.47879 minutes
```

```
Program running...
Iteration: 2097
Percentage completed: 69.9000%
Time elapsed: 484.10773 seconds
Estimated time remaining: 3.47440 minutes
```

```
Program running...
Iteration: 2098
Percentage completed: 69.9333%
Time elapsed: 484.26579 seconds
Estimated time remaining: 3.47003 minutes
```

```
Program running...
Iteration: 2099
Percentage completed: 69.9667%
```

```
Time elapsed: 484.42246 seconds
Estimated time remaining: 3.46565 minutes
```

```
Program running...
Iteration: 2100
Percentage completed: 70.0000%
Time elapsed: 484.58141 seconds
Estimated time remaining: 3.46129 minutes
```

```
Program running...
Iteration: 2101
Percentage completed: 70.0333%
Time elapsed: 485.45532 seconds
Estimated time remaining: 3.46204 minutes
```

```
Program running...
Iteration: 2102
Percentage completed: 70.0667%
Time elapsed: 485.61221 seconds
Estimated time remaining: 3.45766 minutes
```

```
Program running...
Iteration: 2103
Percentage completed: 70.1000%
Time elapsed: 485.76925 seconds
Estimated time remaining: 3.45328 minutes
```

```
Program running...
Iteration: 2104
Percentage completed: 70.1333%
Time elapsed: 485.92677 seconds
Estimated time remaining: 3.44891 minutes
```

```
Program running...
Iteration: 2105
Percentage completed: 70.1667%
Time elapsed: 486.08703 seconds
Estimated time remaining: 3.44456 minutes
```

```
Program running...
```

```
Iteration: 2106
Percentage completed: 70.2000%
Time elapsed: 486.24213 seconds
Estimated time remaining: 3.44017 minutes
```

```
Program running...
Iteration: 2107
Percentage completed: 70.2333%
Time elapsed: 486.39887 seconds
Estimated time remaining: 3.43580 minutes
```

```
Program running...
Iteration: 2108
Percentage completed: 70.2667%
Time elapsed: 486.55604 seconds
Estimated time remaining: 3.43143 minutes
```

```
Program running...
Iteration: 2109
Percentage completed: 70.3000%
Time elapsed: 486.71589 seconds
Estimated time remaining: 3.42709 minutes
```

```
Program running...
Iteration: 2110
Percentage completed: 70.3333%
Time elapsed: 486.87209 seconds
Estimated time remaining: 3.42272 minutes
```

```
Program running...
Iteration: 2111
Percentage completed: 70.3667%
Time elapsed: 487.73968 seconds
Estimated time remaining: 3.42334 minutes
```

```
Program running...
Iteration: 2112
Percentage completed: 70.4000%
Time elapsed: 487.89490 seconds
Estimated time remaining: 3.41896 minutes
```

```
Program running...
Iteration: 2113
Percentage completed: 70.4333%
Time elapsed: 488.05482 seconds
Estimated time remaining: 3.41461 minutes
```

```
Program running...
Iteration: 2114
Percentage completed: 70.4667%
Time elapsed: 488.21017 seconds
Estimated time remaining: 3.41023 minutes
```

```
Program running...
Iteration: 2115
Percentage completed: 70.5000%
Time elapsed: 488.36798 seconds
Estimated time remaining: 3.40587 minutes
```

```
Program running...
Iteration: 2116
Percentage completed: 70.5333%
Time elapsed: 488.52595 seconds
Estimated time remaining: 3.40152 minutes
```

```
Program running...
Iteration: 2117
Percentage completed: 70.5667%
Time elapsed: 488.68037 seconds
Estimated time remaining: 3.39714 minutes
```

```
Program running...
Iteration: 2118
Percentage completed: 70.6000%
Time elapsed: 488.83723 seconds
Estimated time remaining: 3.39278 minutes
```

```
Program running...
Iteration: 2119
Percentage completed: 70.6333%
Time elapsed: 488.99305 seconds
```

Estimated time remaining: 3.38841 minutes

Program running...  
Iteration: 2120  
Percentage completed: 70.6667%  
Time elapsed: 489.14979 seconds  
Estimated time remaining: 3.38405 minutes

Program running...  
Iteration: 2121  
Percentage completed: 70.7000%  
Time elapsed: 490.01643 seconds  
Estimated time remaining: 3.38460 minutes

Program running...  
Iteration: 2122  
Percentage completed: 70.7333%  
Time elapsed: 490.17169 seconds  
Estimated time remaining: 3.38023 minutes

Program running...  
Iteration: 2123  
Percentage completed: 70.7667%  
Time elapsed: 490.32737 seconds  
Estimated time remaining: 3.37586 minutes

Program running...  
Iteration: 2124  
Percentage completed: 70.8000%  
Time elapsed: 490.48292 seconds  
Estimated time remaining: 3.37149 minutes

Program running...  
Iteration: 2125  
Percentage completed: 70.8333%  
Time elapsed: 490.63675 seconds  
Estimated time remaining: 3.36711 minutes

Program running...  
Iteration: 2126  
Percentage completed: 70.8667%

```
Time elapsed: 490.79458 seconds
Estimated time remaining: 3.36276 minutes
```

```
Program running...
Iteration: 2127
Percentage completed: 70.9000%
Time elapsed: 490.95085 seconds
Estimated time remaining: 3.35841 minutes
```

```
Program running...
Iteration: 2128
Percentage completed: 70.9333%
Time elapsed: 491.10725 seconds
Estimated time remaining: 3.35405 minutes
```

```
Program running...
Iteration: 2129
Percentage completed: 70.9667%
Time elapsed: 491.26444 seconds
Estimated time remaining: 3.34970 minutes
```

```
Program running...
Iteration: 2130
Percentage completed: 71.0000%
Time elapsed: 491.41884 seconds
Estimated time remaining: 3.34534 minutes
```

```
Program running...
Iteration: 2131
Percentage completed: 71.0333%
Time elapsed: 492.28705 seconds
Estimated time remaining: 3.34583 minutes
```

```
Program running...
Iteration: 2132
Percentage completed: 71.0667%
Time elapsed: 492.44679 seconds
Estimated time remaining: 3.34149 minutes
```

```
Program running...
Iteration: 2133
Percentage completed: 71.1000%
Time elapsed: 492.60094 seconds
Estimated time remaining: 3.33712 minutes
```

```
Program running...
Iteration: 2134
Percentage completed: 71.1333%
Time elapsed: 492.75762 seconds
Estimated time remaining: 3.33277 minutes
```

```
Program running...
Iteration: 2135
Percentage completed: 71.1667%
Time elapsed: 492.91414 seconds
Estimated time remaining: 3.32842 minutes
```

```
Program running...
Iteration: 2136
Percentage completed: 71.2000%
Time elapsed: 493.07163 seconds
Estimated time remaining: 3.32408 minutes
```

```
Program running...
Iteration: 2137
Percentage completed: 71.2333%
Time elapsed: 493.22831 seconds
Estimated time remaining: 3.31973 minutes
```

```
Program running...
Iteration: 2138
Percentage completed: 71.2667%
Time elapsed: 493.38447 seconds
Estimated time remaining: 3.31538 minutes
```

```
Program running...
Iteration: 2139
Percentage completed: 71.3000%
Time elapsed: 493.53965 seconds
Estimated time remaining: 3.31103 minutes
```

```
Program running...
Iteration: 2140
Percentage completed: 71.3333%
Time elapsed: 493.69537 seconds
Estimated time remaining: 3.30668 minutes
```

```
Program running...
Iteration: 2141
Percentage completed: 71.3667%
Time elapsed: 494.55322 seconds
Estimated time remaining: 3.30703 minutes
```

```
Program running...
Iteration: 2142
Percentage completed: 71.4000%
Time elapsed: 494.71005 seconds
Estimated time remaining: 3.30268 minutes
```

```
Program running...
Iteration: 2143
Percentage completed: 71.4333%
Time elapsed: 494.86516 seconds
Estimated time remaining: 3.29833 minutes
```

```
Program running...
Iteration: 2144
Percentage completed: 71.4667%
Time elapsed: 495.02321 seconds
Estimated time remaining: 3.29400 minutes
```

```
Program running...
Iteration: 2145
Percentage completed: 71.5000%
Time elapsed: 495.18074 seconds
Estimated time remaining: 3.28966 minutes
```

```
Program running...
Iteration: 2146
Percentage completed: 71.5333%
```

Time elapsed: 495.49608 seconds  
Estimated time remaining: 3.28534 minutes

Program running...  
Iteration: 2147  
Percentage completed: 71.5667%  
Time elapsed: 495.49608 seconds  
Estimated time remaining: 3.28100 minutes

Program running...  
Iteration: 2148  
Percentage completed: 71.6000%  
Time elapsed: 495.65608 seconds  
Estimated time remaining: 3.27668 minutes

Program running...  
Iteration: 2149  
Percentage completed: 71.6333%  
Time elapsed: 495.81056 seconds  
Estimated time remaining: 3.27233 minutes

Program running...  
Iteration: 2150  
Percentage completed: 71.6667%  
Time elapsed: 495.96781 seconds  
Estimated time remaining: 3.26800 minutes

Program running...  
Iteration: 2151  
Percentage completed: 71.7000%  
Time elapsed: 496.83553 seconds  
Estimated time remaining: 3.26835 minutes

Program running...  
Iteration: 2152  
Percentage completed: 71.7333%  
Time elapsed: 496.99030 seconds  
Estimated time remaining: 3.26400 minutes

Program running...

Iteration: 2155  
Percentage completed: 71.7667%  
Time elapsed: 497.14800 seconds  
Estimated time remaining: 3.25967 minutes

Program running...  
Iteration: 2154  
Percentage completed: 71.8000%  
Time elapsed: 497.30262 seconds  
Estimated time remaining: 3.25532 minutes

Program running...  
Iteration: 2155  
Percentage completed: 71.8333%  
Time elapsed: 497.46186 seconds  
Estimated time remaining: 3.25101 minutes

Program running...  
Iteration: 2156  
Percentage completed: 71.8667%  
Time elapsed: 497.61867 seconds  
Estimated time remaining: 3.24668 minutes

Program running...  
Iteration: 2157  
Percentage completed: 71.9000%  
Time elapsed: 497.77349 seconds  
Estimated time remaining: 3.24233 minutes

Program running...  
Iteration: 2158  
Percentage completed: 71.9333%  
Time elapsed: 497.92856 seconds  
Estimated time remaining: 3.23800 minutes

Program running...  
Iteration: 2159  
Percentage completed: 71.9667%  
Time elapsed: 498.08743 seconds  
Estimated time remaining: 3.23368 minutes

```
Program running...
Iteration: 2160
Percentage completed: 72.0000%
Time elapsed: 498.24299 seconds
Estimated time remaining: 3.22935 minutes
```

```
Program running...
Iteration: 2161
Percentage completed: 72.0333%
Time elapsed: 499.11744 seconds
Estimated time remaining: 3.22967 minutes
```

```
Program running...
Iteration: 2162
Percentage completed: 72.0667%
Time elapsed: 499.27354 seconds
Estimated time remaining: 3.22534 minutes
```

```
Program running...
Iteration: 2163
Percentage completed: 72.1000%
Time elapsed: 499.42699 seconds
Estimated time remaining: 3.22099 minutes
```

```
Program running...
Iteration: 2164
Percentage completed: 72.1333%
Time elapsed: 499.58435 seconds
Estimated time remaining: 3.21667 minutes
```

```
Program running...
Iteration: 2165
Percentage completed: 72.1667%
Time elapsed: 499.74303 seconds
Estimated time remaining: 3.21236 minutes
```

```
Program running...
Iteration: 2166
Percentage completed: 72.2000%
Time elapsed: 499.90169 seconds
Estimated time remaining: 3.20805 minutes
```

Program running...  
Iteration: 2167  
Percentage completed: 72.2333%  
Time elapsed: 500.05853 seconds  
Estimated time remaining: 3.20373 minutes

Program running...  
Iteration: 2168  
Percentage completed: 72.2667%  
Time elapsed: 500.21654 seconds  
Estimated time remaining: 3.19942 minutes

Program running...  
Iteration: 2169  
Percentage completed: 72.3000%  
Time elapsed: 500.37157 seconds  
Estimated time remaining: 3.19509 minutes

Program running...  
Iteration: 2170  
Percentage completed: 72.3333%  
Time elapsed: 500.52631 seconds  
Estimated time remaining: 3.19076 minutes

Program running...  
Iteration: 2171  
Percentage completed: 72.3667%  
Time elapsed: 501.39778 seconds  
Estimated time remaining: 3.19099 minutes

Program running...  
Iteration: 2172  
Percentage completed: 72.4000%  
Time elapsed: 501.55672 seconds  
Estimated time remaining: 3.18668 minutes

Program running...  
Iteration: 2173  
Percentage completed: 72.4333%

```
Time elapsed: 501.71272 seconds
Estimated time remaining: 3.18236 minutes
```

```
Program running...
Iteration: 2174
Percentage completed: 72.4667%
Time elapsed: 501.86876 seconds
Estimated time remaining: 3.17804 minutes
```

```
Program running...
Iteration: 2175
Percentage completed: 72.5000%
Time elapsed: 502.02705 seconds
Estimated time remaining: 3.17373 minutes
```

```
Program running...
Iteration: 2176
Percentage completed: 72.5333%
Time elapsed: 502.18522 seconds
Estimated time remaining: 3.16943 minutes
```

```
Program running...
Iteration: 2177
Percentage completed: 72.5667%
Time elapsed: 502.34233 seconds
Estimated time remaining: 3.16512 minutes
```

```
Program running...
Iteration: 2178
Percentage completed: 72.6000%
Time elapsed: 502.50080 seconds
Estimated time remaining: 3.16082 minutes
```

```
Program running...
Iteration: 2179
Percentage completed: 72.6333%
Time elapsed: 502.65558 seconds
Estimated time remaining: 3.15649 minutes
```

```
Program running...
Iteration: 2180
Percentage completed: 72.6667%
Time elapsed: 502.81104 seconds
Estimated time remaining: 3.15218 minutes
```

```
Program running...
Iteration: 2181
Percentage completed: 72.7000%
Time elapsed: 503.67595 seconds
Estimated time remaining: 3.15230 minutes
```

```
Program running...
Iteration: 2182
Percentage completed: 72.7333%
Time elapsed: 503.82921 seconds
Estimated time remaining: 3.14797 minutes
```

```
Program running...
Iteration: 2183
Percentage completed: 72.7667%
Time elapsed: 503.98680 seconds
Estimated time remaining: 3.14366 minutes
```

```
Program running...
Iteration: 2184
Percentage completed: 72.8000%
Time elapsed: 504.14280 seconds
Estimated time remaining: 3.13935 minutes
```

```
Program running...
Iteration: 2185
Percentage completed: 72.8333%
Time elapsed: 504.30016 seconds
Estimated time remaining: 3.13505 minutes
```

```
Program running...
Iteration: 2186
Percentage completed: 72.8667%
Time elapsed: 504.46023 seconds
Estimated time remaining: 3.13076 minutes
```

```
Program running...
  Iteration: 2187
  Percentage completed: 72.9000%
  Time elapsed: 504.61467 seconds
  Estimated time remaining: 3.12644 minutes
```

```
Program running...
  Iteration: 2188
  Percentage completed: 72.9333%
  Time elapsed: 504.77276 seconds
  Estimated time remaining: 3.12215 minutes
```

```
Program running...
  Iteration: 2189
  Percentage completed: 72.9667%
  Time elapsed: 504.93795 seconds
  Estimated time remaining: 3.11790 minutes
```

```
Program running...
  Iteration: 2190
  Percentage completed: 73.0000%
  Time elapsed: 505.09242 seconds
  Estimated time remaining: 3.11358 minutes
```

```
Program running...
  Iteration: 2191
  Percentage completed: 73.0333%
  Time elapsed: 505.95420 seconds
  Estimated time remaining: 3.11362 minutes
```

```
Program running...
  Iteration: 2192
  Percentage completed: 73.0667%
  Time elapsed: 506.10747 seconds
  Estimated time remaining: 3.10930 minutes
```

```
Program running...
  Iteration: 2193
  Percentage completed: 73.1000%
  Time elapsed: 506.26145 seconds
```

Estimated time remaining: 3.10498 minutes

Program running...  
Iteration: 2194  
Percentage completed: 73.1333%  
Time elapsed: 506.41456 seconds  
Estimated time remaining: 3.10065 minutes

Program running...  
Iteration: 2195  
Percentage completed: 73.1667%  
Time elapsed: 506.56720 seconds  
Estimated time remaining: 3.09633 minutes

Program running...  
Iteration: 2196  
Percentage completed: 73.2000%  
Time elapsed: 506.72339 seconds  
Estimated time remaining: 3.09203 minutes

Program running...  
Iteration: 2197  
Percentage completed: 73.2333%  
Time elapsed: 506.87909 seconds  
Estimated time remaining: 3.08772 minutes

Program running...  
Iteration: 2198  
Percentage completed: 73.2667%  
Time elapsed: 507.03413 seconds  
Estimated time remaining: 3.08342 minutes

Program running...  
Iteration: 2199  
Percentage completed: 73.3000%  
Time elapsed: 507.18843 seconds  
Estimated time remaining: 3.07911 minutes

Program running...  
Iteration: 2200

```
Percentage completed: 73.3333%
Time elapsed: 507.34117 seconds
Estimated time remaining: 3.07479 minutes
```

```
Program running...
Iteration: 2201
Percentage completed: 73.3667%
Time elapsed: 508.21341 seconds
Estimated time remaining: 3.07483 minutes
```

```
Program running...
Iteration: 2202
Percentage completed: 73.4000%
Time elapsed: 508.37187 seconds
Estimated time remaining: 3.07055 minutes
```

```
Program running...
Iteration: 2203
Percentage completed: 73.4333%
Time elapsed: 508.52512 seconds
Estimated time remaining: 3.06623 minutes
```

```
Program running...
Iteration: 2204
Percentage completed: 73.4667%
Time elapsed: 508.68034 seconds
Estimated time remaining: 3.06193 minutes
```

```
Program running...
Iteration: 2205
Percentage completed: 73.5000%
Time elapsed: 508.83644 seconds
Estimated time remaining: 3.05763 minutes
```

```
Program running...
Iteration: 2206
Percentage completed: 73.5333%
Time elapsed: 508.99207 seconds
Estimated time remaining: 3.05334 minutes
```

```
Program running...
Iteration: 2207
Percentage completed: 73.5667%
Time elapsed: 509.14844 seconds
Estimated time remaining: 3.04904 minutes
```

```
Program running...
Iteration: 2208
Percentage completed: 73.6000%
Time elapsed: 509.30485 seconds
Estimated time remaining: 3.04476 minutes
```

```
Program running...
Iteration: 2209
Percentage completed: 73.6333%
Time elapsed: 509.46096 seconds
Estimated time remaining: 3.04047 minutes
```

```
Program running...
Iteration: 2210
Percentage completed: 73.6667%
Time elapsed: 509.61657 seconds
Estimated time remaining: 3.03618 minutes
```

```
Program running...
Iteration: 2211
Percentage completed: 73.7000%
Time elapsed: 510.47780 seconds
Estimated time remaining: 3.03608 minutes
```

```
Program running...
Iteration: 2212
Percentage completed: 73.7333%
Time elapsed: 510.63250 seconds
Estimated time remaining: 3.03178 minutes
```

```
Program running...
Iteration: 2213
Percentage completed: 73.7667%
Time elapsed: 510.78877 seconds
Estimated time remaining: 3.02749 minutes
```

```
Program running...
Iteration: 2214
Percentage completed: 73.8000%
Time elapsed: 510.94220 seconds
Estimated time remaining: 3.02319 minutes
```

```
Program running...
Iteration: 2215
Percentage completed: 73.8333%
Time elapsed: 511.10266 seconds
Estimated time remaining: 3.01893 minutes
```

```
Program running...
Iteration: 2216
Percentage completed: 73.8667%
Time elapsed: 511.26062 seconds
Estimated time remaining: 3.01465 minutes
```

```
Program running...
Iteration: 2217
Percentage completed: 73.9000%
Time elapsed: 511.41679 seconds
Estimated time remaining: 3.01037 minutes
```

```
Program running...
Iteration: 2218
Percentage completed: 73.9333%
Time elapsed: 511.57262 seconds
Estimated time remaining: 3.00608 minutes
```

```
Program running...
Iteration: 2219
Percentage completed: 73.9667%
Time elapsed: 511.72967 seconds
Estimated time remaining: 3.00181 minutes
```

```
Program running...
Iteration: 2220
Percentage completed: 74.0000%
Time elapsed: 511.88519 seconds
```

-----  
Estimated time remaining: 2.99752 minutes

Program running...  
Iteration: 2221  
Percentage completed: 74.0333%  
Time elapsed: 512.75536 seconds  
Estimated time remaining: 2.99742 minutes

Program running...  
Iteration: 2222  
Percentage completed: 74.0667%  
Time elapsed: 512.91025 seconds  
Estimated time remaining: 2.99313 minutes

Program running...  
Iteration: 2223  
Percentage completed: 74.1000%  
Time elapsed: 513.06769 seconds  
Estimated time remaining: 2.98885 minutes

Program running...  
Iteration: 2224  
Percentage completed: 74.1333%  
Time elapsed: 513.22184 seconds  
Estimated time remaining: 2.98456 minutes

Program running...  
Iteration: 2225  
Percentage completed: 74.1667%  
Time elapsed: 513.38047 seconds  
Estimated time remaining: 2.98030 minutes

Program running...  
Iteration: 2226  
Percentage completed: 74.2000%  
Time elapsed: 513.53720 seconds  
Estimated time remaining: 2.97602 minutes

Program running...

```
Iteration: 2227
Percentage completed: 74.2333%
Time elapsed: 513.69278 seconds
Estimated time remaining: 2.97174 minutes
```

```
Program running...
Iteration: 2228
Percentage completed: 74.2667%
Time elapsed: 513.84976 seconds
Estimated time remaining: 2.96747 minutes
```

```
Program running...
Iteration: 2229
Percentage completed: 74.3000%
Time elapsed: 514.00545 seconds
Estimated time remaining: 2.96320 minutes
```

```
Program running...
Iteration: 2230
Percentage completed: 74.3333%
Time elapsed: 514.15900 seconds
Estimated time remaining: 2.95891 minutes
```

```
Program running...
Iteration: 2231
Percentage completed: 74.3667%
Time elapsed: 515.02680 seconds
Estimated time remaining: 2.95873 minutes
```

```
Program running...
Iteration: 2232
Percentage completed: 74.4000%
Time elapsed: 515.18372 seconds
Estimated time remaining: 2.95446 minutes
```

```
Program running...
Iteration: 2233
Percentage completed: 74.4333%
Time elapsed: 515.33862 seconds
Estimated time remaining: 2.95018 minutes
```

```
Program running...
Iteration: 2234
Percentage completed: 74.4667%
Time elapsed: 515.49420 seconds
Estimated time remaining: 2.94590 minutes
```

```
Program running...
Iteration: 2235
Percentage completed: 74.5000%
Time elapsed: 515.65168 seconds
Estimated time remaining: 2.94164 minutes
```

```
Program running...
Iteration: 2236
Percentage completed: 74.5333%
Time elapsed: 515.81041 seconds
Estimated time remaining: 2.93738 minutes
```

```
Program running...
Iteration: 2237
Percentage completed: 74.5667%
Time elapsed: 515.96679 seconds
Estimated time remaining: 2.93311 minutes
```

```
Program running...
Iteration: 2238
Percentage completed: 74.6000%
Time elapsed: 516.12594 seconds
Estimated time remaining: 2.92886 minutes
```

```
Program running...
Iteration: 2239
Percentage completed: 74.6333%
Time elapsed: 516.28195 seconds
Estimated time remaining: 2.92460 minutes
```

```
Program running...
Iteration: 2240
Percentage completed: 74.6667%
Time elapsed: 516.43930 seconds
```

Estimated time remaining: 2.92034 minutes

Program running...  
Iteration: 2241  
Percentage completed: 74.7000%  
Time elapsed: 517.31377 seconds  
Estimated time remaining: 2.92013 minutes

Program running...  
Iteration: 2242  
Percentage completed: 74.7333%  
Time elapsed: 517.48711 seconds  
Estimated time remaining: 2.91596 minutes

Program running...  
Iteration: 2243  
Percentage completed: 74.7667%  
Time elapsed: 517.65356 seconds  
Estimated time remaining: 2.91175 minutes

Program running...  
Iteration: 2244  
Percentage completed: 74.8000%  
Time elapsed: 517.80790 seconds  
Estimated time remaining: 2.90748 minutes

Program running...  
Iteration: 2245  
Percentage completed: 74.8333%  
Time elapsed: 517.96532 seconds  
Estimated time remaining: 2.90322 minutes

Program running...  
Iteration: 2246  
Percentage completed: 74.8667%  
Time elapsed: 518.11955 seconds  
Estimated time remaining: 2.89895 minutes

Program running...  
Iteration: 2247

Percentage completed: 74.9000%  
Time elapsed: 518.27471 seconds  
Estimated time remaining: 2.89468 minutes

Program running...  
Iteration: 2248  
Percentage completed: 74.9333%  
Time elapsed: 518.43061 seconds  
Estimated time remaining: 2.89042 minutes

Program running...  
Iteration: 2249  
Percentage completed: 74.9667%  
Time elapsed: 518.58551 seconds  
Estimated time remaining: 2.88615 minutes

Program running...  
Iteration: 2250  
Percentage completed: 75.0000%  
Time elapsed: 518.74005 seconds  
Estimated time remaining: 2.88189 minutes

Program running...  
Iteration: 2251  
Percentage completed: 75.0333%  
Time elapsed: 519.60262 seconds  
Estimated time remaining: 2.88155 minutes

Program running...  
Iteration: 2252  
Percentage completed: 75.0667%  
Time elapsed: 519.75794 seconds  
Estimated time remaining: 2.87729 minutes

Program running...  
Iteration: 2253  
Percentage completed: 75.1000%  
Time elapsed: 519.91459 seconds  
Estimated time remaining: 2.87303 minutes

```
Program running...
Iteration: 2254
Percentage completed: 75.1333%
Time elapsed: 520.07203 seconds
Estimated time remaining: 2.86878 minutes
```

```
Program running...
Iteration: 2255
Percentage completed: 75.1667%
Time elapsed: 520.22689 seconds
Estimated time remaining: 2.86451 minutes
```

```
Program running...
Iteration: 2256
Percentage completed: 75.2000%
Time elapsed: 520.38771 seconds
Estimated time remaining: 2.86029 minutes
```

```
Program running...
Iteration: 2257
Percentage completed: 75.2333%
Time elapsed: 520.54547 seconds
Estimated time remaining: 2.85604 minutes
```

```
Program running...
Iteration: 2258
Percentage completed: 75.2667%
Time elapsed: 520.70319 seconds
Estimated time remaining: 2.85180 minutes
```

```
Program running...
Iteration: 2259
Percentage completed: 75.3000%
Time elapsed: 520.86234 seconds
Estimated time remaining: 2.84756 minutes
```

```
Program running...
Iteration: 2260
Percentage completed: 75.3333%
Time elapsed: 521.01709 seconds
Estimated time remaining: 2.84331 minutes
```

```
Program running...
Iteration: 2261
Percentage completed: 75.3667%
Time elapsed: 521.88202 seconds
Estimated time remaining: 2.84292 minutes
```

```
Program running...
Iteration: 2262
Percentage completed: 75.4000%
Time elapsed: 522.03745 seconds
Estimated time remaining: 2.83866 minutes
```

```
Program running...
Iteration: 2263
Percentage completed: 75.4333%
Time elapsed: 522.19356 seconds
Estimated time remaining: 2.83441 minutes
```

```
Program running...
Iteration: 2264
Percentage completed: 75.4667%
Time elapsed: 522.34945 seconds
Estimated time remaining: 2.83016 minutes
```

```
Program running...
Iteration: 2265
Percentage completed: 75.5000%
Time elapsed: 522.50733 seconds
Estimated time remaining: 2.82592 minutes
```

```
Program running...
Iteration: 2266
Percentage completed: 75.5333%
Time elapsed: 522.66610 seconds
Estimated time remaining: 2.82169 minutes
```

```
Program running...
Iteration: 2267
Percentage completed: 75.5667%
Time elapsed: 522.82134 seconds
```

Estimated time remaining: 2.81744 minutes

Program running...  
Iteration: 2268  
Percentage completed: 75.6000%  
Time elapsed: 522.97616 seconds  
Estimated time remaining: 2.81319 minutes

Program running...  
Iteration: 2269  
Percentage completed: 75.6333%  
Time elapsed: 523.13107 seconds  
Estimated time remaining: 2.80894 minutes

Program running...  
Iteration: 2270  
Percentage completed: 75.6667%  
Time elapsed: 523.28632 seconds  
Estimated time remaining: 2.80469 minutes

Program running...  
Iteration: 2271  
Percentage completed: 75.7000%  
Time elapsed: 524.15819 seconds  
Estimated time remaining: 2.80428 minutes

Program running...  
Iteration: 2272  
Percentage completed: 75.7333%  
Time elapsed: 524.31281 seconds  
Estimated time remaining: 2.80003 minutes

Program running...  
Iteration: 2273  
Percentage completed: 75.7667%  
Time elapsed: 524.46916 seconds  
Estimated time remaining: 2.79578 minutes

Program running...

```
Iteration: 2274
Percentage completed: 75.8000%
Time elapsed: 524.62497 seconds
Estimated time remaining: 2.79154 minutes
```

```
Program running...
Iteration: 2275
Percentage completed: 75.8333%
Time elapsed: 524.78385 seconds
Estimated time remaining: 2.78731 minutes
```

```
Program running...
Iteration: 2276
Percentage completed: 75.8667%
Time elapsed: 524.94048 seconds
Estimated time remaining: 2.78307 minutes
```

```
Program running...
Iteration: 2277
Percentage completed: 75.9000%
Time elapsed: 525.09650 seconds
Estimated time remaining: 2.77884 minutes
```

```
Program running...
Iteration: 2278
Percentage completed: 75.9333%
Time elapsed: 525.25213 seconds
Estimated time remaining: 2.77460 minutes
```

```
Program running...
Iteration: 2279
Percentage completed: 75.9667%
Time elapsed: 525.40601 seconds
Estimated time remaining: 2.77035 minutes
```

```
Program running...
Iteration: 2280
Percentage completed: 76.0000%
Time elapsed: 525.56357 seconds
Estimated time remaining: 2.76612 minutes
```

```
Program running...
  Iteration: 2281
  Percentage completed: 76.0333%
  Time elapsed: 526.42058 seconds
  Estimated time remaining: 2.76557 minutes
```

```
Program running...
  Iteration: 2282
  Percentage completed: 76.0667%
  Time elapsed: 526.58210 seconds
  Estimated time remaining: 2.76136 minutes
```

```
Program running...
  Iteration: 2283
  Percentage completed: 76.1000%
  Time elapsed: 526.73460 seconds
  Estimated time remaining: 2.75711 minutes
```

```
Program running...
  Iteration: 2284
  Percentage completed: 76.1333%
  Time elapsed: 526.88857 seconds
  Estimated time remaining: 2.75286 minutes
```

```
Program running...
  Iteration: 2285
  Percentage completed: 76.1667%
  Time elapsed: 527.04215 seconds
  Estimated time remaining: 2.74861 minutes
```

```
Program running...
  Iteration: 2286
  Percentage completed: 76.2000%
  Time elapsed: 527.19810 seconds
  Estimated time remaining: 2.74438 minutes
```

```
Program running...
  Iteration: 2287
  Percentage completed: 76.2333%
  Time elapsed: 527.35190 seconds
  Estimated time remaining: 2.74014 minutes
```

```
Program running...
Iteration: 2288
Percentage completed: 76.2667%
Time elapsed: 527.50656 seconds
Estimated time remaining: 2.73590 minutes
```

```
Program running...
Iteration: 2289
Percentage completed: 76.3000%
Time elapsed: 527.65925 seconds
Estimated time remaining: 2.73166 minutes
```

```
Program running...
Iteration: 2290
Percentage completed: 76.3333%
Time elapsed: 527.81296 seconds
Estimated time remaining: 2.72742 minutes
```

```
Program running...
Iteration: 2291
Percentage completed: 76.3667%
Time elapsed: 528.67273 seconds
Estimated time remaining: 2.72682 minutes
```

```
Program running...
Iteration: 2292
Percentage completed: 76.4000%
Time elapsed: 528.82596 seconds
Estimated time remaining: 2.72258 minutes
```

```
Program running...
Iteration: 2293
Percentage completed: 76.4333%
Time elapsed: 528.98108 seconds
Estimated time remaining: 2.71834 minutes
```

```
Program running...
Iteration: 2294
Percentage completed: 76.4667%
```

Time elapsed: 529.13820 seconds  
Estimated time remaining: 2.71412 minutes

Program running...  
Iteration: 2295  
Percentage completed: 76.5000%  
Time elapsed: 529.29299 seconds  
Estimated time remaining: 2.70989 minutes

Program running...  
Iteration: 2296  
Percentage completed: 76.5333%  
Time elapsed: 529.45293 seconds  
Estimated time remaining: 2.70568 minutes

Program running...  
Iteration: 2297  
Percentage completed: 76.5667%  
Time elapsed: 529.60747 seconds  
Estimated time remaining: 2.70145 minutes

Program running...  
Iteration: 2298  
Percentage completed: 76.6000%  
Time elapsed: 529.76322 seconds  
Estimated time remaining: 2.69723 minutes

Program running...  
Iteration: 2299  
Percentage completed: 76.6333%  
Time elapsed: 529.92126 seconds  
Estimated time remaining: 2.69302 minutes

Program running...  
Iteration: 2300  
Percentage completed: 76.6667%  
Time elapsed: 530.07809 seconds  
Estimated time remaining: 2.68880 minutes

Program running...  
Iteration: 2301  
Percentage completed: 76.7000%  
Time elapsed: 530.94344 seconds  
Estimated time remaining: 2.68817 minutes

Program running...  
Iteration: 2302  
Percentage completed: 76.7333%  
Time elapsed: 531.09975 seconds  
Estimated time remaining: 2.68395 minutes

Program running...  
Iteration: 2303  
Percentage completed: 76.7667%  
Time elapsed: 531.25523 seconds  
Estimated time remaining: 2.67973 minutes

Program running...  
Iteration: 2304  
Percentage completed: 76.8000%  
Time elapsed: 531.41136 seconds  
Estimated time remaining: 2.67551 minutes

Program running...  
Iteration: 2305  
Percentage completed: 76.8333%  
Time elapsed: 531.56986 seconds  
Estimated time remaining: 2.67130 minutes

Program running...  
Iteration: 2306  
Percentage completed: 76.8667%  
Time elapsed: 531.72857 seconds  
Estimated time remaining: 2.66710 minutes

Program running...  
Iteration: 2307  
Percentage completed: 76.9000%  
Time elapsed: 531.88401 seconds  
Estimated time remaining: 2.66288 minutes

```
Program running...
  Iteration: 2308
  Percentage completed: 76.9333%
  Time elapsed: 532.03721 seconds
  Estimated time remaining: 2.65865 minutes
```

```
Program running...
  Iteration: 2309
  Percentage completed: 76.9667%
  Time elapsed: 532.19200 seconds
  Estimated time remaining: 2.65443 minutes
```

```
Program running...
  Iteration: 2310
  Percentage completed: 77.0000%
  Time elapsed: 532.34656 seconds
  Estimated time remaining: 2.65021 minutes
```

```
Program running...
  Iteration: 2311
  Percentage completed: 77.0333%
  Time elapsed: 533.20842 seconds
  Estimated time remaining: 2.64951 minutes
```

```
Program running...
  Iteration: 2312
  Percentage completed: 77.0667%
  Time elapsed: 533.36746 seconds
  Estimated time remaining: 2.64530 minutes
```

```
Program running...
  Iteration: 2313
  Percentage completed: 77.1000%
  Time elapsed: 533.52105 seconds
  Estimated time remaining: 2.64108 minutes
```

```
Program running...
  Iteration: 2314
  Percentage completed: 77.1333%
  Time elapsed: 533.67577 seconds
```

ESTIMATED TIME REMAINING: 2.63264 MINUTES

Program running...  
Iteration: 2315  
Percentage completed: 77.1667%  
Time elapsed: 533.83119 seconds  
Estimated time remaining: 2.63264 minutes

Program running...  
Iteration: 2316  
Percentage completed: 77.2000%  
Time elapsed: 533.98727 seconds  
Estimated time remaining: 2.62843 minutes

Program running...  
Iteration: 2317  
Percentage completed: 77.2333%  
Time elapsed: 534.14356 seconds  
Estimated time remaining: 2.62423 minutes

Program running...  
Iteration: 2318  
Percentage completed: 77.2667%  
Time elapsed: 534.30155 seconds  
Estimated time remaining: 2.62003 minutes

Program running...  
Iteration: 2319  
Percentage completed: 77.3000%  
Time elapsed: 534.45783 seconds  
Estimated time remaining: 2.61582 minutes

Program running...  
Iteration: 2320  
Percentage completed: 77.3333%  
Time elapsed: 534.61394 seconds  
Estimated time remaining: 2.61162 minutes

Program running...  
Iteration: 2321

```
Percentage completed: 77.3667%
Time elapsed: 535.47931 seconds
Estimated time remaining: 2.61087 minutes
```

```
Program running...
Iteration: 2322
Percentage completed: 77.4000%
Time elapsed: 535.63417 seconds
Estimated time remaining: 2.60666 minutes
```

```
Program running...
Iteration: 2323
Percentage completed: 77.4333%
Time elapsed: 535.79076 seconds
Estimated time remaining: 2.60245 minutes
```

```
Program running...
Iteration: 2324
Percentage completed: 77.4667%
Time elapsed: 535.94680 seconds
Estimated time remaining: 2.59825 minutes
```

```
Program running...
Iteration: 2325
Percentage completed: 77.5000%
Time elapsed: 536.10267 seconds
Estimated time remaining: 2.59404 minutes
```

```
Program running...
Iteration: 2326
Percentage completed: 77.5333%
Time elapsed: 536.25874 seconds
Estimated time remaining: 2.58984 minutes
```

```
Program running...
Iteration: 2327
Percentage completed: 77.5667%
Time elapsed: 536.41287 seconds
Estimated time remaining: 2.58563 minutes
```

```
Program running...
Iteration: 2328
Percentage completed: 77.6000%
Time elapsed: 536.56687 seconds
Estimated time remaining: 2.58142 minutes
```

```
Program running...
Iteration: 2329
Percentage completed: 77.6333%
Time elapsed: 536.72289 seconds
Estimated time remaining: 2.57722 minutes
```

```
Program running...
Iteration: 2330
Percentage completed: 77.6667%
Time elapsed: 536.87700 seconds
Estimated time remaining: 2.57301 minutes
```

```
Program running...
Iteration: 2331
Percentage completed: 77.7000%
Time elapsed: 537.74941 seconds
Estimated time remaining: 2.57224 minutes
```

```
Program running...
Iteration: 2332
Percentage completed: 77.7333%
Time elapsed: 537.90724 seconds
Estimated time remaining: 2.56805 minutes
```

```
Program running...
Iteration: 2333
Percentage completed: 77.7667%
Time elapsed: 538.06185 seconds
Estimated time remaining: 2.56385 minutes
```

```
Program running...
Iteration: 2334
Percentage completed: 77.8000%
Time elapsed: 538.21650 seconds
Estimated time remaining: 2.55964 minutes
```

```
Program running...
Iteration: 2335
Percentage completed: 77.8333%
Time elapsed: 538.37486 seconds
Estimated time remaining: 2.55545 minutes
```

```
Program running...
Iteration: 2336
Percentage completed: 77.8667%
Time elapsed: 538.53121 seconds
Estimated time remaining: 2.55126 minutes
```

```
Program running...
Iteration: 2337
Percentage completed: 77.9000%
Time elapsed: 538.68777 seconds
Estimated time remaining: 2.54707 minutes
```

```
Program running...
Iteration: 2338
Percentage completed: 77.9333%
Time elapsed: 538.84334 seconds
Estimated time remaining: 2.54287 minutes
```

```
Program running...
Iteration: 2339
Percentage completed: 77.9667%
Time elapsed: 539.00017 seconds
Estimated time remaining: 2.53868 minutes
```

```
Program running...
Iteration: 2340
Percentage completed: 78.0000%
Time elapsed: 539.15604 seconds
Estimated time remaining: 2.53449 minutes
```

```
Program running...
Iteration: 2341
Percentage completed: 78.0333%
```

```
Time elapsed: 540.01218 seconds
Estimated time remaining: 2.53359 minutes
```

```
Program running...
Iteration: 2342
Percentage completed: 78.0667%
Time elapsed: 540.17180 seconds
Estimated time remaining: 2.52941 minutes
```

```
Program running...
Iteration: 2343
Percentage completed: 78.1000%
Time elapsed: 540.32397 seconds
Estimated time remaining: 2.52520 minutes
```

```
Program running...
Iteration: 2344
Percentage completed: 78.1333%
Time elapsed: 540.48069 seconds
Estimated time remaining: 2.52101 minutes
```

```
Program running...
Iteration: 2345
Percentage completed: 78.1667%
Time elapsed: 540.63503 seconds
Estimated time remaining: 2.51681 minutes
```

```
Program running...
Iteration: 2346
Percentage completed: 78.2000%
Time elapsed: 540.79140 seconds
Estimated time remaining: 2.51263 minutes
```

```
Program running...
Iteration: 2347
Percentage completed: 78.2333%
Time elapsed: 540.94683 seconds
Estimated time remaining: 2.50844 minutes
```

```
Program running...
```

```
Iteration: 2348
Percentage completed: 78.2667%
Time elapsed: 541.10574 seconds
Estimated time remaining: 2.50426 minutes
```

```
Program running...
Iteration: 2349
Percentage completed: 78.3000%
Time elapsed: 541.26053 seconds
Estimated time remaining: 2.50007 minutes
```

```
Program running...
Iteration: 2350
Percentage completed: 78.3333%
Time elapsed: 541.41819 seconds
Estimated time remaining: 2.49590 minutes
```

```
Program running...
Iteration: 2351
Percentage completed: 78.3667%
Time elapsed: 542.28440 seconds
Estimated time remaining: 2.49498 minutes
```

```
Program running...
Iteration: 2352
Percentage completed: 78.4000%
Time elapsed: 542.44196 seconds
Estimated time remaining: 2.49080 minutes
```

```
Program running...
Iteration: 2353
Percentage completed: 78.4333%
Time elapsed: 542.60066 seconds
Estimated time remaining: 2.48663 minutes
```

```
Program running...
Iteration: 2354
Percentage completed: 78.4667%
Time elapsed: 542.75479 seconds
Estimated time remaining: 2.48244 minutes
```

```
Program running...
Iteration: 2355
Percentage completed: 78.5000%
Time elapsed: 542.91361 seconds
Estimated time remaining: 2.47827 minutes
```

```
Program running...
Iteration: 2356
Percentage completed: 78.5333%
Time elapsed: 543.07112 seconds
Estimated time remaining: 2.47409 minutes
```

```
Program running...
Iteration: 2357
Percentage completed: 78.5667%
Time elapsed: 543.22661 seconds
Estimated time remaining: 2.46991 minutes
```

```
Program running...
Iteration: 2358
Percentage completed: 78.6000%
Time elapsed: 543.38169 seconds
Estimated time remaining: 2.46573 minutes
```

```
Program running...
Iteration: 2359
Percentage completed: 78.6333%
Time elapsed: 543.53739 seconds
Estimated time remaining: 2.46155 minutes
```

```
Program running...
Iteration: 2360
Percentage completed: 78.6667%
Time elapsed: 543.69375 seconds
Estimated time remaining: 2.45737 minutes
```

```
Program running...
Iteration: 2361
Percentage completed: 78.7000%
Time elapsed: 544.56471 seconds
Estimated time remaining: 2.45642 minutes
```

```
Program running...
Iteration: 2362
Percentage completed: 78.7333%
Time elapsed: 544.72089 seconds
Estimated time remaining: 2.45224 minutes
```

```
Program running...
Iteration: 2363
Percentage completed: 78.7667%
Time elapsed: 544.87429 seconds
Estimated time remaining: 2.44805 minutes
```

```
Program running...
Iteration: 2364
Percentage completed: 78.8000%
Time elapsed: 545.02832 seconds
Estimated time remaining: 2.44387 minutes
```

```
Program running...
Iteration: 2365
Percentage completed: 78.8333%
Time elapsed: 545.18841 seconds
Estimated time remaining: 2.43971 minutes
```

```
Program running...
Iteration: 2366
Percentage completed: 78.8667%
Time elapsed: 545.34431 seconds
Estimated time remaining: 2.43553 minutes
```

```
Program running...
Iteration: 2367
Percentage completed: 78.9000%
Time elapsed: 545.49740 seconds
Estimated time remaining: 2.43135 minutes
```

```
Program running...
Iteration: 2368
```

```
Percentage completed: 78.9333%
Time elapsed: 545.65201 seconds
Estimated time remaining: 2.42717 minutes
```

```
Program running...
Iteration: 2369
Percentage completed: 78.9667%
Time elapsed: 545.80702 seconds
Estimated time remaining: 2.42299 minutes
```

```
Program running...
Iteration: 2370
Percentage completed: 79.0000%
Time elapsed: 545.96177 seconds
Estimated time remaining: 2.41882 minutes
```

```
Program running...
Iteration: 2371
Percentage completed: 79.0333%
Time elapsed: 546.82489 seconds
Estimated time remaining: 2.41778 minutes
```

```
Program running...
Iteration: 2372
Percentage completed: 79.0667%
Time elapsed: 546.98107 seconds
Estimated time remaining: 2.41360 minutes
```

```
Program running...
Iteration: 2373
Percentage completed: 79.1000%
Time elapsed: 547.13700 seconds
Estimated time remaining: 2.40943 minutes
```

```
Program running...
Iteration: 2374
Percentage completed: 79.1333%
Time elapsed: 547.29464 seconds
Estimated time remaining: 2.40527 minutes
```

```
Program running...
Iteration: 2375
Percentage completed: 79.1667%
Time elapsed: 547.45176 seconds
Estimated time remaining: 2.40110 minutes
```

```
Program running...
Iteration: 2376
Percentage completed: 79.2000%
Time elapsed: 547.60876 seconds
Estimated time remaining: 2.39694 minutes
```

```
Program running...
Iteration: 2377
Percentage completed: 79.2333%
Time elapsed: 547.76525 seconds
Estimated time remaining: 2.39277 minutes
```

```
Program running...
Iteration: 2378
Percentage completed: 79.2667%
Time elapsed: 547.92159 seconds
Estimated time remaining: 2.38861 minutes
```

```
Program running...
Iteration: 2379
Percentage completed: 79.3000%
Time elapsed: 548.08226 seconds
Estimated time remaining: 2.38447 minutes
```

```
Program running...
Iteration: 2380
Percentage completed: 79.3333%
Time elapsed: 548.23941 seconds
Estimated time remaining: 2.38031 minutes
```

```
Program running...
Iteration: 2381
Percentage completed: 79.3667%
Time elapsed: 549.10482 seconds
Estimated time remaining: 2.37922 minutes
```

```
Program running...
  Iteration: 2382
  Percentage completed: 79.4000%
  Time elapsed: 549.26534 seconds
  Estimated time remaining: 2.37508 minutes
```

```
Program running...
  Iteration: 2383
  Percentage completed: 79.4333%
  Time elapsed: 549.42117 seconds
  Estimated time remaining: 2.37091 minutes
```

```
Program running...
  Iteration: 2384
  Percentage completed: 79.4667%
  Time elapsed: 549.57924 seconds
  Estimated time remaining: 2.36675 minutes
```

```
Program running...
  Iteration: 2385
  Percentage completed: 79.5000%
  Time elapsed: 549.74104 seconds
  Estimated time remaining: 2.36262 minutes
```

```
Program running...
  Iteration: 2386
  Percentage completed: 79.5333%
  Time elapsed: 549.89918 seconds
  Estimated time remaining: 2.35847 minutes
```

```
Program running...
  Iteration: 2387
  Percentage completed: 79.5667%
  Time elapsed: 550.05434 seconds
  Estimated time remaining: 2.35430 minutes
```

```
Program running...
  Iteration: 2388
  Percentage completed: 79.6000%
  Time elapsed: 550.21129 seconds
```

Estimated time remaining: 2.35015 minutes

Program running...  
Iteration: 2389  
Percentage completed: 79.6333%  
Time elapsed: 550.36823 seconds  
Estimated time remaining: 2.34599 minutes

Program running...  
Iteration: 2390  
Percentage completed: 79.6667%  
Time elapsed: 550.52383 seconds  
Estimated time remaining: 2.34184 minutes

Program running...  
Iteration: 2391  
Percentage completed: 79.7000%  
Time elapsed: 551.39320 seconds  
Estimated time remaining: 2.34071 minutes

Program running...  
Iteration: 2392  
Percentage completed: 79.7333%  
Time elapsed: 551.54910 seconds  
Estimated time remaining: 2.33655 minutes

Program running...  
Iteration: 2393  
Percentage completed: 79.7667%  
Time elapsed: 551.70599 seconds  
Estimated time remaining: 2.33240 minutes

Program running...  
Iteration: 2394  
Percentage completed: 79.8000%  
Time elapsed: 551.86040 seconds  
Estimated time remaining: 2.32823 minutes

Program running...

Iteration: 2395  
Percentage completed: 79.8333%  
Time elapsed: 552.01817 seconds  
Estimated time remaining: 2.32408 minutes

Program running...  
Iteration: 2396  
Percentage completed: 79.8667%  
Time elapsed: 552.17694 seconds  
Estimated time remaining: 2.31994 minutes

Program running...  
Iteration: 2397  
Percentage completed: 79.9000%  
Time elapsed: 552.33344 seconds  
Estimated time remaining: 2.31579 minutes

Program running...  
Iteration: 2398  
Percentage completed: 79.9333%  
Time elapsed: 552.48920 seconds  
Estimated time remaining: 2.31164 minutes

Program running...  
Iteration: 2399  
Percentage completed: 79.9667%  
Time elapsed: 552.64363 seconds  
Estimated time remaining: 2.30748 minutes

Program running...  
Iteration: 2400  
Percentage completed: 80.0000%  
Time elapsed: 552.79881 seconds  
Estimated time remaining: 2.30333 minutes

Program running...  
Iteration: 2401  
Percentage completed: 80.0333%  
Time elapsed: 553.65389 seconds  
Estimated time remaining: 2.30209 minutes

```
Program running...
  Iteration: 2402
  Percentage completed: 80.0667%
  Time elapsed: 553.81099 seconds
  Estimated time remaining: 2.29794 minutes
```

```
Program running...
  Iteration: 2403
  Percentage completed: 80.1000%
  Time elapsed: 553.96596 seconds
  Estimated time remaining: 2.29378 minutes
```

```
Program running...
  Iteration: 2404
  Percentage completed: 80.1333%
  Time elapsed: 554.12177 seconds
  Estimated time remaining: 2.28963 minutes
```

```
Program running...
  Iteration: 2405
  Percentage completed: 80.1667%
  Time elapsed: 554.27718 seconds
  Estimated time remaining: 2.28548 minutes
```

```
Program running...
  Iteration: 2406
  Percentage completed: 80.2000%
  Time elapsed: 554.43354 seconds
  Estimated time remaining: 2.28133 minutes
```

```
Program running...
  Iteration: 2407
  Percentage completed: 80.2333%
  Time elapsed: 554.58862 seconds
  Estimated time remaining: 2.27718 minutes
```

```
Program running...
  Iteration: 2408
  Percentage completed: 80.2667%
  Time elapsed: 554.74337 seconds
  Estimated time remaining: 2.27303 minutes
```

```
Program running...
Iteration: 2409
Percentage completed: 80.3000%
Time elapsed: 554.89977 seconds
Estimated time remaining: 2.26889 minutes
```

```
Program running...
Iteration: 2410
Percentage completed: 80.3333%
Time elapsed: 555.05423 seconds
Estimated time remaining: 2.26474 minutes
```

```
Program running...
Iteration: 2411
Percentage completed: 80.3667%
Time elapsed: 555.91711 seconds
Estimated time remaining: 2.26348 minutes
```

```
Program running...
Iteration: 2412
Percentage completed: 80.4000%
Time elapsed: 556.07522 seconds
Estimated time remaining: 2.25934 minutes
```

```
Program running...
Iteration: 2413
Percentage completed: 80.4333%
Time elapsed: 556.22913 seconds
Estimated time remaining: 2.25519 minutes
```

```
Program running...
Iteration: 2414
Percentage completed: 80.4667%
Time elapsed: 556.38493 seconds
Estimated time remaining: 2.25105 minutes
```

```
Program running...
Iteration: 2415
Percentage completed: 80.5000%
```

```
Time elapsed: 556.53960 seconds
Estimated time remaining: 2.24690 minutes
```

```
Program running...
Iteration: 2416
Percentage completed: 80.5333%
Time elapsed: 556.69619 seconds
Estimated time remaining: 2.24276 minutes
```

```
Program running...
Iteration: 2417
Percentage completed: 80.5667%
Time elapsed: 556.85316 seconds
Estimated time remaining: 2.23862 minutes
```

```
Program running...
Iteration: 2418
Percentage completed: 80.6000%
Time elapsed: 557.01217 seconds
Estimated time remaining: 2.23450 minutes
```

```
Program running...
Iteration: 2419

Percentage completed: 80.6333%
Time elapsed: 557.16823 seconds
Estimated time remaining: 2.23036 minutes
```

```
Program running...
Iteration: 2420
Percentage completed: 80.6667%
Time elapsed: 557.32394 seconds
Estimated time remaining: 2.22622 minutes
```

```
Program running...
Iteration: 2421
Percentage completed: 80.7000%
Time elapsed: 558.19030 seconds
Estimated time remaining: 2.22492 minutes
```

```
Program running...
Iteration: 2422
Percentage completed: 80.7333%
Time elapsed: 558.34726 seconds
Estimated time remaining: 2.22079 minutes
```

```
Program running...
Iteration: 2423
Percentage completed: 80.7667%
Time elapsed: 558.50310 seconds
Estimated time remaining: 2.21665 minutes
```

```
Program running...
Iteration: 2424
Percentage completed: 80.8000%
Time elapsed: 558.65896 seconds
Estimated time remaining: 2.21251 minutes
```

```
Program running...
Iteration: 2425
Percentage completed: 80.8333%
Time elapsed: 558.81859 seconds
Estimated time remaining: 2.20839 minutes
```

```
Program running...
Iteration: 2426
Percentage completed: 80.8667%
Time elapsed: 558.97731 seconds
Estimated time remaining: 2.20426 minutes
```

```
Program running...
Iteration: 2427
Percentage completed: 80.9000%
Time elapsed: 559.13312 seconds
Estimated time remaining: 2.20013 minutes
```

```
Program running...
Iteration: 2428
Percentage completed: 80.9333%
Time elapsed: 559.29339 seconds
Estimated time remaining: 2.19602 minutes
```

```
Program running...
  Iteration: 2429
  Percentage completed: 80.9667%
  Time elapsed: 559.45007 seconds
  Estimated time remaining: 2.19189 minutes
```

```
Program running...
  Iteration: 2430
  Percentage completed: 81.0000%
  Time elapsed: 559.60558 seconds
  Estimated time remaining: 2.18776 minutes
```

```
Program running...
  Iteration: 2431
  Percentage completed: 81.0333%
  Time elapsed: 560.47432 seconds
  Estimated time remaining: 2.18641 minutes
```

```
Program running...
  Iteration: 2432
  Percentage completed: 81.0667%
  Time elapsed: 560.63021 seconds
  Estimated time remaining: 2.18228 minutes
```

```
Program running...
  Iteration: 2433
  Percentage completed: 81.1000%
  Time elapsed: 560.78617 seconds
  Estimated time remaining: 2.17814 minutes
```

```
Program running...
  Iteration: 2434
  Percentage completed: 81.1333%
  Time elapsed: 560.94231 seconds
  Estimated time remaining: 2.17401 minutes
```

```
Program running...
  Iteration: 2435
  Percentage completed: 81.1667%
  Time elapsed: 561.10120 seconds
```

Estimated time remaining: 2.16990 minutes

Program running...

Iteration: 2436  
Percentage completed: 81.2000%  
Time elapsed: 561.26057 seconds  
Estimated time remaining: 2.16578 minutes

Program running...

Iteration: 2437  
Percentage completed: 81.2333%  
Time elapsed: 561.41688 seconds  
Estimated time remaining: 2.16166 minutes

Program running...

Iteration: 2438  
Percentage completed: 81.2667%  
Time elapsed: 561.57380 seconds  
Estimated time remaining: 2.15754 minutes

Program running...

Iteration: 2439  
Percentage completed: 81.3000%  
Time elapsed: 561.73165 seconds  
Estimated time remaining: 2.15342 minutes

Program running...

Iteration: 2440  
Percentage completed: 81.3333%  
Time elapsed: 561.88771 seconds  
Estimated time remaining: 2.14930 minutes

Program running...

Iteration: 2441  
Percentage completed: 81.3667%  
Time elapsed: 562.75147 seconds  
Estimated time remaining: 2.14788 minutes

Program running...

Iteration: 2442

```
Percentage completed: 81.4000%
Time elapsed: 562.90631 seconds
Estimated time remaining: 2.14375 minutes
```

```
Program running...
Iteration: 2443
Percentage completed: 81.4333%
Time elapsed: 563.06310 seconds
Estimated time remaining: 2.13962 minutes
```

```
Program running...
Iteration: 2444
Percentage completed: 81.4667%
Time elapsed: 563.21798 seconds
Estimated time remaining: 2.13550 minutes
```

```
Program running...
Iteration: 2445
Percentage completed: 81.5000%
Time elapsed: 563.37638 seconds
Estimated time remaining: 2.13138 minutes
```

```
Program running...
Iteration: 2446
Percentage completed: 81.5333%
Time elapsed: 563.53384 seconds
Estimated time remaining: 2.12727 minutes
```

```
Program running...
Iteration: 2447
Percentage completed: 81.5667%
Time elapsed: 563.68872 seconds
Estimated time remaining: 2.12314 minutes
```

```
Program running...
Iteration: 2448
Percentage completed: 81.6000%
Time elapsed: 563.84384 seconds
Estimated time remaining: 2.11902 minutes
```

```
Program running...
Iteration: 2449
Percentage completed: 81.6333%
Time elapsed: 564.00282 seconds
Estimated time remaining: 2.11491 minutes
```

```
Program running...
Iteration: 2450
Percentage completed: 81.6667%
Time elapsed: 564.15752 seconds
Estimated time remaining: 2.11079 minutes
```

```
Program running...
Iteration: 2451
Percentage completed: 81.7000%
Time elapsed: 565.01330 seconds
Estimated time remaining: 2.10929 minutes
```

```
Program running...
Iteration: 2452
Percentage completed: 81.7333%
Time elapsed: 565.16729 seconds
Estimated time remaining: 2.10516 minutes
```

```
Program running...
Iteration: 2453
Percentage completed: 81.7667%
Time elapsed: 565.31919 seconds
Estimated time remaining: 2.10103 minutes
```

```
Program running...
Iteration: 2454
Percentage completed: 81.8000%
Time elapsed: 565.47311 seconds
Estimated time remaining: 2.09690 minutes
```

```
Program running...
Iteration: 2455
Percentage completed: 81.8333%
Time elapsed: 565.63049 seconds
Estimated time remaining: 2.09279 minutes
```

```
Program running...
  Iteration: 2456
  Percentage completed: 81.8667%
  Time elapsed: 565.78455 seconds
  Estimated time remaining: 2.08867 minutes
```

```
Program running...
  Iteration: 2457
  Percentage completed: 81.9000%
  Time elapsed: 565.93961 seconds
  Estimated time remaining: 2.08455 minutes
```

```
Program running...
  Iteration: 2458
  Percentage completed: 81.9333%
  Time elapsed: 566.09152 seconds
  Estimated time remaining: 2.08043 minutes
```

```
Program running...
  Iteration: 2459
  Percentage completed: 81.9667%
  Time elapsed: 566.24489 seconds
  Estimated time remaining: 2.07631 minutes
```

```
Program running...
  Iteration: 2460
  Percentage completed: 82.0000%
  Time elapsed: 566.39891 seconds
  Estimated time remaining: 2.07219 minutes
```

```
Program running...
  Iteration: 2461
  Percentage completed: 82.0333%
  Time elapsed: 567.25993 seconds
  Estimated time remaining: 2.07065 minutes
```

```
Program running...
  Iteration: 2462
  Percentage completed: 82.0667%
```

```
Time elapsed: 567.41585 seconds
Estimated time remaining: 2.06654 minutes
```

```
Program running...
Iteration: 2463
Percentage completed: 82.1000%
Time elapsed: 567.56941 seconds
Estimated time remaining: 2.06242 minutes
```

```
Program running...
Iteration: 2464
Percentage completed: 82.1333%
Time elapsed: 567.72318 seconds
Estimated time remaining: 2.05830 minutes
```

```
Program running...
Iteration: 2465
Percentage completed: 82.1667%
Time elapsed: 567.88112 seconds
Estimated time remaining: 2.05420 minutes
```

```
Program running...
Iteration: 2466
Percentage completed: 82.2000%
Time elapsed: 568.03956 seconds
Estimated time remaining: 2.05010 minutes
```

```
Program running...
Iteration: 2467
Percentage completed: 82.2333%
Time elapsed: 568.19483 seconds
Estimated time remaining: 2.04599 minutes
```

```
Program running...
Iteration: 2468
Percentage completed: 82.2667%
Time elapsed: 568.34934 seconds
Estimated time remaining: 2.04188 minutes
```

Program running...  
Iteration: 2469  
Percentage completed: 82.3000%  
Time elapsed: 568.50359 seconds  
Estimated time remaining: 2.03777 minutes

Program running...  
Iteration: 2470  
Percentage completed: 82.3333%  
Time elapsed: 568.65755 seconds  
Estimated time remaining: 2.03366 minutes

Program running...  
Iteration: 2471  
Percentage completed: 82.3667%  
Time elapsed: 569.52414 seconds  
Estimated time remaining: 2.03209 minutes

Program running...  
Iteration: 2472  
Percentage completed: 82.4000%  
Time elapsed: 569.68187 seconds  
Estimated time remaining: 2.02799 minutes

Program running...  
Iteration: 2473  
Percentage completed: 82.4333%  
Time elapsed: 569.84035 seconds  
Estimated time remaining: 2.02390 minutes

Program running...  
Iteration: 2474  
Percentage completed: 82.4667%  
Time elapsed: 569.99737 seconds  
Estimated time remaining: 2.01980 minutes

Program running...  
Iteration: 2475  
Percentage completed: 82.5000%  
Time elapsed: 570.15738 seconds  
Estimated time remaining: 2.01571 minutes

```
Program running...
Iteration: 2476
Percentage completed: 82.5333%
Time elapsed: 570.31855 seconds
Estimated time remaining: 2.01162 minutes
```

```
Program running...
Iteration: 2477
Percentage completed: 82.5667%
Time elapsed: 570.47509 seconds
Estimated time remaining: 2.00752 minutes
```

```
Program running...
Iteration: 2478
Percentage completed: 82.6000%
Time elapsed: 570.63283 seconds
Estimated time remaining: 2.00343 minutes
```

```
Program running...
Iteration: 2479
Percentage completed: 82.6333%
Time elapsed: 570.79191 seconds
Estimated time remaining: 1.99934 minutes
```

```
Program running...
Iteration: 2480
Percentage completed: 82.6667%
Time elapsed: 570.94868 seconds
Estimated time remaining: 1.99525 minutes
```

```
Program running...
Iteration: 2481
Percentage completed: 82.7000%
Time elapsed: 571.81278 seconds
Estimated time remaining: 1.99362 minutes
```

```
Program running...
Iteration: 2482
Percentage completed: 82.7333%
Time elapsed: 571.96972 seconds
Estimated time remaining: 1.98952 minutes
```

```
Program running...
Iteration: 2483
Percentage completed: 82.7667%
Time elapsed: 572.12468 seconds
Estimated time remaining: 1.98542 minutes
```

```
Program running...
Iteration: 2484
Percentage completed: 82.8000%
Time elapsed: 572.28282 seconds
Estimated time remaining: 1.98133 minutes
```

```
Program running...
Iteration: 2485
Percentage completed: 82.8333%
Time elapsed: 572.44210 seconds
Estimated time remaining: 1.97725 minutes
```

```
Program running...
Iteration: 2486
Percentage completed: 82.8667%
Time elapsed: 572.60195 seconds
Estimated time remaining: 1.97316 minutes
```

```
Program running...
Iteration: 2487
Percentage completed: 82.9000%
Time elapsed: 572.75829 seconds
Estimated time remaining: 1.96907 minutes
```

```
Program running...
Iteration: 2488
Percentage completed: 82.9333%
Time elapsed: 572.91532 seconds
Estimated time remaining: 1.96498 minutes
```

```
Program running...
Iteration: 2489
```

```
Percentage completed: 82.9667%
Time elapsed: 573.07346 seconds
Estimated time remaining: 1.96090 minutes
```

```
Program running...
Iteration: 2490
Percentage completed: 83.0000%
Time elapsed: 573.23516 seconds
Estimated time remaining: 1.95683 minutes
```

```
Program running...
Iteration: 2491
Percentage completed: 83.0333%
Time elapsed: 574.10368 seconds
Estimated time remaining: 1.95516 minutes
```

```
Program running...
Iteration: 2492
Percentage completed: 83.0667%
Time elapsed: 574.26203 seconds
Estimated time remaining: 1.95108 minutes
```

```
Program running...
Iteration: 2493
Percentage completed: 83.1000%
Time elapsed: 574.41931 seconds
Estimated time remaining: 1.94699 minutes
```

```
Program running...
Iteration: 2494
Percentage completed: 83.1333%
Time elapsed: 574.57655 seconds
Estimated time remaining: 1.94290 minutes
```

```
Program running...
Iteration: 2495
Percentage completed: 83.1667%
Time elapsed: 574.73610 seconds
Estimated time remaining: 1.93882 minutes
```

```
Program running...
Iteration: 2496
Percentage completed: 83.2000%
Time elapsed: 574.89521 seconds
Estimated time remaining: 1.93474 minutes
```

```
Program running...
Iteration: 2497
Percentage completed: 83.2333%
Time elapsed: 575.05237 seconds
Estimated time remaining: 1.93066 minutes
```

```
Program running...
Iteration: 2498
Percentage completed: 83.2667%
Time elapsed: 575.21097 seconds
Estimated time remaining: 1.92658 minutes
```

```
Program running...
Iteration: 2499
Percentage completed: 83.3000%
Time elapsed: 575.36658 seconds
Estimated time remaining: 1.92249 minutes
```

```
Program running...
Iteration: 2500
Percentage completed: 83.3333%
Time elapsed: 575.52280 seconds
Estimated time remaining: 1.91841 minutes
```

```
Program running...
Iteration: 2501
Percentage completed: 83.3667%
Time elapsed: 576.39961 seconds
Estimated time remaining: 1.91672 minutes
```

```
Program running...
Iteration: 2502
Percentage completed: 83.4000%
Time elapsed: 576.55297 seconds
Estimated time remaining: 1.91262 minutes
```

```
Program running...
Iteration: 2503
Percentage completed: 83.4333%
Time elapsed: 576.71218 seconds
Estimated time remaining: 1.90855 minutes
```

```
Program running...
Iteration: 2504
Percentage completed: 83.4667%
Time elapsed: 576.86980 seconds
Estimated time remaining: 1.90447 minutes
```

```
Program running...
Iteration: 2505
Percentage completed: 83.5000%
Time elapsed: 577.02779 seconds
Estimated time remaining: 1.90039 minutes
```

```
Program running...
Iteration: 2506
Percentage completed: 83.5333%
Time elapsed: 577.19249 seconds
Estimated time remaining: 1.89633 minutes
```

```
Program running...
Iteration: 2507
Percentage completed: 83.5667%
Time elapsed: 577.34931 seconds
Estimated time remaining: 1.89226 minutes
```

```
Program running...
Iteration: 2508
Percentage completed: 83.6000%
Time elapsed: 577.50461 seconds
Estimated time remaining: 1.88817 minutes
```

```
Program running...
Iteration: 2509
Percentage completed: 83.6333%
```

Time elapsed: 577.80200 seconds  
Estimated time remaining: 1.88410 minutes

Program running...  
Iteration: 2510  
Percentage completed: 83.6667%  
Time elapsed: 577.81878 seconds  
Estimated time remaining: 1.88002 minutes

Program running...  
Iteration: 2511  
Percentage completed: 83.7000%  
Time elapsed: 578.68328 seconds  
Estimated time remaining: 1.87824 minutes

Program running...  
Iteration: 2512  
Percentage completed: 83.7333%  
Time elapsed: 578.84195 seconds  
Estimated time remaining: 1.87417 minutes

Program running...  
Iteration: 2513  
  
Percentage completed: 83.7667%  
Time elapsed: 578.99532 seconds  
Estimated time remaining: 1.87008 minutes

Program running...  
Iteration: 2514  
Percentage completed: 83.8000%  
Time elapsed: 579.15153 seconds  
Estimated time remaining: 1.86600 minutes

Program running...  
Iteration: 2515  
Percentage completed: 83.8333%  
Time elapsed: 579.31343 seconds  
Estimated time remaining: 1.86194 minutes

Program running...  
Iteration: 2516  
Percentage completed: 83.8667%  
Time elapsed: 579.47007 seconds  
Estimated time remaining: 1.85787 minutes

Program running...  
Iteration: 2517  
Percentage completed: 83.9000%  
Time elapsed: 579.62619 seconds  
Estimated time remaining: 1.85379 minutes

Program running...  
Iteration: 2518  
Percentage completed: 83.9333%  
Time elapsed: 579.78349 seconds  
Estimated time remaining: 1.84972 minutes

Program running...  
Iteration: 2519  
Percentage completed: 83.9667%  
Time elapsed: 579.94048 seconds  
Estimated time remaining: 1.84565 minutes

Program running...  
Iteration: 2520  
Percentage completed: 84.0000%  
Time elapsed: 580.09722 seconds  
Estimated time remaining: 1.84158 minutes

Program running...  
Iteration: 2521  
Percentage completed: 84.0333%  
Time elapsed: 580.96118 seconds  
Estimated time remaining: 1.83975 minutes

Program running...  
Iteration: 2522  
Percentage completed: 84.0667%  
Time elapsed: 581.11937 seconds  
Estimated time remaining: 1.83568 minutes

```
Program running...
Iteration: 2523
Percentage completed: 84.1000%
Time elapsed: 581.27601 seconds
Estimated time remaining: 1.83161 minutes
```

```
Program running...
Iteration: 2524
Percentage completed: 84.1333%
Time elapsed: 581.42914 seconds
Estimated time remaining: 1.82752 minutes
```

```
Program running...
Iteration: 2525
Percentage completed: 84.1667%
Time elapsed: 581.59012 seconds
Estimated time remaining: 1.82347 minutes
```

```
Program running...
Iteration: 2526
Percentage completed: 84.2000%
Time elapsed: 581.74468 seconds
Estimated time remaining: 1.81939 minutes
```

```
Program running...
Iteration: 2527
Percentage completed: 84.2333%
Time elapsed: 581.89789 seconds
Estimated time remaining: 1.81531 minutes
```

```
Program running...
Iteration: 2528
Percentage completed: 84.2667%
Time elapsed: 582.05356 seconds
Estimated time remaining: 1.81124 minutes
```

```
Program running...
Iteration: 2529
Percentage completed: 84.3000%
Time elapsed: 582.20768 seconds
Estimated time remaining: 1.80717 minutes
```

```
Program running...
Iteration: 2530
Percentage completed: 84.3333%
Time elapsed: 582.36241 seconds
Estimated time remaining: 1.80310 minutes
```

```
Program running...
Iteration: 2531
Percentage completed: 84.3667%
Time elapsed: 583.22000 seconds
Estimated time remaining: 1.80120 minutes
```

```
Program running...
Iteration: 2532
Percentage completed: 84.4000%
Time elapsed: 583.37536 seconds
Estimated time remaining: 1.79713 minutes
```

```
Program running...
Iteration: 2533
Percentage completed: 84.4333%
Time elapsed: 583.53135 seconds
Estimated time remaining: 1.79306 minutes
```

```
Program running...
Iteration: 2534
Percentage completed: 84.4667%
Time elapsed: 583.68624 seconds
Estimated time remaining: 1.78899 minutes
```

```
Program running...
Iteration: 2535
Percentage completed: 84.5000%
Time elapsed: 583.84219 seconds
Estimated time remaining: 1.78492 minutes
```

```
Program running...
Iteration: 2536
Percentage completed: 84.5333%
```

Time elapsed: 583.99932 seconds  
Estimated time remaining: 1.78086 minutes

Program running...  
Iteration: 2537  
Percentage completed: 84.5667%  
Time elapsed: 584.15353 seconds  
Estimated time remaining: 1.77679 minutes

Program running...  
Iteration: 2538  
Percentage completed: 84.6000%  
Time elapsed: 584.30920 seconds  
Estimated time remaining: 1.77273 minutes

Program running...  
Iteration: 2539  
Percentage completed: 84.6333%  
Time elapsed: 584.47193 seconds  
Estimated time remaining: 1.76868 minutes

Program running...  
Iteration: 2540  
Percentage completed: 84.6667%  
Time elapsed: 584.62782 seconds  
Estimated time remaining: 1.76462 minutes

Program running...  
Iteration: 2541  
Percentage completed: 84.7000%  
Time elapsed: 585.49263 seconds  
Estimated time remaining: 1.76270 minutes

Program running...  
Iteration: 2542  
Percentage completed: 84.7333%  
Time elapsed: 585.64810 seconds  
Estimated time remaining: 1.75863 minutes

```
Program running...
Iteration: 2543
Percentage completed: 84.7667%
Time elapsed: 585.80450 seconds
Estimated time remaining: 1.75457 minutes
```

```
Program running...
Iteration: 2544
Percentage completed: 84.8000%
Time elapsed: 585.96029 seconds
Estimated time remaining: 1.75051 minutes
```

```
Program running...
Iteration: 2545
Percentage completed: 84.8333%
Time elapsed: 586.12024 seconds
Estimated time remaining: 1.74646 minutes
```

```
Program running...
Iteration: 2546
Percentage completed: 84.8667%
Time elapsed: 586.27894 seconds
Estimated time remaining: 1.74241 minutes
```

```
Program running...
Iteration: 2547
Percentage completed: 84.9000%
Time elapsed: 586.43845 seconds
Estimated time remaining: 1.73836 minutes
```

```
Program running...
Iteration: 2548
Percentage completed: 84.9333%
Time elapsed: 586.59321 seconds
Estimated time remaining: 1.73430 minutes
```

```
Program running...
Iteration: 2549
Percentage completed: 84.9667%
Time elapsed: 586.75081 seconds
Estimated time remaining: 1.73025 minutes
```

```
Program running...
Iteration: 2550
Percentage completed: 85.0000%
Time elapsed: 586.90919 seconds
Estimated time remaining: 1.72620 minutes
```

```
Program running...
Iteration: 2551
Percentage completed: 85.0333%
Time elapsed: 587.77423 seconds
Estimated time remaining: 1.72423 minutes
```

```
Program running...
Iteration: 2552
Percentage completed: 85.0667%
Time elapsed: 587.93280 seconds
Estimated time remaining: 1.72018 minutes
```

```
Program running...
Iteration: 2553
Percentage completed: 85.1000%
Time elapsed: 588.10087 seconds
Estimated time remaining: 1.71616 minutes
```

```
Program running...
Iteration: 2554
Percentage completed: 85.1333%
Time elapsed: 588.25713 seconds
Estimated time remaining: 1.71210 minutes
```

```
Program running...
Iteration: 2555
Percentage completed: 85.1667%
Time elapsed: 588.41704 seconds
Estimated time remaining: 1.70806 minutes
```

```
Program running...
Iteration: 2556
Percentage completed: 85.2000%
Time elapsed: 588.57318 seconds
```

Estimated time remaining: 1.70401 minutes

Program running...  
Iteration: 2557  
Percentage completed: 85.2333%  
Time elapsed: 588.73142 seconds  
Estimated time remaining: 1.69996 minutes

Program running...  
Iteration: 2558  
Percentage completed: 85.2667%  
Time elapsed: 588.88814 seconds  
Estimated time remaining: 1.69591 minutes

Program running...  
Iteration: 2559  
Percentage completed: 85.3000%  
Time elapsed: 589.04358 seconds  
Estimated time remaining: 1.69186 minutes

Program running...  
Iteration: 2560  
  
Percentage completed: 85.3333%  
Time elapsed: 589.20118 seconds  
Estimated time remaining: 1.68781 minutes

Program running...  
Iteration: 2561  
Percentage completed: 85.3667%  
Time elapsed: 590.06913 seconds  
Estimated time remaining: 1.68580 minutes

Program running...  
Iteration: 2562  
Percentage completed: 85.4000%  
Time elapsed: 590.22371 seconds  
Estimated time remaining: 1.68174 minutes

Program running...

```
Iteration: 2563
Percentage completed: 85.4333%
Time elapsed: 590.37806 seconds
Estimated time remaining: 1.67769 minutes
```

```
Program running...
Iteration: 2564
Percentage completed: 85.4667%
Time elapsed: 590.53399 seconds
Estimated time remaining: 1.67364 minutes
```

```
Program running...
Iteration: 2565
Percentage completed: 85.5000%
Time elapsed: 590.69045 seconds
Estimated time remaining: 1.66959 minutes
```

```
Program running...
Iteration: 2566
Percentage completed: 85.5333%
Time elapsed: 590.85086 seconds
Estimated time remaining: 1.66556 minutes
```

```
Program running...
Iteration: 2567
Percentage completed: 85.5667%
Time elapsed: 591.00589 seconds
Estimated time remaining: 1.66151 minutes
```

```
Program running...
Iteration: 2568
Percentage completed: 85.6000%
Time elapsed: 591.16226 seconds
Estimated time remaining: 1.65746 minutes
```

```
Program running...
Iteration: 2569
Percentage completed: 85.6333%
Time elapsed: 591.31987 seconds
Estimated time remaining: 1.65342 minutes
```

```
Program running...
Iteration: 2570
Percentage completed: 85.6667%
Time elapsed: 591.47361 seconds
Estimated time remaining: 1.64937 minutes
```

```
Program running...
Iteration: 2571
Percentage completed: 85.7000%
Time elapsed: 592.35296 seconds
Estimated time remaining: 1.64734 minutes
```

```
Program running...
Iteration: 2572
Percentage completed: 85.7333%
Time elapsed: 592.50893 seconds
Estimated time remaining: 1.64330 minutes
```

```
Program running...
Iteration: 2573
Percentage completed: 85.7667%
Time elapsed: 592.66437 seconds
Estimated time remaining: 1.63925 minutes
```

```
Program running...
Iteration: 2574
Percentage completed: 85.8000%
Time elapsed: 592.82165 seconds
Estimated time remaining: 1.63521 minutes
```

```
Program running...
Iteration: 2575
Percentage completed: 85.8333%
Time elapsed: 592.97929 seconds
Estimated time remaining: 1.63117 minutes
```

```
Program running...
Iteration: 2576
Percentage completed: 85.8667%
Time elapsed: 593.13593 seconds
Estimated time remaining: 1.62713 minutes
```

```
Program running...
Iteration: 2577
Percentage completed: 85.9000%
Time elapsed: 593.28990 seconds
Estimated time remaining: 1.62309 minutes
```

```
Program running...
Iteration: 2578
Percentage completed: 85.9333%
Time elapsed: 593.44696 seconds
Estimated time remaining: 1.61905 minutes
```

```
Program running...
Iteration: 2579
Percentage completed: 85.9667%
Time elapsed: 593.60121 seconds
Estimated time remaining: 1.61501 minutes
```

```
Program running...
Iteration: 2580
Percentage completed: 86.0000%
Time elapsed: 593.75659 seconds
Estimated time remaining: 1.61097 minutes
```

```
Program running...
Iteration: 2581
Percentage completed: 86.0333%
Time elapsed: 594.62034 seconds
Estimated time remaining: 1.60884 minutes
```

```
Program running...
Iteration: 2582
Percentage completed: 86.0667%
Time elapsed: 594.77373 seconds
Estimated time remaining: 1.60480 minutes
```

```
Program running...
Iteration: 2583
Percentage completed: 86.1000%
```

```
Time elapsed: 594.92700 seconds
Estimated time remaining: 1.60075 minutes
```

```
Program running...
Iteration: 2584
Percentage completed: 86.1333%
Time elapsed: 595.08160 seconds
Estimated time remaining: 1.59671 minutes
```

```
Program running...
Iteration: 2585
Percentage completed: 86.1667%
Time elapsed: 595.23656 seconds
Estimated time remaining: 1.59267 minutes
```

```
Program running...
Iteration: 2586
Percentage completed: 86.2000%
Time elapsed: 595.39147 seconds
Estimated time remaining: 1.58863 minutes
```

```
Program running...
Iteration: 2587
Percentage completed: 86.2333%
Time elapsed: 595.54690 seconds
Estimated time remaining: 1.58459 minutes
```

```
Program running...
Iteration: 2588
Percentage completed: 86.2667%
Time elapsed: 595.70263 seconds
Estimated time remaining: 1.58056 minutes
```

```
Program running...
Iteration: 2589
Percentage completed: 86.3000%
Time elapsed: 595.85811 seconds
Estimated time remaining: 1.57653 minutes
```

```
Program running...
Iteration: 2590
Percentage completed: 86.3333%
Time elapsed: 596.01494 seconds
Estimated time remaining: 1.57250 minutes
```

```
Program running...
Iteration: 2591
Percentage completed: 86.3667%
Time elapsed: 596.87513 seconds
Estimated time remaining: 1.57032 minutes
```

```
Program running...
Iteration: 2592
Percentage completed: 86.4000%
Time elapsed: 597.03191 seconds
Estimated time remaining: 1.56629 minutes
```

```
Program running...
Iteration: 2593
Percentage completed: 86.4333%
Time elapsed: 597.18928 seconds
Estimated time remaining: 1.56226 minutes
```

```
Program running...
Iteration: 2594
Percentage completed: 86.4667%
Time elapsed: 597.34680 seconds
Estimated time remaining: 1.55823 minutes
```

```
Program running...
Iteration: 2595
Percentage completed: 86.5000%
Time elapsed: 597.50694 seconds
Estimated time remaining: 1.55421 minutes
```

```
Program running...
Iteration: 2596
Percentage completed: 86.5333%
Time elapsed: 597.66806 seconds
Estimated time remaining: 1.55019 minutes
```

```
Program running...
Iteration: 2597
Percentage completed: 86.5667%
Time elapsed: 597.82332 seconds
Estimated time remaining: 1.54616 minutes
```

```
Program running...
Iteration: 2598
Percentage completed: 86.6000%
Time elapsed: 597.98118 seconds
Estimated time remaining: 1.54214 minutes
```

```
Program running...
Iteration: 2599
Percentage completed: 86.6333%
Time elapsed: 598.13696 seconds
Estimated time remaining: 1.53811 minutes
```

```
Program running...
Iteration: 2600
Percentage completed: 86.6667%
Time elapsed: 598.29381 seconds
Estimated time remaining: 1.53409 minutes
```

```
Program running...
Iteration: 2601
Percentage completed: 86.7000%
Time elapsed: 599.15855 seconds
Estimated time remaining: 1.53187 minutes
```

```
Program running...
Iteration: 2602
Percentage completed: 86.7333%
Time elapsed: 599.31425 seconds
Estimated time remaining: 1.52784 minutes
```

```
Program running...
Iteration: 2603
Percentage completed: 86.7667%
Time elapsed: 599.47004 seconds
```

Estimated time remaining: 1.51979 minutes

Program running...  
Iteration: 2604  
Percentage completed: 86.8000%  
Time elapsed: 599.62595 seconds  
Estimated time remaining: 1.51979 minutes

Program running...  
Iteration: 2605  
Percentage completed: 86.8333%  
Time elapsed: 599.78288 seconds  
Estimated time remaining: 1.51576 minutes

Program running...  
Iteration: 2606  
Percentage completed: 86.8667%  
Time elapsed: 599.94314 seconds  
Estimated time remaining: 1.51175 minutes

Program running...  
Iteration: 2607  
  
Percentage completed: 86.9000%  
Time elapsed: 600.09936 seconds  
Estimated time remaining: 1.50773 minutes

Program running...  
Iteration: 2608  
Percentage completed: 86.9333%  
Time elapsed: 600.25502 seconds  
Estimated time remaining: 1.50370 minutes

Program running...  
Iteration: 2609  
Percentage completed: 86.9667%  
Time elapsed: 600.41337 seconds  
Estimated time remaining: 1.49969 minutes

Program running...

Iteration: 2610  
Percentage completed: 87.0000%  
Time elapsed: 600.56790 seconds  
Estimated time remaining: 1.49567 minutes

Program running...  
Iteration: 2611  
Percentage completed: 87.0333%  
Time elapsed: 601.43377 seconds  
Estimated time remaining: 1.49341 minutes

Program running...  
Iteration: 2612  
Percentage completed: 87.0667%  
Time elapsed: 601.58996 seconds  
Estimated time remaining: 1.48939 minutes

Program running...  
Iteration: 2613  
Percentage completed: 87.1000%  
Time elapsed: 601.74520 seconds  
Estimated time remaining: 1.48536 minutes

Program running...  
Iteration: 2614  
Percentage completed: 87.1333%  
Time elapsed: 601.90361 seconds  
Estimated time remaining: 1.48135 minutes

Program running...  
Iteration: 2615  
Percentage completed: 87.1667%  
Time elapsed: 602.05970 seconds  
Estimated time remaining: 1.47733 minutes

Program running...  
Iteration: 2616  
Percentage completed: 87.2000%  
Time elapsed: 602.21377 seconds  
Estimated time remaining: 1.47330 minutes

```
Program running...
Iteration: 2617
Percentage completed: 87.2333%
Time elapsed: 602.37317 seconds
Estimated time remaining: 1.46930 minutes
```

```
Program running...
Iteration: 2618
Percentage completed: 87.2667%
Time elapsed: 602.52822 seconds
Estimated time remaining: 1.46528 minutes
```

```
Program running...
Iteration: 2619
Percentage completed: 87.3000%
Time elapsed: 602.68230 seconds
Estimated time remaining: 1.46126 minutes
```

```
Program running...
Iteration: 2620
Percentage completed: 87.3333%
Time elapsed: 602.83627 seconds
Estimated time remaining: 1.45724 minutes
```

```
Program running...
Iteration: 2621
Percentage completed: 87.3667%
Time elapsed: 603.71352 seconds
Estimated time remaining: 1.45496 minutes
```

```
Program running...
Iteration: 2622
Percentage completed: 87.4000%
Time elapsed: 603.86859 seconds
Estimated time remaining: 1.45094 minutes
```

```
Program running...
Iteration: 2623
Percentage completed: 87.4333%
Time elapsed: 604.02438 seconds
Estimated time remaining: 1.44692 minutes
```

```
Program running...
  Iteration: 2624
  Percentage completed: 87.4667%
  Time elapsed: 604.17919 seconds
  Estimated time remaining: 1.44291 minutes
```

```
Program running...
  Iteration: 2625
  Percentage completed: 87.5000%
  Time elapsed: 604.33892 seconds
  Estimated time remaining: 1.43890 minutes
```

```
Program running...
  Iteration: 2626
  Percentage completed: 87.5333%
  Time elapsed: 604.49736 seconds
  Estimated time remaining: 1.43489 minutes
```

```
Program running...
  Iteration: 2627
  Percentage completed: 87.5667%
  Time elapsed: 604.65332 seconds
  Estimated time remaining: 1.43088 minutes
```

```
Program running...
  Iteration: 2628
  Percentage completed: 87.6000%
  Time elapsed: 604.81256 seconds
  Estimated time remaining: 1.42688 minutes
```

```
Program running...
  Iteration: 2629
  Percentage completed: 87.6333%
  Time elapsed: 604.97016 seconds
  Estimated time remaining: 1.42287 minutes
```

```
Program running...
  Iteration: 2630
  Percentage completed: 87.6667%
  Time elapsed: 605.12640 seconds
```

Program running...  
Iteration: 2631  
Percentage completed: 87.7000%  
Time elapsed: 605.99638 seconds  
Estimated time remaining: 1.41652 minutes

Program running...  
Iteration: 2632  
Percentage completed: 87.7333%  
Time elapsed: 606.14915 seconds  
Estimated time remaining: 1.41250 minutes

Program running...  
Iteration: 2633  
Percentage completed: 87.7667%  
Time elapsed: 606.30613 seconds  
Estimated time remaining: 1.40850 minutes

Program running...  
Iteration: 2634  
Percentage completed: 87.8000%  
Time elapsed: 606.46253 seconds  
Estimated time remaining: 1.40449 minutes

Program running...  
Iteration: 2635  
Percentage completed: 87.8333%  
Time elapsed: 606.61900 seconds  
Estimated time remaining: 1.40048 minutes

Program running...  
Iteration: 2636  
Percentage completed: 87.8667%  
Time elapsed: 606.78084 seconds  
Estimated time remaining: 1.39648 minutes

Program running...

Iteration: 2637  
Percentage completed: 87.9000%  
Time elapsed: 606.93627 seconds  
Estimated time remaining: 1.39248 minutes

Program running...  
Iteration: 2638  
Percentage completed: 87.9333%  
Time elapsed: 607.09083 seconds  
Estimated time remaining: 1.38847 minutes

Program running...  
Iteration: 2639  
Percentage completed: 87.9667%  
Time elapsed: 607.24559 seconds  
Estimated time remaining: 1.38446 minutes

Program running...  
Iteration: 2640  
Percentage completed: 88.0000%  
Time elapsed: 607.39990 seconds  
Estimated time remaining: 1.38045 minutes

Program running...  
Iteration: 2641  
Percentage completed: 88.0333%  
Time elapsed: 608.27054 seconds  
Estimated time remaining: 1.37807 minutes

Program running...  
Iteration: 2642  
Percentage completed: 88.0667%  
Time elapsed: 608.42390 seconds  
Estimated time remaining: 1.37406 minutes

Program running...  
Iteration: 2643  
Percentage completed: 88.1000%  
Time elapsed: 608.57983 seconds  
Estimated time remaining: 1.37005 minutes

```
Program running...
Iteration: 2644
Percentage completed: 88.1333%
Time elapsed: 608.73670 seconds
Estimated time remaining: 1.36605 minutes
```

```
Program running...
Iteration: 2645
Percentage completed: 88.1667%
Time elapsed: 608.89419 seconds
Estimated time remaining: 1.36205 minutes
```

```
Program running...
Iteration: 2646
Percentage completed: 88.2000%
Time elapsed: 609.05279 seconds
Estimated time remaining: 1.35805 minutes
```

```
Program running...
Iteration: 2647
Percentage completed: 88.2333%
Time elapsed: 609.21001 seconds
Estimated time remaining: 1.35405 minutes
```

```
Program running...
Iteration: 2648
Percentage completed: 88.2667%
Time elapsed: 609.36836 seconds
Estimated time remaining: 1.35006 minutes
```

```
Program running...
Iteration: 2649
Percentage completed: 88.3000%
Time elapsed: 609.52474 seconds
Estimated time remaining: 1.34606 minutes
```

```
Program running...
Iteration: 2650
Percentage completed: 88.3333%
Time elapsed: 609.68257 seconds
Estimated time remaining: 1.34207 minutes
```

```
Program running...
Iteration: 2651
Percentage completed: 88.3667%
Time elapsed: 610.53769 seconds
Estimated time remaining: 1.33960 minutes
```

```
Program running...
Iteration: 2652
Percentage completed: 88.4000%
Time elapsed: 610.69310 seconds
Estimated time remaining: 1.33560 minutes
```

```
Program running...
Iteration: 2653
Percentage completed: 88.4333%
Time elapsed: 610.84705 seconds
Estimated time remaining: 1.33160 minutes
```

```
Program running...
Iteration: 2654
Percentage completed: 88.4667%
Time elapsed: 611.00188 seconds
Estimated time remaining: 1.32760 minutes
```

```
Program running...
Iteration: 2655
Percentage completed: 88.5000%
Time elapsed: 611.15736 seconds
Estimated time remaining: 1.32360 minutes
```

```
Program running...
Iteration: 2656
Percentage completed: 88.5333%
Time elapsed: 611.31289 seconds
Estimated time remaining: 1.31960 minutes
```

```
Program running...
Iteration: 2657
```

```
Percentage completed: 88.5667%
Time elapsed: 611.46959 seconds
Estimated time remaining: 1.31561 minutes
```

```
Program running...
Iteration: 2658
Percentage completed: 88.6000%
Time elapsed: 611.62350 seconds
Estimated time remaining: 1.31161 minutes
```

```
Program running...
Iteration: 2659
Percentage completed: 88.6333%
Time elapsed: 611.77776 seconds
Estimated time remaining: 1.30761 minutes
```

```
Program running...
Iteration: 2660
Percentage completed: 88.6667%
Time elapsed: 611.93286 seconds
Estimated time remaining: 1.30361 minutes
```

```
Program running...
Iteration: 2661
Percentage completed: 88.7000%
Time elapsed: 612.79658 seconds
Estimated time remaining: 1.30113 minutes
```

```
Program running...
Iteration: 2662
Percentage completed: 88.7333%
Time elapsed: 612.95222 seconds
Estimated time remaining: 1.29713 minutes
```

```
Program running...
Iteration: 2663
Percentage completed: 88.7667%
Time elapsed: 613.10934 seconds
Estimated time remaining: 1.29314 minutes
```

```
Program running...
Iteration: 2664
Percentage completed: 88.8000%
Time elapsed: 613.26572 seconds
Estimated time remaining: 1.28915 minutes
```

```
Program running...
Iteration: 2665
Percentage completed: 88.8333%
Time elapsed: 613.42466 seconds
Estimated time remaining: 1.28516 minutes
```

```
Program running...
Iteration: 2666
Percentage completed: 88.8667%
Time elapsed: 613.58413 seconds
Estimated time remaining: 1.28118 minutes
```

```
Program running...
Iteration: 2667
Percentage completed: 88.9000%
Time elapsed: 613.74084 seconds
Estimated time remaining: 1.27719 minutes
```

```
Program running...
Iteration: 2668
Percentage completed: 88.9333%
Time elapsed: 613.89788 seconds
Estimated time remaining: 1.27320 minutes
```

```
Program running...
Iteration: 2669
Percentage completed: 88.9667%
Time elapsed: 614.05530 seconds
Estimated time remaining: 1.26921 minutes
```

```
Program running...
Iteration: 2670
Percentage completed: 89.0000%
Time elapsed: 614.21009 seconds
Estimated time remaining: 1.26523 minutes
```

```
Program running...
Iteration: 2671
Percentage completed: 89.0333%
Time elapsed: 615.08488 seconds
Estimated time remaining: 1.26272 minutes
```

```
Program running...
Iteration: 2672
Percentage completed: 89.0667%
Time elapsed: 615.24472 seconds
Estimated time remaining: 1.25873 minutes
```

```
Program running...
Iteration: 2673
Percentage completed: 89.1000%
Time elapsed: 615.40166 seconds
Estimated time remaining: 1.25475 minutes
```

```
Program running...
Iteration: 2674
Percentage completed: 89.1333%
Time elapsed: 615.55619 seconds
Estimated time remaining: 1.25075 minutes
```

```
Program running...
Iteration: 2675
Percentage completed: 89.1667%
Time elapsed: 615.71266 seconds
Estimated time remaining: 1.24677 minutes
```

```
Program running...
Iteration: 2676
Percentage completed: 89.2000%
Time elapsed: 615.87191 seconds
Estimated time remaining: 1.24279 minutes
```

```
Program running...
Iteration: 2677
Percentage completed: 89.2333%
Time elapsed: 616.02856 seconds
```

Estimated time remaining: 1.23881 minutes

Program running...  
Iteration: 2678  
Percentage completed: 89.2667%  
Time elapsed: 616.18428 seconds  
Estimated time remaining: 1.23482 minutes

Program running...  
Iteration: 2679  
Percentage completed: 89.3000%  
Time elapsed: 616.34142 seconds  
Estimated time remaining: 1.23084 minutes

Program running...  
Iteration: 2680  
Percentage completed: 89.3333%  
Time elapsed: 616.49820 seconds  
Estimated time remaining: 1.22686 minutes

Program running...  
Iteration: 2681  
Percentage completed: 89.3667%  
Time elapsed: 617.36215 seconds  
Estimated time remaining: 1.22428 minutes

Program running...  
Iteration: 2682  
Percentage completed: 89.4000%  
Time elapsed: 617.51715 seconds  
Estimated time remaining: 1.22030 minutes

Program running...  
Iteration: 2683  
Percentage completed: 89.4333%  
Time elapsed: 617.67138 seconds  
Estimated time remaining: 1.21631 minutes

Program running...

Iteration: 2684  
Percentage completed: 89.4667%  
Time elapsed: 617.82734 seconds  
Estimated time remaining: 1.21233 minutes

Program running...  
Iteration: 2685  
Percentage completed: 89.5000%  
Time elapsed: 617.98575 seconds  
Estimated time remaining: 1.20835 minutes

Program running...  
Iteration: 2686  
Percentage completed: 89.5333%  
Time elapsed: 618.14284 seconds  
Estimated time remaining: 1.20437 minutes

Program running...  
Iteration: 2687  
Percentage completed: 89.5667%  
Time elapsed: 618.29960 seconds  
Estimated time remaining: 1.20039 minutes

Program running...  
Iteration: 2688  
Percentage completed: 89.6000%  
Time elapsed: 618.45732 seconds  
Estimated time remaining: 1.19642 minutes

Program running...  
Iteration: 2689  
Percentage completed: 89.6333%  
Time elapsed: 618.61441 seconds  
Estimated time remaining: 1.19244 minutes

Program running...  
Iteration: 2690  
Percentage completed: 89.6667%  
Time elapsed: 618.77128 seconds  
Estimated time remaining: 1.18847 minutes

```
Program running...
Iteration: 2691
Percentage completed: 89.7000%
Time elapsed: 619.64710 seconds
Estimated time remaining: 1.18587 minutes
```

```
Program running...
Iteration: 2692
Percentage completed: 89.7333%
Time elapsed: 619.80390 seconds
Estimated time remaining: 1.18189 minutes
```

```
Program running...
Iteration: 2693
Percentage completed: 89.7667%
Time elapsed: 619.96376 seconds
Estimated time remaining: 1.17792 minutes
```

```
Program running...
Iteration: 2694
Percentage completed: 89.8000%
Time elapsed: 620.11607 seconds
Estimated time remaining: 1.17394 minutes
```

```
Program running...
Iteration: 2695
Percentage completed: 89.8333%
Time elapsed: 620.27636 seconds
Estimated time remaining: 1.16997 minutes
```

```
Program running...
Iteration: 2696
Percentage completed: 89.8667%
Time elapsed: 620.43371 seconds
Estimated time remaining: 1.16600 minutes
```

```
Program running...
Iteration: 2697
Percentage completed: 89.9000%
Time elapsed: 620.59023 seconds
Estimated time remaining: 1.16202 minutes
```

```
Program running...
Iteration: 2698
Percentage completed: 89.9333%
Time elapsed: 620.74595 seconds
Estimated time remaining: 1.15805 minutes
```

```
Program running...
Iteration: 2699
Percentage completed: 89.9667%
Time elapsed: 620.90319 seconds
Estimated time remaining: 1.15408 minutes
```

```
Program running...
Iteration: 2700
Percentage completed: 90.0000%
Time elapsed: 621.05714 seconds
Estimated time remaining: 1.15010 minutes
```

```
Program running...
Iteration: 2701
Percentage completed: 90.0333%
Time elapsed: 621.92714 seconds
Estimated time remaining: 1.14745 minutes
```

```
Program running...
Iteration: 2702
Percentage completed: 90.0667%
Time elapsed: 622.08392 seconds
Estimated time remaining: 1.14348 minutes
```

```
Program running...
Iteration: 2703
Percentage completed: 90.1000%
Time elapsed: 622.23871 seconds
Estimated time remaining: 1.13950 minutes
```

```
Program running...
Iteration: 2704
```

```
Percentage completed: 90.1555%
Time elapsed: 622.39703 seconds
Estimated time remaining: 1.13554 minutes
```

```
Program running...
Iteration: 2705
Percentage completed: 90.1667%
Time elapsed: 622.55407 seconds
Estimated time remaining: 1.13157 minutes
```

```
Program running...
Iteration: 2706
Percentage completed: 90.2000%
Time elapsed: 622.71296 seconds
Estimated time remaining: 1.12760 minutes
```

```
Program running...
Iteration: 2707
Percentage completed: 90.2333%
Time elapsed: 622.87024 seconds
Estimated time remaining: 1.12363 minutes
```

```
Program running...
Iteration: 2708
Percentage completed: 90.2667%
Time elapsed: 623.03001 seconds
Estimated time remaining: 1.11967 minutes
```

```
Program running...
Iteration: 2709
Percentage completed: 90.3000%
Time elapsed: 623.18604 seconds
Estimated time remaining: 1.11571 minutes
```

```
Program running...
Iteration: 2710
Percentage completed: 90.3333%
Time elapsed: 623.34145 seconds
Estimated time remaining: 1.11174 minutes
```

Program running...  
Iteration: 2711  
Percentage completed: 90.3667%  
Time elapsed: 624.21447 seconds  
Estimated time remaining: 1.10905 minutes

Program running...  
Iteration: 2712  
Percentage completed: 90.4000%  
Time elapsed: 624.37039 seconds  
Estimated time remaining: 1.10508 minutes

Program running...  
Iteration: 2713  
Percentage completed: 90.4333%  
Time elapsed: 624.52807 seconds  
Estimated time remaining: 1.10111 minutes

Program running...  
Iteration: 2714  
Percentage completed: 90.4667%  
Time elapsed: 624.68425 seconds  
Estimated time remaining: 1.09715 minutes

Program running...  
Iteration: 2715  
Percentage completed: 90.5000%  
Time elapsed: 624.84640 seconds  
Estimated time remaining: 1.09319 minutes

Program running...  
Iteration: 2716  
Percentage completed: 90.5333%  
Time elapsed: 625.00348 seconds  
Estimated time remaining: 1.08923 minutes

Program running...  
Iteration: 2717  
Percentage completed: 90.5667%  
Time elapsed: 625.15953 seconds  
Estimated time remaining: 1.08527 minutes

```
Program running...
Iteration: 2718
Percentage completed: 90.6000%
Time elapsed: 625.31615 seconds
Estimated time remaining: 1.08130 minutes
```

```
Program running...
Iteration: 2719
Percentage completed: 90.6333%
Time elapsed: 625.47197 seconds
Estimated time remaining: 1.07734 minutes
```

```
Program running...
Iteration: 2720
Percentage completed: 90.6667%
Time elapsed: 625.63187 seconds
Estimated time remaining: 1.07339 minutes
```

```
Program running...
Iteration: 2721
Percentage completed: 90.7000%
Time elapsed: 626.49431 seconds
Estimated time remaining: 1.07063 minutes
```

```
Program running...
Iteration: 2722
Percentage completed: 90.7333%
Time elapsed: 626.64943 seconds
Estimated time remaining: 1.06667 minutes
```

```
Program running...
Iteration: 2723
Percentage completed: 90.7667%
Time elapsed: 626.80761 seconds
Estimated time remaining: 1.06271 minutes
```

```
Program running...
Iteration: 2724
Percentage completed: 90.8000%
Time elapsed: 626.96017 seconds
```

ESTIMATED TIME REMAINING: 1.05479 MINUTES

Program running...  
Iteration: 2725  
Percentage completed: 90.8333%  
Time elapsed: 627.11855 seconds  
Estimated time remaining: 1.05479 minutes

Program running...  
Iteration: 2726  
Percentage completed: 90.8667%  
Time elapsed: 627.27669 seconds  
Estimated time remaining: 1.05083 minutes

Program running...  
Iteration: 2727  
Percentage completed: 90.9000%  
Time elapsed: 627.43609 seconds  
Estimated time remaining: 1.04688 minutes

Program running...  
Iteration: 2728  
Percentage completed: 90.9333%  
Time elapsed: 627.59107 seconds  
Estimated time remaining: 1.04292 minutes

Program running...  
Iteration: 2729  
Percentage completed: 90.9667%  
Time elapsed: 627.74789 seconds  
Estimated time remaining: 1.03896 minutes

Program running...  
Iteration: 2730  
Percentage completed: 91.0000%  
Time elapsed: 627.90310 seconds  
Estimated time remaining: 1.03500 minutes

Program running...

-----  
Percentage completed: 91.0333%  
Time elapsed: 628.75904 seconds  
Estimated time remaining: 1.03220 minutes

Program running...  
Iteration: 2732  
Percentage completed: 91.0667%  
Time elapsed: 628.91387 seconds  
Estimated time remaining: 1.02824 minutes

Program running...  
Iteration: 2733  
Percentage completed: 91.1000%  
Time elapsed: 629.07026 seconds  
Estimated time remaining: 1.02428 minutes

Program running...  
Iteration: 2734  
Percentage completed: 91.1333%  
Time elapsed: 629.22500 seconds  
Estimated time remaining: 1.02032 minutes

Program running...  
Iteration: 2735  
Percentage completed: 91.1667%  
Time elapsed: 629.38149 seconds  
Estimated time remaining: 1.01637 minutes

Program running...  
Iteration: 2736  
Percentage completed: 91.2000%  
Time elapsed: 629.53959 seconds  
Estimated time remaining: 1.01242 minutes

Program running...  
Iteration: 2737  
Percentage completed: 91.2333%  
Time elapsed: 629.69415 seconds  
Estimated time remaining: 1.00846 minutes

```
Program running...
Iteration: 2738
Percentage completed: 91.2667%
Time elapsed: 629.84857 seconds
Estimated time remaining: 1.00451 minutes
```

```
Program running...
Iteration: 2739
Percentage completed: 91.3000%
Time elapsed: 630.00441 seconds
Estimated time remaining: 1.00055 minutes
```

```
Program running...
Iteration: 2740
Percentage completed: 91.3333%
Time elapsed: 630.16024 seconds
Estimated time remaining: 0.99660 minutes
```

```
Program running...
Iteration: 2741
Percentage completed: 91.3667%
Time elapsed: 631.02258 seconds
Estimated time remaining: 0.99377 minutes
```

```
Program running...
Iteration: 2742
Percentage completed: 91.4000%
Time elapsed: 631.17956 seconds
Estimated time remaining: 0.98981 minutes
```

```
Program running...
Iteration: 2743
Percentage completed: 91.4333%
Time elapsed: 631.33489 seconds
Estimated time remaining: 0.98586 minutes
```

```
Program running...
Iteration: 2744
Percentage completed: 91.4667%
Time elapsed: 631.49026 seconds
Estimated time remaining: 0.98191 minutes
```

```
Program running...
  Iteration: 2745
  Percentage completed: 91.5000%
  Time elapsed: 631.64986 seconds
  Estimated time remaining: 0.97796 minutes
```

```
Program running...
  Iteration: 2746
  Percentage completed: 91.5333%
  Time elapsed: 631.82918 seconds
  Estimated time remaining: 0.97405 minutes
```

```
Program running...
  Iteration: 2747
  Percentage completed: 91.5667%
  Time elapsed: 631.98438 seconds
  Estimated time remaining: 0.97010 minutes
```

```
Program running...
  Iteration: 2748
  Percentage completed: 91.6000%
  Time elapsed: 632.14042 seconds
  Estimated time remaining: 0.96615 minutes
```

```
Program running...
  Iteration: 2749
  Percentage completed: 91.6333%
  Time elapsed: 632.29626 seconds
  Estimated time remaining: 0.96221 minutes
```

```
Program running...
  Iteration: 2750
  Percentage completed: 91.6667%
  Time elapsed: 632.45187 seconds
  Estimated time remaining: 0.95826 minutes
```

```
Program running...
  Iteration: 2751
  Percentage completed: 91.7000%
```

```
Time elapsed: 633.32134 seconds
Estimated time remaining: 0.95539 minutes
```

```
Program running...
Iteration: 2752
Percentage completed: 91.7333%
Time elapsed: 633.47809 seconds
Estimated time remaining: 0.95144 minutes
```

```
Program running...
Iteration: 2753
Percentage completed: 91.7667%
Time elapsed: 633.63447 seconds
Estimated time remaining: 0.94750 minutes
```

```
Program running...
Iteration: 2754
Percentage completed: 91.8000%
Time elapsed: 633.78995 seconds
Estimated time remaining: 0.94355 minutes
```

```
Program running...
Iteration: 2755
Percentage completed: 91.8333%
Time elapsed: 633.94834 seconds
Estimated time remaining: 0.93961 minutes
```

```
Program running...
Iteration: 2756
Percentage completed: 91.8667%
Time elapsed: 634.10620 seconds
Estimated time remaining: 0.93567 minutes
```

```
Program running...
Iteration: 2757
Percentage completed: 91.9000%
Time elapsed: 634.26311 seconds
Estimated time remaining: 0.93172 minutes
```

```
Program running...
```

-  
Iteration: 2758  
Percentage completed: 91.9333%  
Time elapsed: 634.41886 seconds  
Estimated time remaining: 0.92778 minutes

Program running...  
Iteration: 2759  
Percentage completed: 91.9667%  
Time elapsed: 634.57547 seconds  
Estimated time remaining: 0.92384 minutes

Program running...  
Iteration: 2760  
Percentage completed: 92.0000%  
Time elapsed: 634.73222 seconds  
Estimated time remaining: 0.91990 minutes

Program running...  
Iteration: 2761  
Percentage completed: 92.0333%  
Time elapsed: 635.60368 seconds  
Estimated time remaining: 0.91699 minutes

Program running...  
Iteration: 2762  
Percentage completed: 92.0667%  
Time elapsed: 635.76401 seconds  
Estimated time remaining: 0.91306 minutes

Program running...  
Iteration: 2763  
Percentage completed: 92.1000%  
Time elapsed: 635.91996 seconds  
Estimated time remaining: 0.90911 minutes

Program running...  
Iteration: 2764  
Percentage completed: 92.1333%  
Time elapsed: 636.07736 seconds  
Estimated time remaining: 0.90517 minutes

```
Program running...
Iteration: 2765
Percentage completed: 92.1667%
Time elapsed: 636.23777 seconds
Estimated time remaining: 0.90124 minutes
```

```
Program running...
Iteration: 2766
Percentage completed: 92.2000%
Time elapsed: 636.39563 seconds
Estimated time remaining: 0.89730 minutes
```

```
Program running...
Iteration: 2767
Percentage completed: 92.2333%
Time elapsed: 636.55624 seconds
Estimated time remaining: 0.89337 minutes
```

```
Program running...
Iteration: 2768
Percentage completed: 92.2667%
Time elapsed: 636.71279 seconds
Estimated time remaining: 0.88943 minutes
```

```
Program running...
Iteration: 2769
Percentage completed: 92.3000%
Time elapsed: 636.86998 seconds
Estimated time remaining: 0.88550 minutes
```

```
Program running...
Iteration: 2770
Percentage completed: 92.3333%
Time elapsed: 637.02494 seconds
Estimated time remaining: 0.88156 minutes
```

```
Program running...
Iteration: 2771
Percentage completed: 92.3667%
Time elapsed: 637.88916 seconds
Estimated time remaining: 0.87860 minutes
```

```
Program running...
Iteration: 2772
Percentage completed: 92.4000%
Time elapsed: 638.04402 seconds
Estimated time remaining: 0.87466 minutes
```

```
Program running...
Iteration: 2773
Percentage completed: 92.4333%
Time elapsed: 638.19752 seconds
Estimated time remaining: 0.87072 minutes
```

```
Program running...
Iteration: 2774
Percentage completed: 92.4667%
Time elapsed: 638.35386 seconds
Estimated time remaining: 0.86679 minutes
```

```
Program running...

Iteration: 2775
Percentage completed: 92.5000%
Time elapsed: 638.51347 seconds
Estimated time remaining: 0.86285 minutes
```

```
Program running...
Iteration: 2776
Percentage completed: 92.5333%
Time elapsed: 638.67220 seconds
Estimated time remaining: 0.85892 minutes
```

```
Program running...
Iteration: 2777
Percentage completed: 92.5667%
Time elapsed: 638.82811 seconds
Estimated time remaining: 0.85499 minutes
```

```
Program running...
Iteration: 2778
```

Percentage completed: 92.6000%  
Time elapsed: 638.98503 seconds  
Estimated time remaining: 0.85106 minutes

Program running...  
Iteration: 2779  
Percentage completed: 92.6333%  
Time elapsed: 639.16508 seconds  
Estimated time remaining: 0.84716 minutes

Program running...  
Iteration: 2780  
Percentage completed: 92.6667%  
Time elapsed: 639.32024 seconds  
Estimated time remaining: 0.84323 minutes

Program running...  
Iteration: 2781  
Percentage completed: 92.7000%  
Time elapsed: 640.19061 seconds  
Estimated time remaining: 0.84023 minutes

Program running...  
Iteration: 2782  
Percentage completed: 92.7333%  
Time elapsed: 640.34656 seconds  
Estimated time remaining: 0.83630 minutes

Program running...  
Iteration: 2783  
Percentage completed: 92.7667%  
Time elapsed: 640.50149 seconds  
Estimated time remaining: 0.83237 minutes

Program running...  
Iteration: 2784  
Percentage completed: 92.8000%  
Time elapsed: 640.65582 seconds  
Estimated time remaining: 0.82843 minutes

Program running...  
Iteration: 2785  
Percentage completed: 92.8333%  
Time elapsed: 640.81286 seconds  
Estimated time remaining: 0.82450 minutes

Program running...  
Iteration: 2786  
Percentage completed: 92.8667%  
Time elapsed: 640.96894 seconds  
Estimated time remaining: 0.82057 minutes

Program running...  
Iteration: 2787  
Percentage completed: 92.9000%  
Time elapsed: 641.12453 seconds  
Estimated time remaining: 0.81664 minutes

Program running...  
Iteration: 2788  
Percentage completed: 92.9333%  
Time elapsed: 641.28039 seconds  
Estimated time remaining: 0.81272 minutes

Program running...  
Iteration: 2789  
Percentage completed: 92.9667%  
Time elapsed: 641.43481 seconds  
Estimated time remaining: 0.80879 minutes

Program running...  
Iteration: 2790  
Percentage completed: 93.0000%  
Time elapsed: 641.58885 seconds  
Estimated time remaining: 0.80486 minutes

Program running...  
Iteration: 2791  
Percentage completed: 93.0333%  
Time elapsed: 642.45364 seconds  
Estimated time remaining: 0.80182 minutes

```
Program running...
  Iteration: 2792
  Percentage completed: 93.0667%
  Time elapsed: 642.61472 seconds
  Estimated time remaining: 0.79790 minutes
```

```
Program running...
  Iteration: 2793
  Percentage completed: 93.1000%
  Time elapsed: 642.77166 seconds
  Estimated time remaining: 0.79397 minutes
```

```
Program running...
  Iteration: 2794
  Percentage completed: 93.1333%
  Time elapsed: 642.92818 seconds
  Estimated time remaining: 0.79004 minutes
```

```
Program running...
  Iteration: 2795
  Percentage completed: 93.1667%
  Time elapsed: 643.10599 seconds
  Estimated time remaining: 0.78614 minutes
```

```
Program running...
  Iteration: 2796
  Percentage completed: 93.2000%
  Time elapsed: 643.28309 seconds
  Estimated time remaining: 0.78225 minutes
```

```
Program running...
  Iteration: 2797
  Percentage completed: 93.2333%
  Time elapsed: 643.46069 seconds
  Estimated time remaining: 0.77835 minutes
```

```
Program running...
  Iteration: 2798
  Percentage completed: 93.2667%
```

```
Time elapsed: 643.64104 seconds
Estimated time remaining: 0.77445 minutes
```

```
Program running...
Iteration: 2799
Percentage completed: 93.3000%
Time elapsed: 643.81922 seconds
Estimated time remaining: 0.77056 minutes
```

```
Program running...
Iteration: 2800
Percentage completed: 93.3333%
Time elapsed: 644.00120 seconds
Estimated time remaining: 0.76667 minutes
```

```
Program running...
Iteration: 2801
Percentage completed: 93.3667%
Time elapsed: 644.89428 seconds
Estimated time remaining: 0.76362 minutes
```

```
Program running...
Iteration: 2802
Percentage completed: 93.4000%
Time elapsed: 645.04909 seconds
Estimated time remaining: 0.75969 minutes
```

```
Program running...
Iteration: 2803
Percentage completed: 93.4333%
Time elapsed: 645.20443 seconds
Estimated time remaining: 0.75577 minutes
```

```
Program running...
Iteration: 2804
Percentage completed: 93.4667%
Time elapsed: 645.35868 seconds
Estimated time remaining: 0.75184 minutes
```

```
Program running...
```

```
Iteration: 2805
Percentage completed: 93.5000%
Time elapsed: 645.51667 seconds
Estimated time remaining: 0.74792 minutes
```

```
Program running...
Iteration: 2806
Percentage completed: 93.5333%
Time elapsed: 645.67395 seconds
Estimated time remaining: 0.74400 minutes
```

```
Program running...
Iteration: 2807
Percentage completed: 93.5667%
Time elapsed: 645.82873 seconds
Estimated time remaining: 0.74008 minutes
```

```
Program running...
Iteration: 2808
Percentage completed: 93.6000%
Time elapsed: 645.98142 seconds
Estimated time remaining: 0.73616 minutes
```

```
Program running...
Iteration: 2809
Percentage completed: 93.6333%
Time elapsed: 646.13556 seconds
Estimated time remaining: 0.73224 minutes
```

```
Program running...
Iteration: 2810
Percentage completed: 93.6667%
Time elapsed: 646.28979 seconds
Estimated time remaining: 0.72832 minutes
```

```
Program running...
Iteration: 2811
Percentage completed: 93.7000%
Time elapsed: 647.14966 seconds
Estimated time remaining: 0.72519 minutes
```

```
Program running...
Iteration: 2812
Percentage completed: 93.7333%
Time elapsed: 647.30200 seconds
Estimated time remaining: 0.72127 minutes
```

```
Program running...
Iteration: 2813
Percentage completed: 93.7667%
Time elapsed: 647.45728 seconds
Estimated time remaining: 0.71735 minutes
```

```
Program running...
Iteration: 2814
Percentage completed: 93.8000%
Time elapsed: 647.61392 seconds
Estimated time remaining: 0.71343 minutes
```

```
Program running...
Iteration: 2815
Percentage completed: 93.8333%
Time elapsed: 647.77063 seconds
Estimated time remaining: 0.70952 minutes
```

```
Program running...
Iteration: 2816
Percentage completed: 93.8667%
Time elapsed: 647.92705 seconds
Estimated time remaining: 0.70560 minutes
```

```
Program running...
Iteration: 2817
Percentage completed: 93.9000%
Time elapsed: 648.08160 seconds
Estimated time remaining: 0.70168 minutes
```

```
Program running...
Iteration: 2818
Percentage completed: 93.9333%
Time elapsed: 648.23924 seconds
Estimated time remaining: 0.69777 minutes
```

```
Program running...
Iteration: 2819
Percentage completed: 93.9667%
Time elapsed: 648.39469 seconds
Estimated time remaining: 0.69386 minutes
```

```
Program running...
Iteration: 2820
Percentage completed: 94.0000%
Time elapsed: 648.55073 seconds
Estimated time remaining: 0.68995 minutes
```

```
Program running...
Iteration: 2821
Percentage completed: 94.0333%
Time elapsed: 649.42617 seconds
Estimated time remaining: 0.68680 minutes
```

```
Program running...
Iteration: 2822
Percentage completed: 94.0667%
Time elapsed: 649.57984 seconds
Estimated time remaining: 0.68288 minutes
```

```
Program running...
Iteration: 2823
Percentage completed: 94.1000%
Time elapsed: 649.73466 seconds
Estimated time remaining: 0.67896 minutes
```

```
Program running...
Iteration: 2824
Percentage completed: 94.1333%
Time elapsed: 649.89144 seconds
Estimated time remaining: 0.67505 minutes
```

```
Program running...
Iteration: 2825
```

Percentage completed: 94.1000%  
Time elapsed: 650.05213 seconds  
Estimated time remaining: 0.67114 minutes

Program running...  
Iteration: 2826  
Percentage completed: 94.2000%  
Time elapsed: 650.20626 seconds  
Estimated time remaining: 0.66723 minutes

Program running...  
Iteration: 2827  
Percentage completed: 94.2333%  
Time elapsed: 650.36028 seconds  
Estimated time remaining: 0.66332 minutes

Program running...  
Iteration: 2828  
Percentage completed: 94.2667%  
Time elapsed: 650.51703 seconds  
Estimated time remaining: 0.65941 minutes

Program running...  
Iteration: 2829  
Percentage completed: 94.3000%  
Time elapsed: 650.67140 seconds  
Estimated time remaining: 0.65550 minutes

Program running...  
Iteration: 2830  
Percentage completed: 94.3333%  
Time elapsed: 650.82746 seconds  
Estimated time remaining: 0.65159 minutes

Program running...  
Iteration: 2831  
Percentage completed: 94.3667%  
Time elapsed: 651.69231 seconds  
Estimated time remaining: 0.64839 minutes

Program running...

```
Iteration: 2832
Percentage completed: 94.4000%
Time elapsed: 651.85011 seconds
Estimated time remaining: 0.64448 minutes
```

```
Program running...
Iteration: 2833
Percentage completed: 94.4333%
Time elapsed: 652.00568 seconds
Estimated time remaining: 0.64057 minutes
```

```
Program running...
Iteration: 2834
Percentage completed: 94.4667%
Time elapsed: 652.17253 seconds
Estimated time remaining: 0.63668 minutes
```

```
Program running...
Iteration: 2835
Percentage completed: 94.5000%
Time elapsed: 652.33224 seconds
Estimated time remaining: 0.63277 minutes
```

```
Program running...
Iteration: 2836
Percentage completed: 94.5333%
Time elapsed: 652.48888 seconds
Estimated time remaining: 0.62887 minutes
```

```
Program running...
Iteration: 2837
Percentage completed: 94.5667%
Time elapsed: 652.64432 seconds
Estimated time remaining: 0.62496 minutes
```

```
Program running...
Iteration: 2838
Percentage completed: 94.6000%
Time elapsed: 652.80339 seconds
Estimated time remaining: 0.62106 minutes
```

```
Program running...
Iteration: 2839
Percentage completed: 94.6333%
Time elapsed: 652.95933 seconds
Estimated time remaining: 0.61716 minutes
```

```
Program running...
Iteration: 2840
Percentage completed: 94.6667%
Time elapsed: 653.11290 seconds
Estimated time remaining: 0.61325 minutes
```

```
Program running...
Iteration: 2841
Percentage completed: 94.7000%
Time elapsed: 653.98505 seconds
Estimated time remaining: 0.61002 minutes
```

```
Program running...
Iteration: 2842
Percentage completed: 94.7333%
Time elapsed: 654.13935 seconds
Estimated time remaining: 0.60611 minutes
```

```
Program running...
Iteration: 2843
Percentage completed: 94.7667%
Time elapsed: 654.29754 seconds
Estimated time remaining: 0.60221 minutes
```

```
Program running...
Iteration: 2844
Percentage completed: 94.8000%
Time elapsed: 654.45468 seconds
Estimated time remaining: 0.59830 minutes
```

```
Program running...
Iteration: 2845
Percentage completed: 94.8333%
Time elapsed: 654.61306 seconds
```

Estimated time remaining: 0.59440 minutes

Program running...  
Iteration: 2846  
Percentage completed: 94.8667%  
Time elapsed: 654.77197 seconds  
Estimated time remaining: 0.59051 minutes

Program running...  
Iteration: 2847  
Percentage completed: 94.9000%  
Time elapsed: 654.92965 seconds  
Estimated time remaining: 0.58661 minutes

Program running...  
Iteration: 2848  
Percentage completed: 94.9333%  
Time elapsed: 655.08763 seconds  
Estimated time remaining: 0.58271 minutes

Program running...  
Iteration: 2849  
Percentage completed: 94.9667%  
Time elapsed: 655.24626 seconds  
Estimated time remaining: 0.57881 minutes

Program running...  
Iteration: 2850  
Percentage completed: 95.0000%  
Time elapsed: 655.40278 seconds  
Estimated time remaining: 0.57491 minutes

Program running...  
Iteration: 2851  
Percentage completed: 95.0333%  
Time elapsed: 656.26551 seconds  
Estimated time remaining: 0.57163 minutes

Program running...  
Iteration: 2852

```
Percentage completed: 95.0667%
Time elapsed: 656.42387 seconds
Estimated time remaining: 0.56773 minutes
```

```
Program running...
Iteration: 2853
Percentage completed: 95.1000%
Time elapsed: 656.57708 seconds
Estimated time remaining: 0.56383 minutes
```

```
Program running...
Iteration: 2854
Percentage completed: 95.1333%
Time elapsed: 656.73310 seconds
Estimated time remaining: 0.55993 minutes
```

```
Program running...
Iteration: 2855
Percentage completed: 95.1667%
Time elapsed: 656.89105 seconds
Estimated time remaining: 0.55604 minutes
```

```
Program running...
Iteration: 2856
Percentage completed: 95.2000%
Time elapsed: 657.05281 seconds
Estimated time remaining: 0.55214 minutes
```

```
Program running...
Iteration: 2857
Percentage completed: 95.2333%
Time elapsed: 657.21032 seconds
Estimated time remaining: 0.54825 minutes
```

```
Program running...
Iteration: 2858
Percentage completed: 95.2667%
Time elapsed: 657.36555 seconds
Estimated time remaining: 0.54435 minutes
```

```
Program running...
Iteration: 2859
Percentage completed: 95.3000%
Time elapsed: 657.52208 seconds
Estimated time remaining: 0.54046 minutes
```

```
Program running...
Iteration: 2860
Percentage completed: 95.3333%
Time elapsed: 657.67952 seconds
Estimated time remaining: 0.53657 minutes
```

```
Program running...
Iteration: 2861
Percentage completed: 95.3667%
Time elapsed: 658.55133 seconds
Estimated time remaining: 0.53325 minutes
```

```
Program running...
Iteration: 2862
Percentage completed: 95.4000%
Time elapsed: 658.70605 seconds
Estimated time remaining: 0.52936 minutes
```

```
Program running...
Iteration: 2863
Percentage completed: 95.4333%
Time elapsed: 658.86255 seconds
Estimated time remaining: 0.52546 minutes
```

```
Program running...
Iteration: 2864
Percentage completed: 95.4667%
Time elapsed: 659.01846 seconds
Estimated time remaining: 0.52157 minutes
```

```
Program running...
Iteration: 2865
Percentage completed: 95.5000%
Time elapsed: 659.17575 seconds
Estimated time remaining: 0.51768 minutes
```

```
Program running...
Iteration: 2866
Percentage completed: 95.5333%
Time elapsed: 659.33453 seconds
Estimated time remaining: 0.51379 minutes
```

```
Program running...
Iteration: 2867
Percentage completed: 95.5667%
Time elapsed: 659.49099 seconds
Estimated time remaining: 0.50989 minutes
```

```
Program running...
Iteration: 2868
Percentage completed: 95.6000%
Time elapsed: 659.64806 seconds
Estimated time remaining: 0.50600 minutes
```

```
Program running...
Iteration: 2869
Percentage completed: 95.6333%
Time elapsed: 659.80246 seconds
Estimated time remaining: 0.50211 minutes
```

```
Program running...
Iteration: 2870
Percentage completed: 95.6667%
Time elapsed: 659.95698 seconds
Estimated time remaining: 0.49822 minutes
```

```
Program running...
Iteration: 2871
Percentage completed: 95.7000%
Time elapsed: 660.81756 seconds
Estimated time remaining: 0.49486 minutes
```

```
Program running...
Iteration: 2872
Percentage completed: 95.7333%
```

```
Time elapsed: 660.97434 seconds
Estimated time remaining: 0.49097 minutes
```

```
Program running...
Iteration: 2873
Percentage completed: 95.7667%
Time elapsed: 661.13321 seconds
Estimated time remaining: 0.48708 minutes
```

```
Program running...
Iteration: 2874
Percentage completed: 95.8000%
Time elapsed: 661.28776 seconds
Estimated time remaining: 0.48319 minutes
```

```
Program running...
Iteration: 2875
Percentage completed: 95.8333%
Time elapsed: 661.44669 seconds
Estimated time remaining: 0.47931 minutes
```

```
Program running...
Iteration: 2876
Percentage completed: 95.8667%
Time elapsed: 661.60801 seconds
Estimated time remaining: 0.47542 minutes
```

```
Program running...
Iteration: 2877
Percentage completed: 95.9000%
Time elapsed: 661.76214 seconds
Estimated time remaining: 0.47154 minutes
```

```
Program running...
Iteration: 2878
Percentage completed: 95.9333%
Time elapsed: 661.91647 seconds
Estimated time remaining: 0.46765 minutes
```

```
Program running...
```

Iteration: 2879  
Percentage completed: 95.9667%  
Time elapsed: 662.07412 seconds  
Estimated time remaining: 0.46376 minutes

Program running...  
Iteration: 2880  
Percentage completed: 96.0000%  
Time elapsed: 662.22775 seconds  
Estimated time remaining: 0.45988 minutes

Program running...  
Iteration: 2881  
Percentage completed: 96.0333%  
Time elapsed: 663.08846 seconds  
Estimated time remaining: 0.45648 minutes

Program running...  
Iteration: 2882  
Percentage completed: 96.0667%  
Time elapsed: 663.24359 seconds  
Estimated time remaining: 0.45259 minutes

Program running...  
Iteration: 2883  
Percentage completed: 96.1000%  
Time elapsed: 663.39881 seconds  
Estimated time remaining: 0.44871 minutes

Program running...  
Iteration: 2884  
Percentage completed: 96.1333%  
Time elapsed: 663.55634 seconds  
Estimated time remaining: 0.44482 minutes

Program running...  
Iteration: 2885  
Percentage completed: 96.1667%  
Time elapsed: 663.71290 seconds  
Estimated time remaining: 0.44094 minutes

```
Program running...
Iteration: 2886
Percentage completed: 96.2000%
Time elapsed: 663.86983 seconds
Estimated time remaining: 0.43706 minutes
```

```
Program running...
Iteration: 2887
Percentage completed: 96.2333%
Time elapsed: 664.02543 seconds
Estimated time remaining: 0.43318 minutes
```

```
Program running...
Iteration: 2888
Percentage completed: 96.2667%
Time elapsed: 664.18169 seconds
Estimated time remaining: 0.42929 minutes
```

```
Program running...
Iteration: 2889
Percentage completed: 96.3000%
Time elapsed: 664.33690 seconds
Estimated time remaining: 0.42541 minutes
```

```
Program running...
Iteration: 2890
Percentage completed: 96.3333%
Time elapsed: 664.49429 seconds
Estimated time remaining: 0.42153 minutes
```

```
Program running...
Iteration: 2891
Percentage completed: 96.3667%
Time elapsed: 665.36518 seconds
Estimated time remaining: 0.41811 minutes
```

```
Program running...
Iteration: 2892
Percentage completed: 96.4000%
Time elapsed: 665.52019 seconds
```

Estimated time remaining: 0.41422 minutes

Program running...

Iteration: 2893  
Percentage completed: 96.4333%  
Time elapsed: 665.67401 seconds  
Estimated time remaining: 0.41034 minutes

Program running...

Iteration: 2894  
Percentage completed: 96.4667%  
Time elapsed: 665.82790 seconds  
Estimated time remaining: 0.40646 minutes

Program running...

Iteration: 2895  
Percentage completed: 96.5000%  
Time elapsed: 665.98340 seconds  
Estimated time remaining: 0.40258 minutes

Program running...

Iteration: 2896  
Percentage completed: 96.5333%  
Time elapsed: 666.13913 seconds  
Estimated time remaining: 0.39870 minutes

Program running...

Iteration: 2897  
Percentage completed: 96.5667%  
Time elapsed: 666.29473 seconds  
Estimated time remaining: 0.39482 minutes

Program running...

Iteration: 2898  
Percentage completed: 96.6000%  
Time elapsed: 666.45027 seconds  
Estimated time remaining: 0.39095 minutes

Program running...

Iteration: 2899

```
Percentage completed: 96.6333%
Time elapsed: 666.60567 seconds
Estimated time remaining: 0.38707 minutes
```

```
Program running...
Iteration: 2900
Percentage completed: 96.6667%
Time elapsed: 666.75904 seconds
Estimated time remaining: 0.38319 minutes
```

```
Program running...
Iteration: 2901
Percentage completed: 96.7000%
Time elapsed: 667.61536 seconds
Estimated time remaining: 0.37972 minutes
```

```
Program running...
Iteration: 2902
Percentage completed: 96.7333%
Time elapsed: 667.76974 seconds
Estimated time remaining: 0.37584 minutes
```

```
Program running...
Iteration: 2903
Percentage completed: 96.7667%
Time elapsed: 667.92352 seconds
Estimated time remaining: 0.37196 minutes
```

```
Program running...
Iteration: 2904
Percentage completed: 96.8000%
Time elapsed: 668.07627 seconds
Estimated time remaining: 0.36808 minutes
```

```
Program running...
Iteration: 2905
Percentage completed: 96.8333%
Time elapsed: 668.23174 seconds
Estimated time remaining: 0.36421 minutes
```

```
Program running...
Iteration: 2906
Percentage completed: 96.8667%
Time elapsed: 668.39087 seconds
Estimated time remaining: 0.36034 minutes
```

```
Program running...
Iteration: 2907
Percentage completed: 96.9000%
Time elapsed: 668.54478 seconds
Estimated time remaining: 0.35646 minutes
```

```
Program running...
Iteration: 2908
Percentage completed: 96.9333%
Time elapsed: 668.70723 seconds
Estimated time remaining: 0.35260 minutes
```

```
Program running...
Iteration: 2909
Percentage completed: 96.9667%
Time elapsed: 668.86090 seconds
Estimated time remaining: 0.34872 minutes
```

```
Program running...
Iteration: 2910
Percentage completed: 97.0000%
Time elapsed: 669.01825 seconds
Estimated time remaining: 0.34485 minutes
```

```
Program running...
Iteration: 2911
Percentage completed: 97.0333%
Time elapsed: 669.88679 seconds
Estimated time remaining: 0.34135 minutes
```

```
Program running...
Iteration: 2912
Percentage completed: 97.0667%
Time elapsed: 670.04046 seconds
Estimated time remaining: 0.33747 minutes
```

```
Program running...
Iteration: 2913
Percentage completed: 97.1000%
Time elapsed: 670.19531 seconds
Estimated time remaining: 0.33360 minutes
```

```
Program running...
Iteration: 2914
Percentage completed: 97.1333%
Time elapsed: 670.35080 seconds
Estimated time remaining: 0.32973 minutes
```

```
Program running...
Iteration: 2915
Percentage completed: 97.1667%
Time elapsed: 670.50725 seconds
Estimated time remaining: 0.32586 minutes
```

```
Program running...
Iteration: 2916
Percentage completed: 97.2000%
Time elapsed: 670.66499 seconds
Estimated time remaining: 0.32199 minutes
```

```
Program running...
Iteration: 2917
Percentage completed: 97.2333%
Time elapsed: 670.82010 seconds
Estimated time remaining: 0.31812 minutes
```

```
Program running...
Iteration: 2918
Percentage completed: 97.2667%
Time elapsed: 670.97237 seconds
Estimated time remaining: 0.31425 minutes
```

```
Program running...
Iteration: 2919
Percentage completed: 97.3000%
```

Time elapsed: 0/1.12000 seconds  
Estimated time remaining: 0.31039 minutes

Program running...  
Iteration: 2920  
Percentage completed: 97.3333%  
Time elapsed: 671.28067 seconds  
Estimated time remaining: 0.30652 minutes

Program running...  
Iteration: 2921  
Percentage completed: 97.3667%  
Time elapsed: 672.14244 seconds  
Estimated time remaining: 0.30297 minutes

Program running...  
Iteration: 2922  
Percentage completed: 97.4000%  
Time elapsed: 672.29890 seconds  
Estimated time remaining: 0.29910 minutes

Program running...  
Iteration: 2923  
Percentage completed: 97.4333%  
Time elapsed: 672.45468 seconds  
Estimated time remaining: 0.29524 minutes

Program running...  
Iteration: 2924  
Percentage completed: 97.4667%  
Time elapsed: 672.61198 seconds  
Estimated time remaining: 0.29137 minutes

Program running...  
Iteration: 2925  
Percentage completed: 97.5000%  
Time elapsed: 672.76817 seconds  
Estimated time remaining: 0.28751 minutes

Program running...  
Iteration: 2926

```
Percentage completed: 97.5333%
Time elapsed: 672.92367 seconds
Estimated time remaining: 0.28364 minutes
```

```
Program running...
Iteration: 2927
Percentage completed: 97.5667%
Time elapsed: 673.08154 seconds
Estimated time remaining: 0.27978 minutes
```

```
Program running...
Iteration: 2928
Percentage completed: 97.6000%
Time elapsed: 673.23707 seconds
Estimated time remaining: 0.27592 minutes
```

```
Program running...
Iteration: 2929
Percentage completed: 97.6333%
Time elapsed: 673.39214 seconds
Estimated time remaining: 0.27205 minutes
```

```
Program running...
Iteration: 2930
Percentage completed: 97.6667%
Time elapsed: 673.55038 seconds
Estimated time remaining: 0.26819 minutes
```

```
Program running...
Iteration: 2931
Percentage completed: 97.7000%
Time elapsed: 674.41510 seconds
Estimated time remaining: 0.26461 minutes
```

```
Program running...
Iteration: 2932
Percentage completed: 97.7333%
Time elapsed: 674.57136 seconds
Estimated time remaining: 0.26075 minutes
```

```
Program running...
Iteration: 2933
Percentage completed: 97.7667%
Time elapsed: 674.72757 seconds
Estimated time remaining: 0.25688 minutes
```

```
Program running...
Iteration: 2934
Percentage completed: 97.8000%
Time elapsed: 674.88481 seconds
Estimated time remaining: 0.25302 minutes
```

```
Program running...
Iteration: 2935
Percentage completed: 97.8333%
Time elapsed: 675.04590 seconds
Estimated time remaining: 0.24916 minutes
```

```
Program running...
Iteration: 2936
Percentage completed: 97.8667%
Time elapsed: 675.19946 seconds
Estimated time remaining: 0.24530 minutes
```

```
Program running...
Iteration: 2937
Percentage completed: 97.9000%
Time elapsed: 675.35712 seconds
Estimated time remaining: 0.24144 minutes
```

```
Program running...
Iteration: 2938
Percentage completed: 97.9333%
Time elapsed: 675.51471 seconds
Estimated time remaining: 0.23759 minutes
```

```
Program running...
Iteration: 2939
Percentage completed: 97.9667%
Time elapsed: 675.67272 seconds
```

Program running...  
Iteration: 2940  
Percentage completed: 98.0000%  
Time elapsed: 675.82786 seconds  
Estimated time remaining: 0.22987 minutes

Program running...  
Iteration: 2941  
Percentage completed: 98.0333%  
Time elapsed: 676.69505 seconds  
Estimated time remaining: 0.22625 minutes

Program running...  
Iteration: 2942  
Percentage completed: 98.0667%  
Time elapsed: 676.84874 seconds  
Estimated time remaining: 0.22239 minutes

Program running...  
Iteration: 2943  
Percentage completed: 98.1000%  
Time elapsed: 677.00462 seconds  
Estimated time remaining: 0.21854 minutes

Program running...  
Iteration: 2944  
Percentage completed: 98.1333%  
Time elapsed: 677.15863 seconds  
Estimated time remaining: 0.21468 minutes

Program running...  
Iteration: 2945  
Percentage completed: 98.1667%  
Time elapsed: 677.31350 seconds  
Estimated time remaining: 0.21082 minutes

Program running...  
Iteration: 2946

Percentage completed: 98.2000%  
Time elapsed: 677.47015 seconds  
Estimated time remaining: 0.20697 minutes

Program running...  
Iteration: 2947  
Percentage completed: 98.2333%  
Time elapsed: 677.62432 seconds  
Estimated time remaining: 0.20311 minutes

Program running...  
Iteration: 2948  
Percentage completed: 98.2667%  
Time elapsed: 677.78054 seconds  
Estimated time remaining: 0.19926 minutes

Program running...  
Iteration: 2949  
Percentage completed: 98.3000%  
Time elapsed: 677.93669 seconds  
Estimated time remaining: 0.19540 minutes

Program running...  
Iteration: 2950  
Percentage completed: 98.3333%  
Time elapsed: 678.08973 seconds  
Estimated time remaining: 0.19155 minutes

Program running...  
Iteration: 2951  
Percentage completed: 98.3667%  
Time elapsed: 678.99793 seconds  
Estimated time remaining: 0.18791 minutes

Program running...  
Iteration: 2952  
Percentage completed: 98.4000%  
Time elapsed: 679.15498 seconds  
Estimated time remaining: 0.18405 minutes

Iteration: 2953  
Percentage completed: 98.4333%  
Time elapsed: 679.31080 seconds  
Estimated time remaining: 0.18020 minutes

Program running...  
Iteration: 2954  
Percentage completed: 98.4667%  
Time elapsed: 679.46723 seconds  
Estimated time remaining: 0.17634 minutes

Program running...  
Iteration: 2955  
Percentage completed: 98.5000%  
Time elapsed: 679.62880 seconds  
Estimated time remaining: 0.17249 minutes

Program running...  
Iteration: 2956  
Percentage completed: 98.5333%  
Time elapsed: 679.78338 seconds  
Estimated time remaining: 0.16864 minutes

Program running...  
Iteration: 2957  
Percentage completed: 98.5667%  
Time elapsed: 679.93977 seconds  
Estimated time remaining: 0.16479 minutes

Program running...  
Iteration: 2958  
Percentage completed: 98.6000%  
Time elapsed: 680.09745 seconds  
Estimated time remaining: 0.16094 minutes

Program running...  
Iteration: 2959  
Percentage completed: 98.6333%  
Time elapsed: 680.25284 seconds  
Estimated time remaining: 0.15709 minutes

```
Program running...
Iteration: 2960
Percentage completed: 98.6667%
Time elapsed: 680.41125 seconds
Estimated time remaining: 0.15324 minutes
```

```
Program running...
Iteration: 2961
Percentage completed: 98.7000%
Time elapsed: 681.27736 seconds
Estimated time remaining: 0.14955 minutes
```

```
Program running...
Iteration: 2962
Percentage completed: 98.7333%
Time elapsed: 681.43237 seconds
Estimated time remaining: 0.14570 minutes
```

```
Program running...
Iteration: 2963
Percentage completed: 98.7667%
Time elapsed: 681.58718 seconds
Estimated time remaining: 0.14185 minutes
```

```
Program running...
Iteration: 2964
Percentage completed: 98.8000%
Time elapsed: 681.74321 seconds
Estimated time remaining: 0.13800 minutes
```

```
Program running...
Iteration: 2965
Percentage completed: 98.8333%
Time elapsed: 681.89993 seconds
Estimated time remaining: 0.13416 minutes
```

```
Program running...
Iteration: 2966
Percentage completed: 98.8667%
Time elapsed: 682.05643 seconds
```

Estimated time remaining: 0.13031 minutes

Program running...  
Iteration: 2967  
Percentage completed: 98.9000%  
Time elapsed: 682.21035 seconds  
Estimated time remaining: 0.12646 minutes

Program running...  
Iteration: 2968  
Percentage completed: 98.9333%  
Time elapsed: 682.36485 seconds  
Estimated time remaining: 0.12262 minutes

Program running...  
Iteration: 2969  
Percentage completed: 98.9667%  
Time elapsed: 682.52027 seconds  
Estimated time remaining: 0.11877 minutes

Program running...  
Iteration: 2970  
Percentage completed: 99.0000%  
Time elapsed: 682.67608 seconds  
Estimated time remaining: 0.11493 minutes

Program running...  
Iteration: 2971  
Percentage completed: 99.0333%  
Time elapsed: 683.55570 seconds  
Estimated time remaining: 0.11120 minutes

Program running...  
Iteration: 2972  
Percentage completed: 99.0667%  
Time elapsed: 683.71157 seconds  
Estimated time remaining: 0.10736 minutes

Program running...  
Iteration: 2973

```
Percentage completed: 99.1000%
Time elapsed: 683.86713 seconds
Estimated time remaining: 0.10351 minutes
```

```
Program running...
Iteration: 2974
Percentage completed: 99.1333%
Time elapsed: 684.02094 seconds
Estimated time remaining: 0.09967 minutes
```

```
Program running...
Iteration: 2975
Percentage completed: 99.1667%
Time elapsed: 684.17939 seconds
Estimated time remaining: 0.09582 minutes
```

```
Program running...
Iteration: 2976
Percentage completed: 99.2000%
Time elapsed: 684.33755 seconds
Estimated time remaining: 0.09198 minutes
```

```
Program running...
Iteration: 2977
Percentage completed: 99.2333%
Time elapsed: 684.49133 seconds
Estimated time remaining: 0.08814 minutes
```

```
Program running...
Iteration: 2978
Percentage completed: 99.2667%
Time elapsed: 684.64830 seconds
Estimated time remaining: 0.08430 minutes
```

```
Program running...
Iteration: 2979
Percentage completed: 99.3000%
Time elapsed: 684.80434 seconds
Estimated time remaining: 0.08046 minutes
```

```
Program running...
Iteration: 2980
Percentage completed: 99.3333%
Time elapsed: 684.96054 seconds
Estimated time remaining: 0.07662 minutes
```

```
Program running...
Iteration: 2981
Percentage completed: 99.3667%
Time elapsed: 685.82313 seconds
Estimated time remaining: 0.07285 minutes
```

```
Program running...
Iteration: 2982
Percentage completed: 99.4000%
Time elapsed: 685.97820 seconds
Estimated time remaining: 0.06901 minutes
```

```
Program running...
Iteration: 2983
Percentage completed: 99.4333%
Time elapsed: 686.13185 seconds
Estimated time remaining: 0.06517 minutes
```

```
Program running...
Iteration: 2984
Percentage completed: 99.4667%
Time elapsed: 686.28477 seconds
Estimated time remaining: 0.06133 minutes
```

```
Program running...
Iteration: 2985
Percentage completed: 99.5000%
Time elapsed: 686.43805 seconds
Estimated time remaining: 0.05749 minutes
```

```
Program running...
Iteration: 2986
Percentage completed: 99.5333%
Time elapsed: 686.59470 seconds
Estimated time remaining: 0.05365 minutes
```

```
Program running...
Iteration: 2987
Percentage completed: 99.5667%
Time elapsed: 686.74919 seconds
Estimated time remaining: 0.04981 minutes
```

```
Program running...
Iteration: 2988
Percentage completed: 99.6000%
Time elapsed: 686.90312 seconds
Estimated time remaining: 0.04598 minutes
```

```
Program running...
Iteration: 2989
Percentage completed: 99.6333%
Time elapsed: 687.06208 seconds
Estimated time remaining: 0.04214 minutes
```

```
Program running...
Iteration: 2990
Percentage completed: 99.6667%
Time elapsed: 687.21575 seconds
Estimated time remaining: 0.03830 minutes
```

```
Program running...
Iteration: 2991
Percentage completed: 99.7000%
Time elapsed: 688.07407 seconds
Estimated time remaining: 0.03451 minutes
```

```
Program running...
Iteration: 2992
Percentage completed: 99.7333%
Time elapsed: 688.22981 seconds
Estimated time remaining: 0.03067 minutes
```

```
Program running...
Iteration: 2993
Percentage completed: 99.7667%
```

```
Time elapsed: 688.38516 seconds
Estimated time remaining: 0.02683 minutes
```

```
Program running...
Iteration: 2994
Percentage completed: 99.8000%
Time elapsed: 688.54379 seconds
Estimated time remaining: 0.02300 minutes
```

```
Program running...
Iteration: 2995
Percentage completed: 99.8333%
Time elapsed: 688.69834 seconds
Estimated time remaining: 0.01916 minutes
```

```
Program running...
Iteration: 2996
Percentage completed: 99.8667%
Time elapsed: 688.85455 seconds
Estimated time remaining: 0.01533 minutes
```

```
Program running...
Iteration: 2997
Percentage completed: 99.9000%
Time elapsed: 689.01001 seconds
Estimated time remaining: 0.01149 minutes
```

```
Program running...
Iteration: 2998
Percentage completed: 99.9333%
Time elapsed: 689.16446 seconds
Estimated time remaining: 0.00766 minutes
```

```
Program running...
Iteration: 2999
Percentage completed: 99.9667%
Time elapsed: 689.31710 seconds
Estimated time remaining: 0.00383 minutes
```

```
Program running...
```

```

Iteration: 3000
Percentage completed: 100.0000%
Time elapsed: 689.47234 seconds
Estimated time remaining: -0.0000 minutes

```

### Plot figure only every no\_steps generations

```

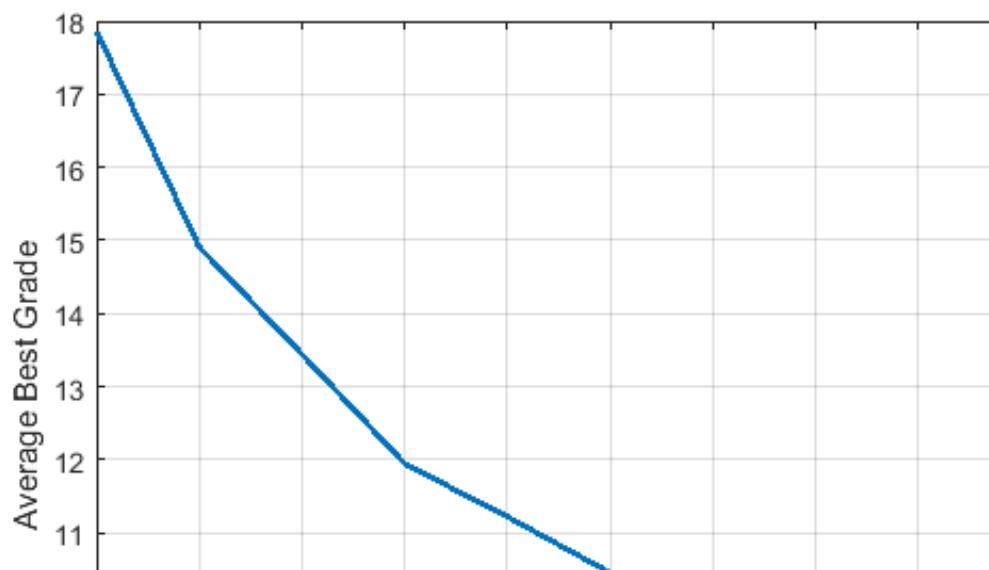
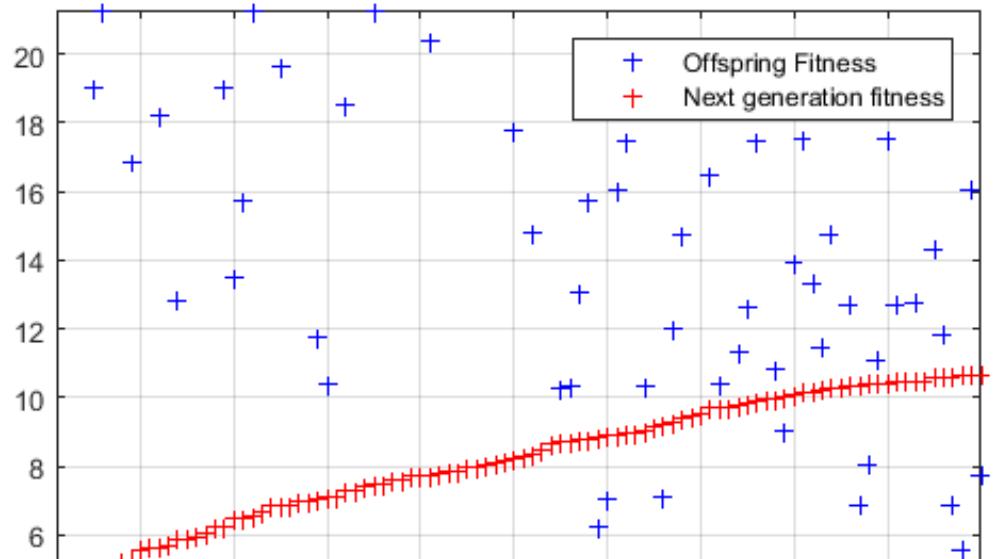
if (mod(gen_i, no_steps) == 0 || gen_i == no_members)
    figure(1);
    hold off;
    plot(offspring_grades, '+b');
    hold on;
    plot(parent_grades, '+r'); grid on;
    legend('Offspring Fitness', 'Next generation fitness');
    axis([1 no_members 0 2*max(parent_grades)]);

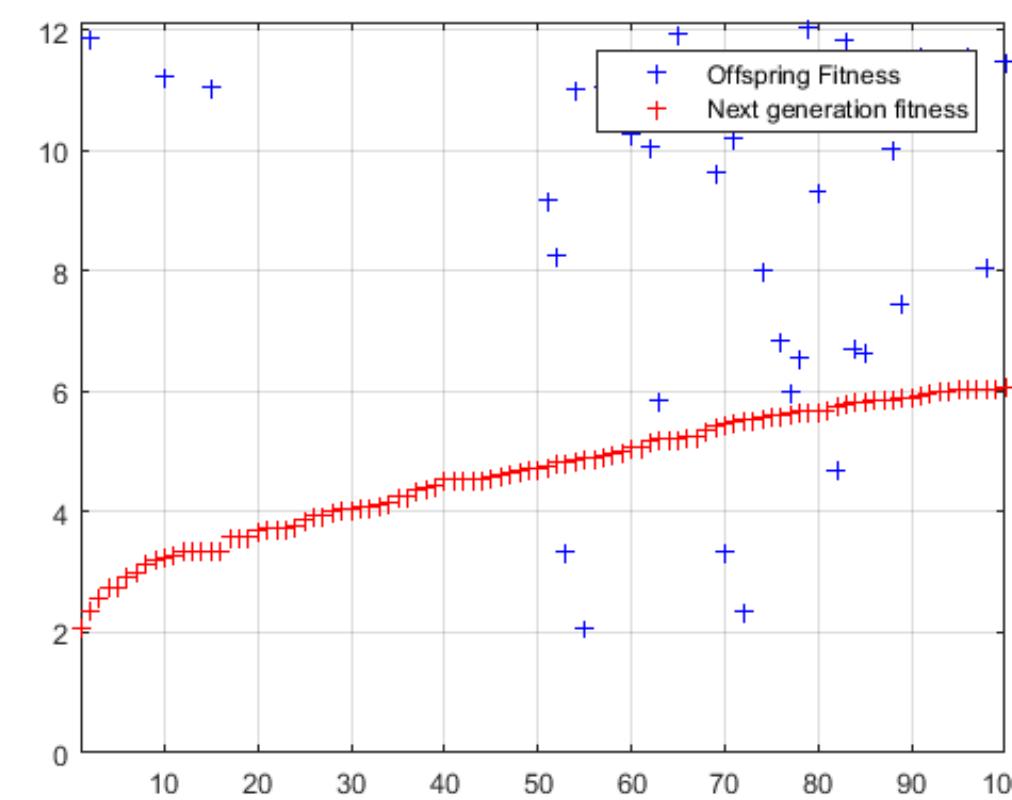
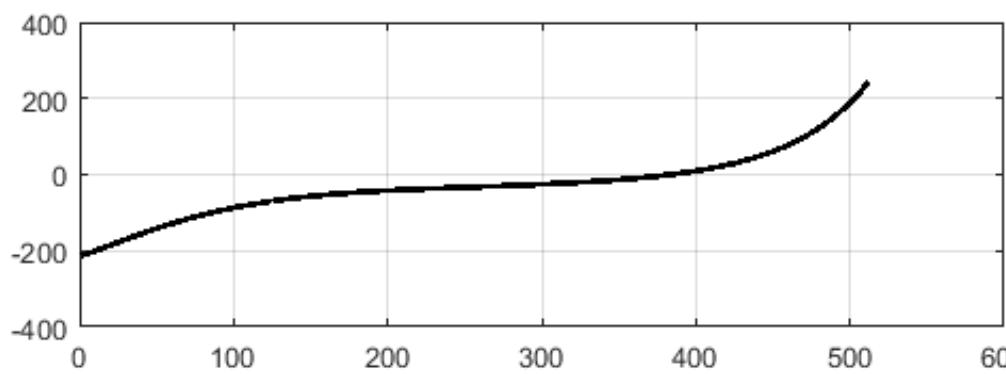
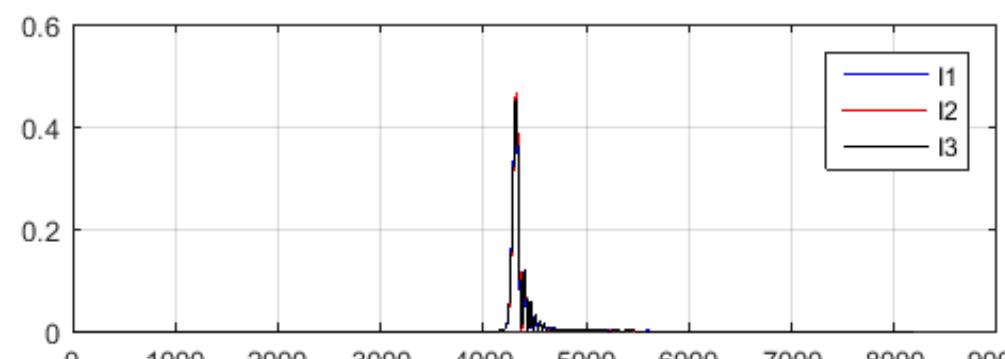
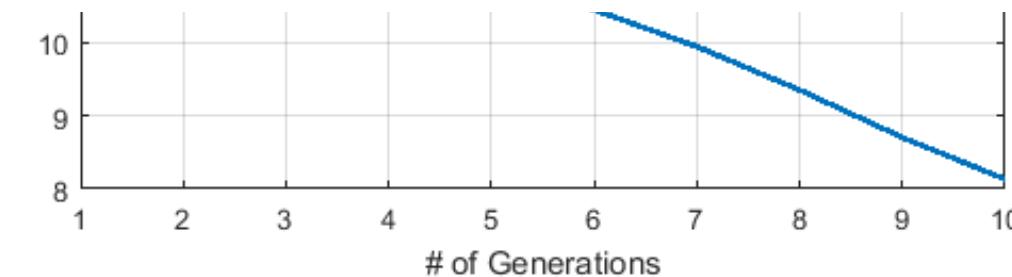
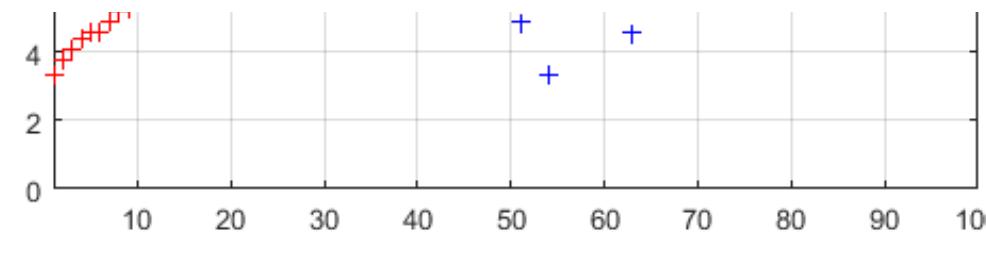
figure(2);
title('Algorithm Convergence');
plot(convergence, 'Linewidth', 2);
grid on;
xlabel('# of Generations');
ylabel('Average Best Grade');
[I1best,I2best,I3best,phase] = LaserPropagation(parents(:,1), pad_size, technique);

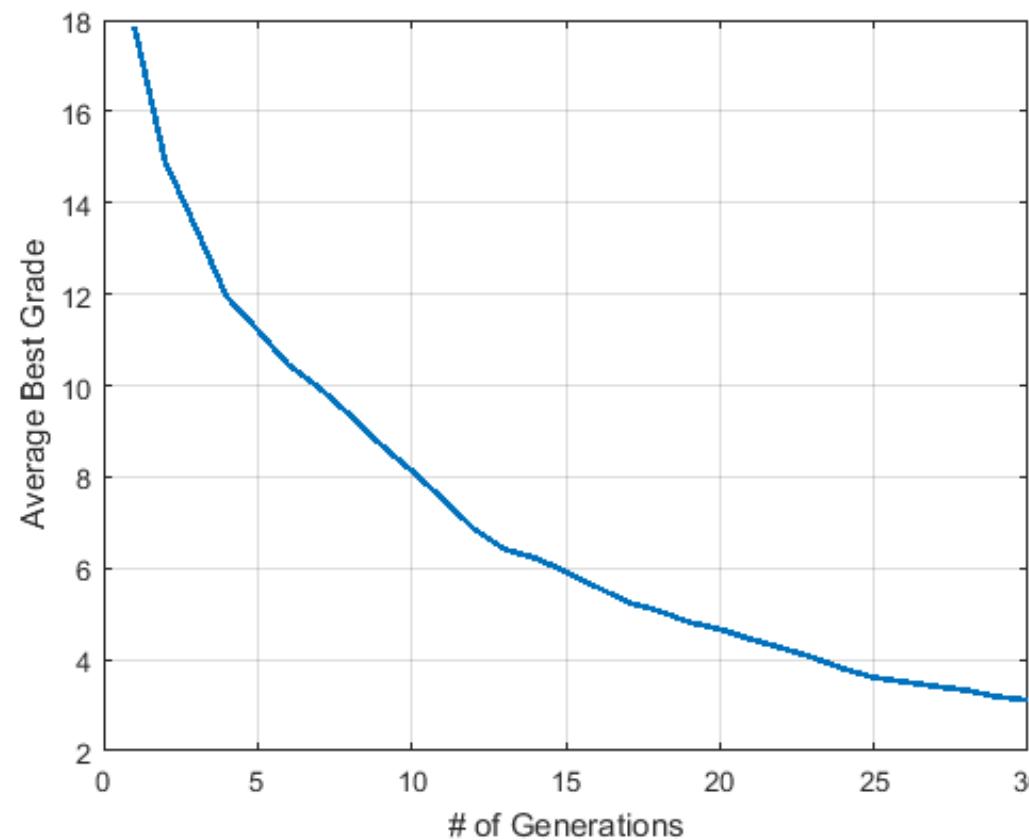
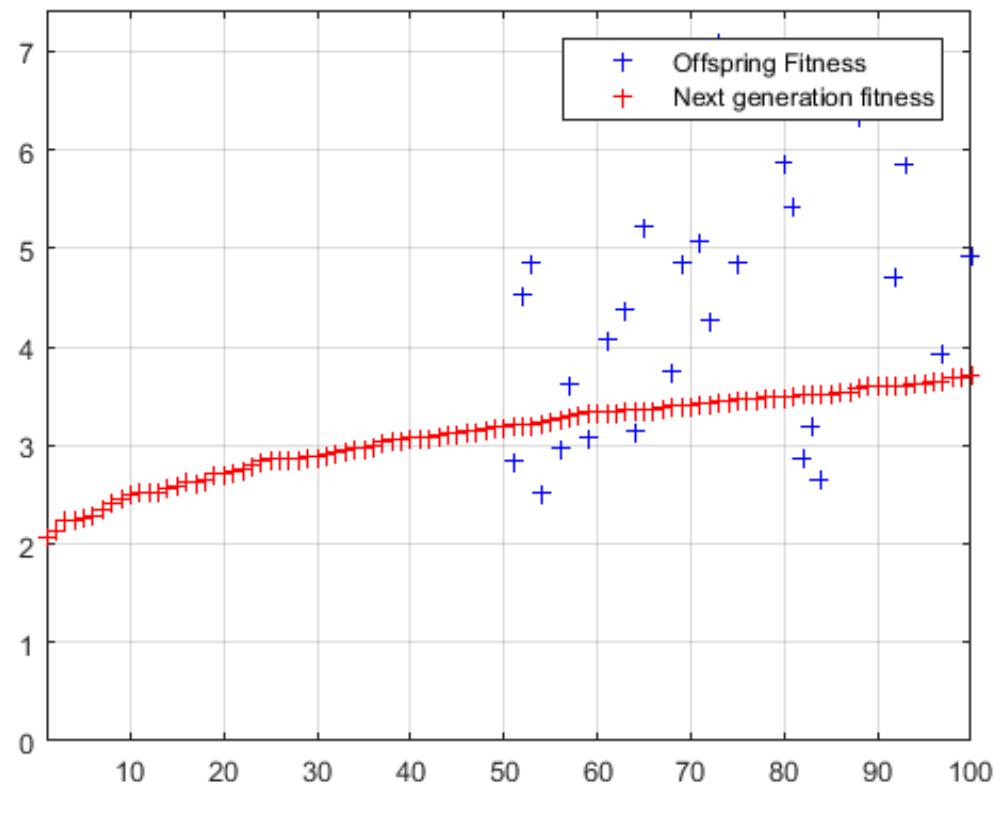
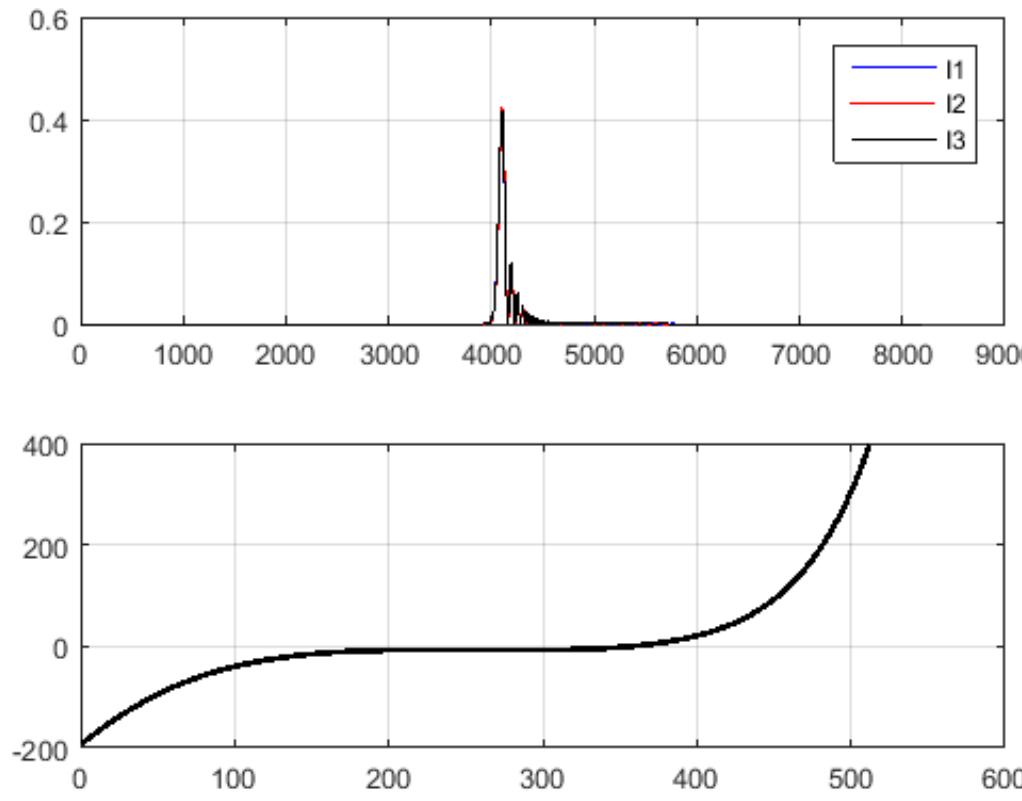
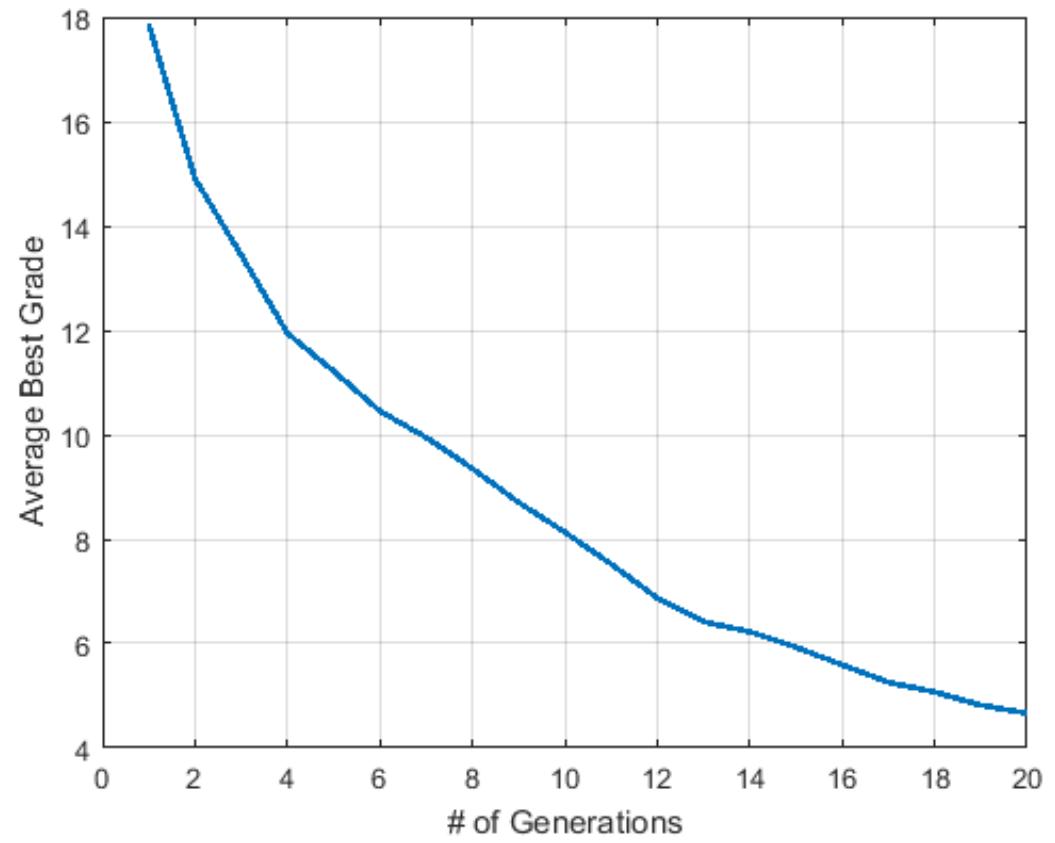
figure(3);
title('Best Result');

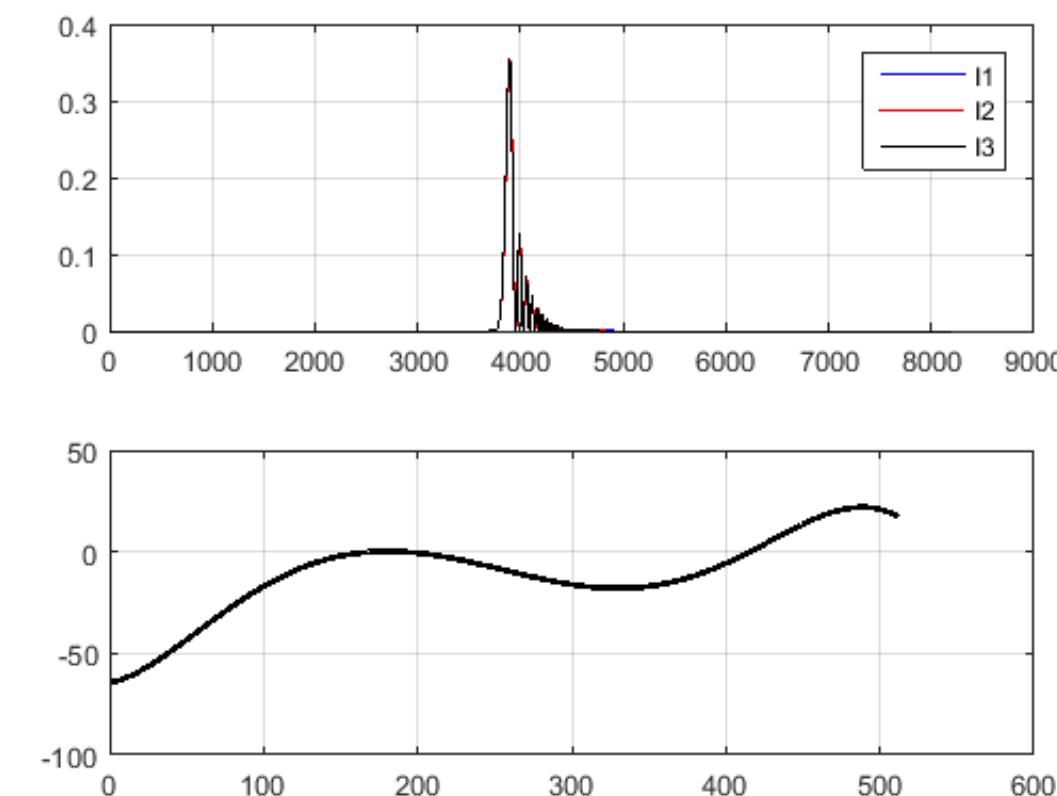
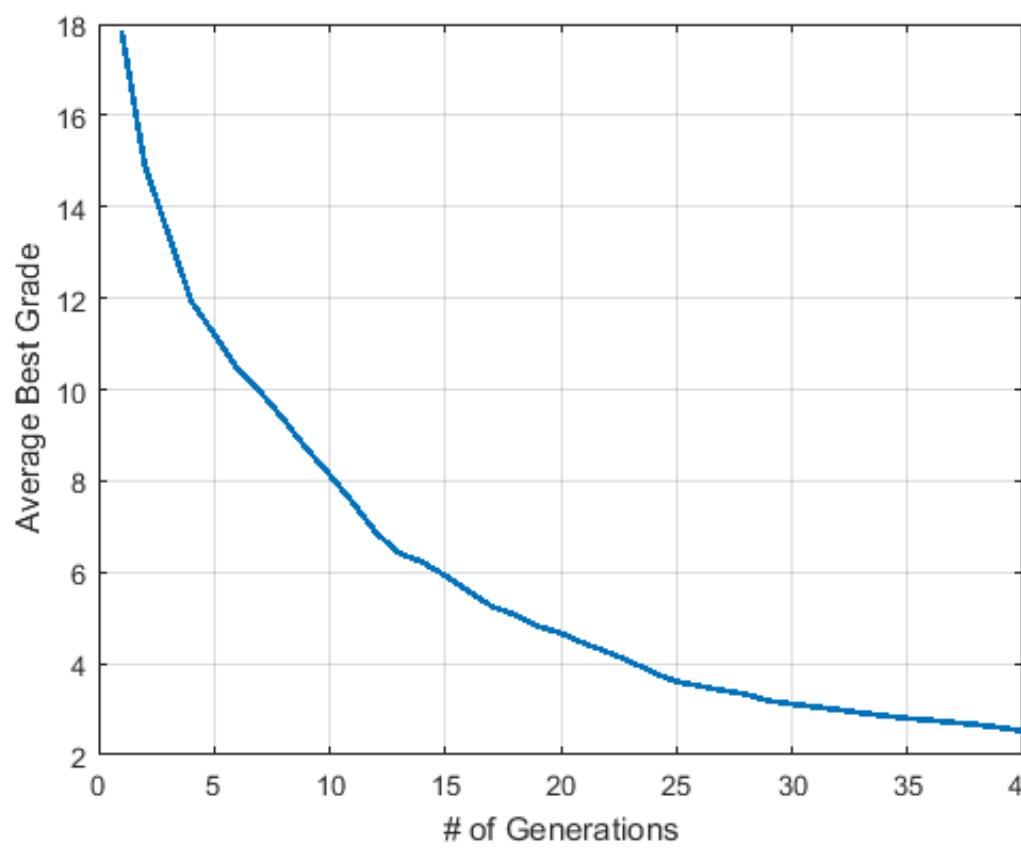
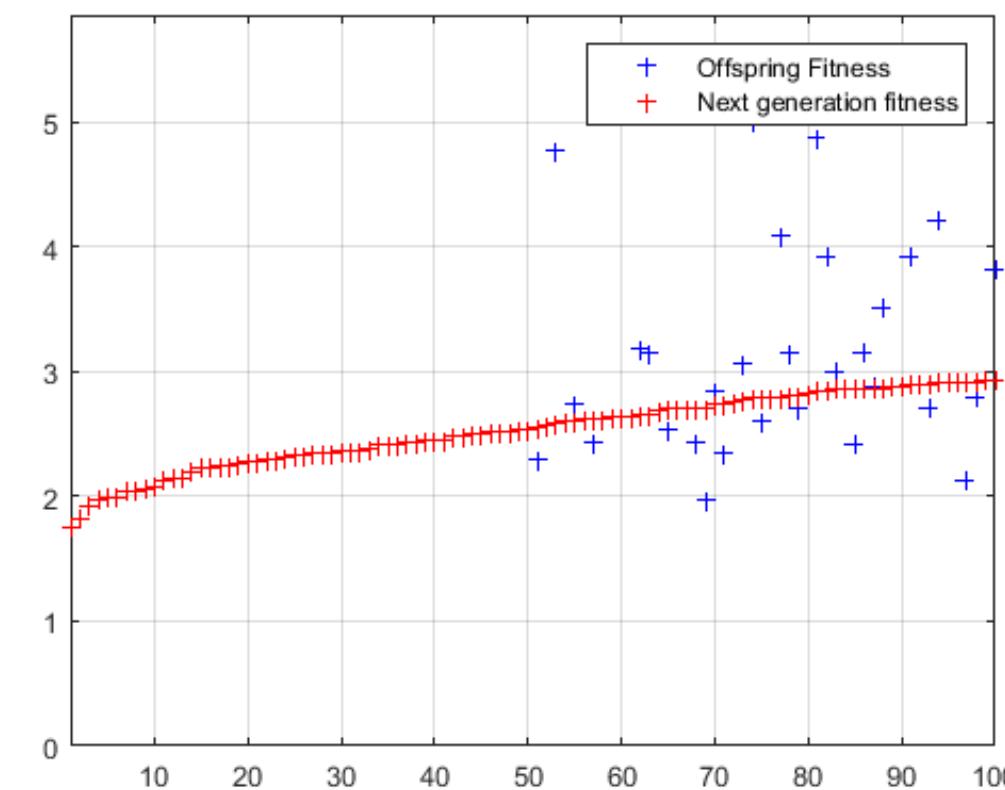
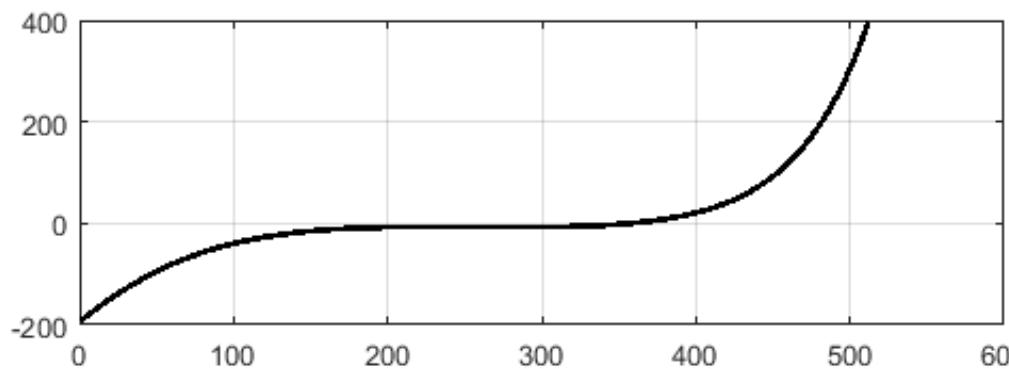
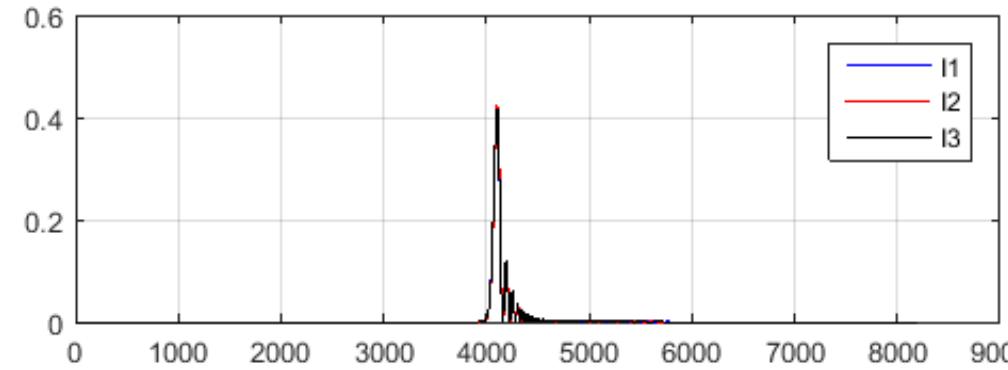
subplot(2,1,1);
plot(I1best, 'b'); hold on; plot(I2best, 'r');
plot(I3best, 'k'); hold off;
grid on; legend('I1', 'I2', 'I3');
subplot(2,1,2);
plot(phase, 'k', 'Linewidth', 2);
grid on;
end

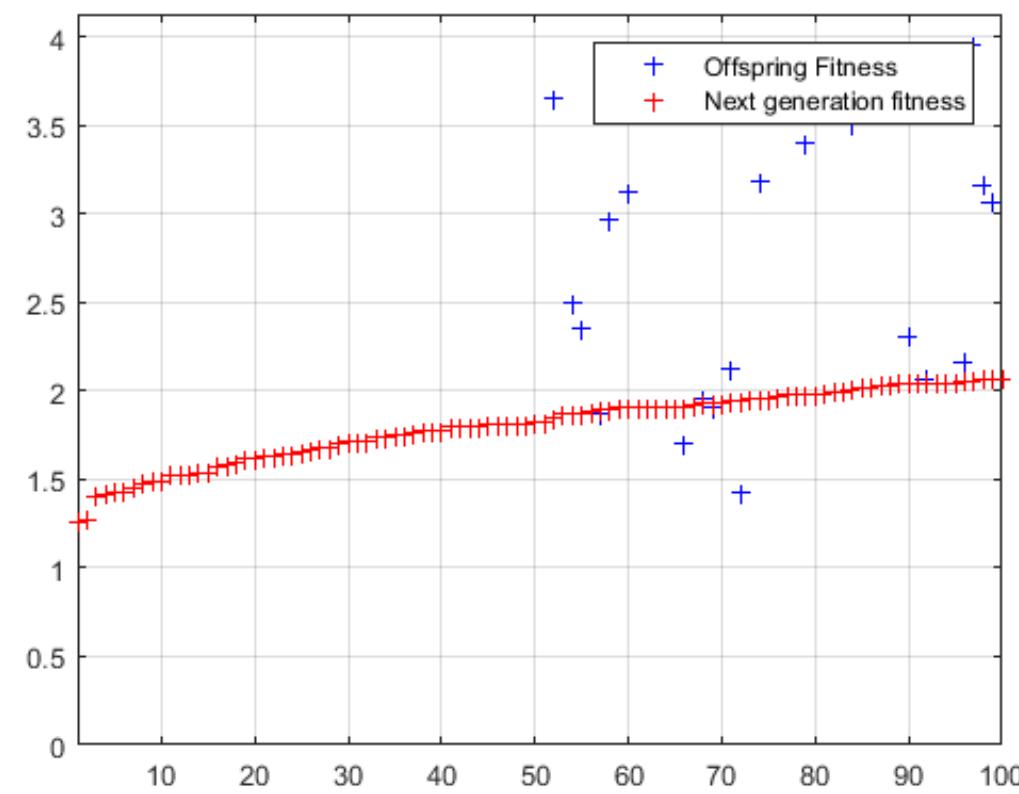
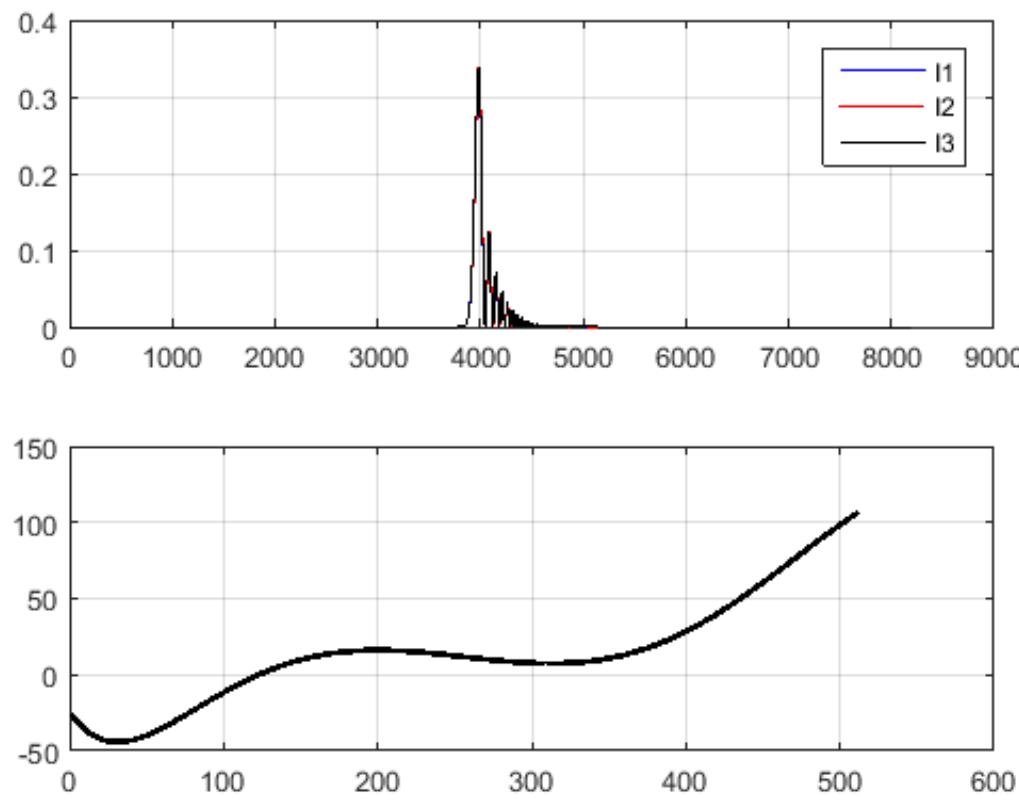
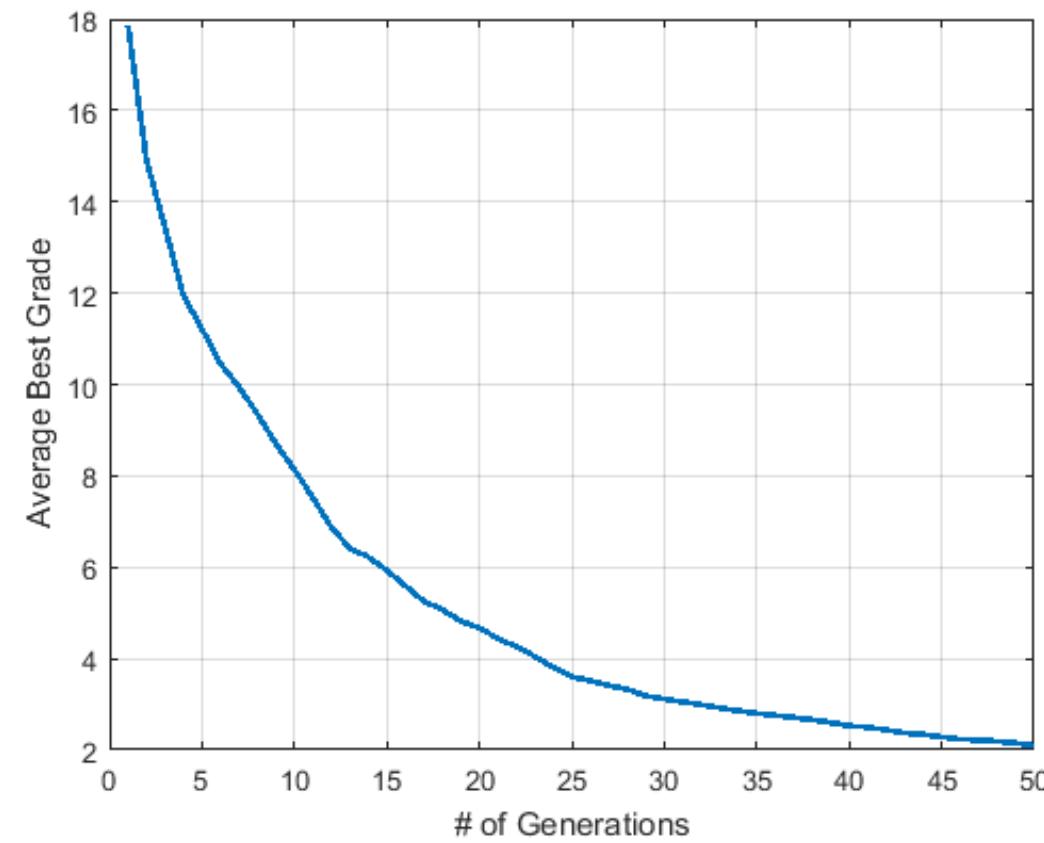
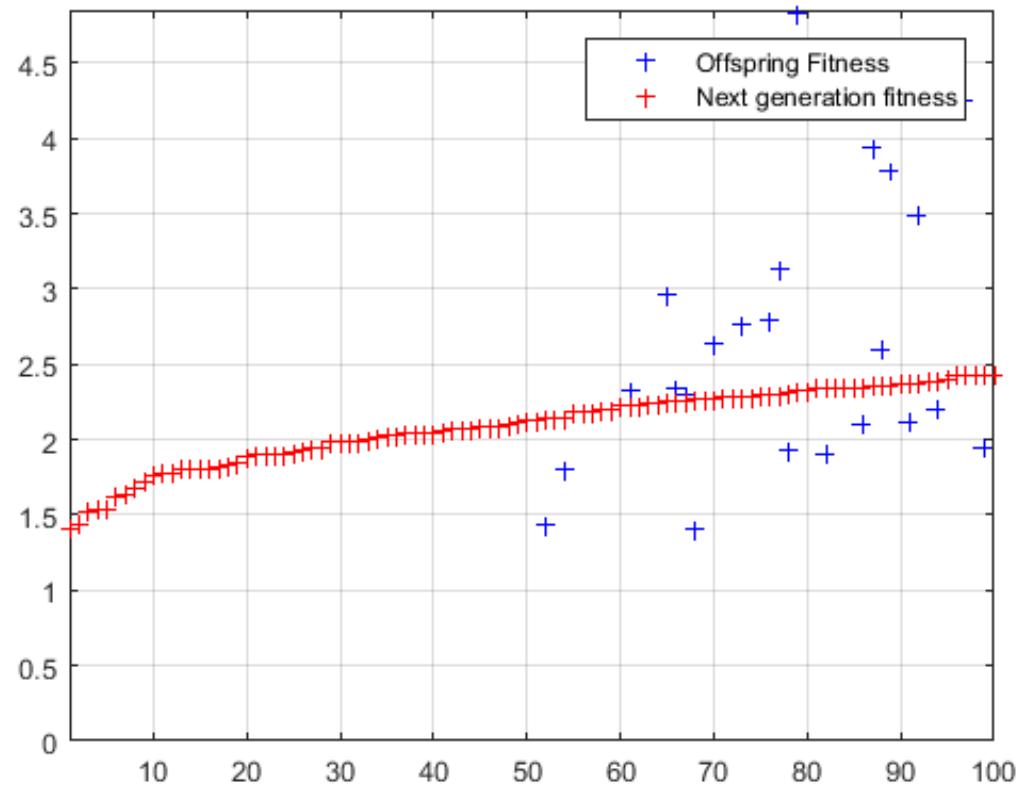
```

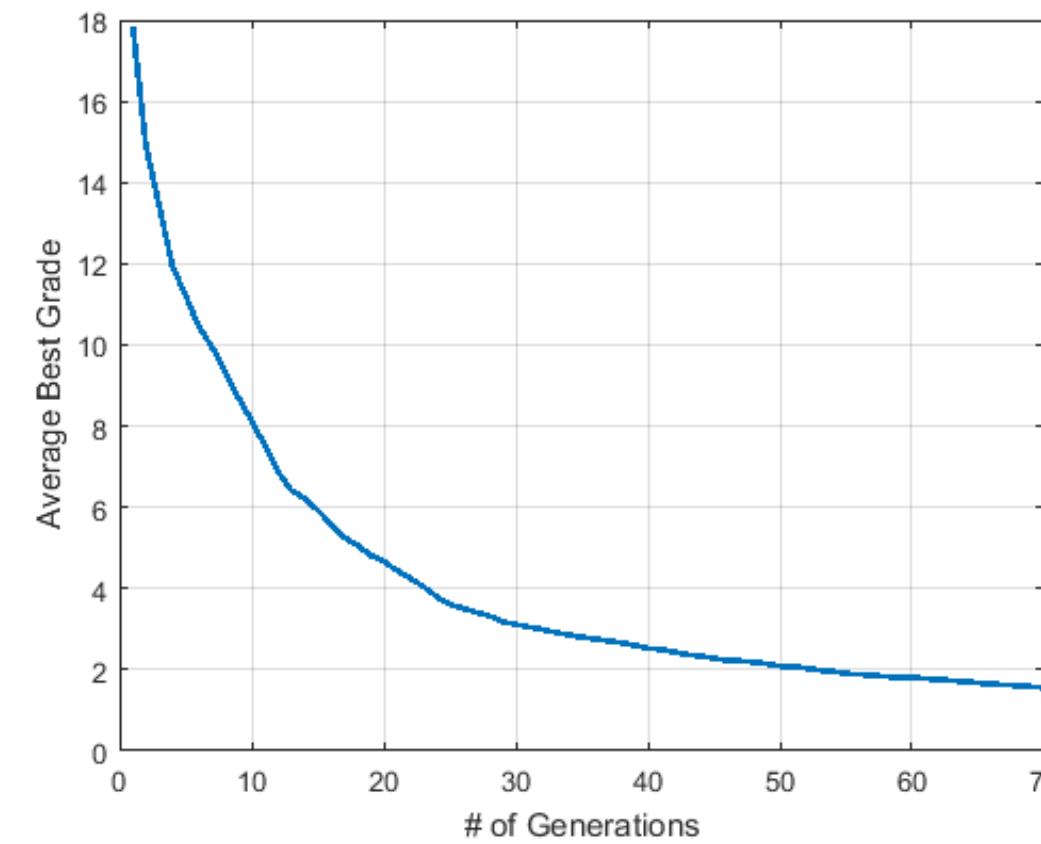
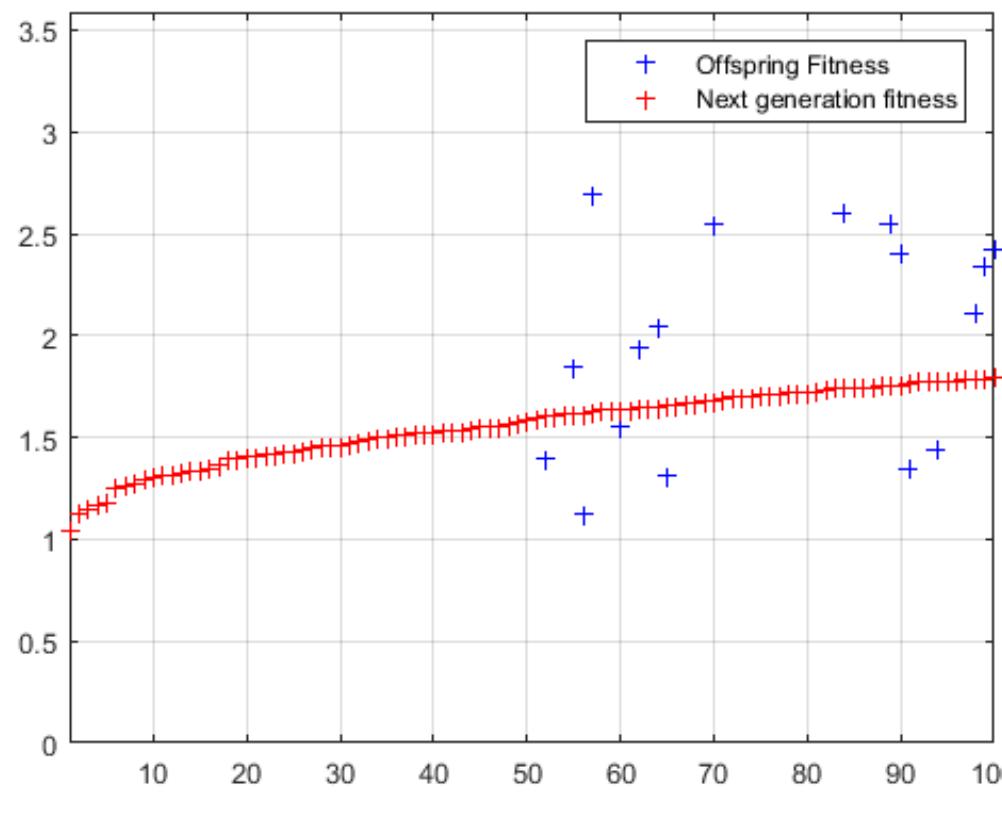
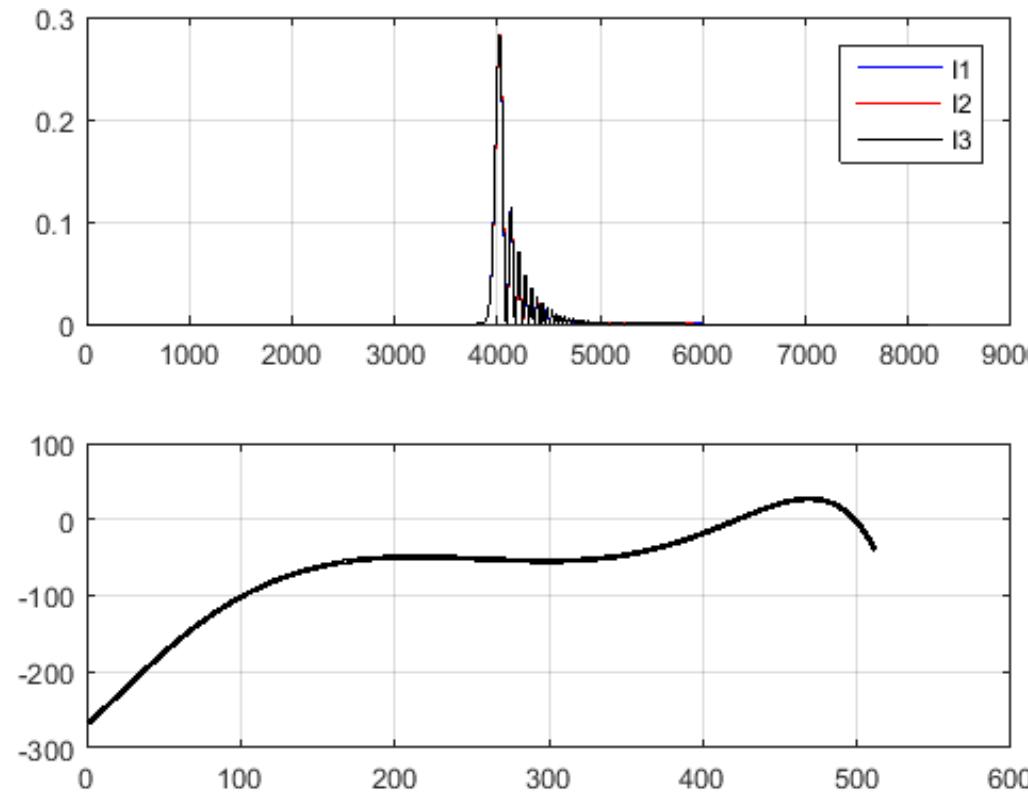
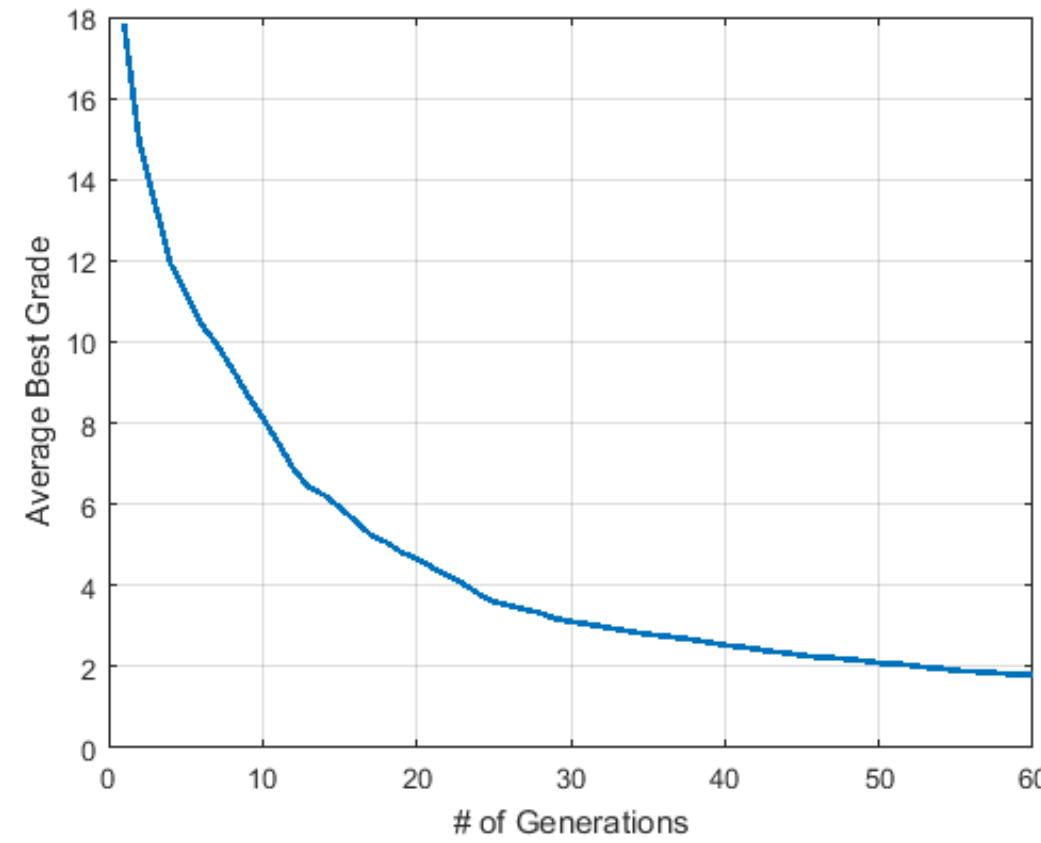


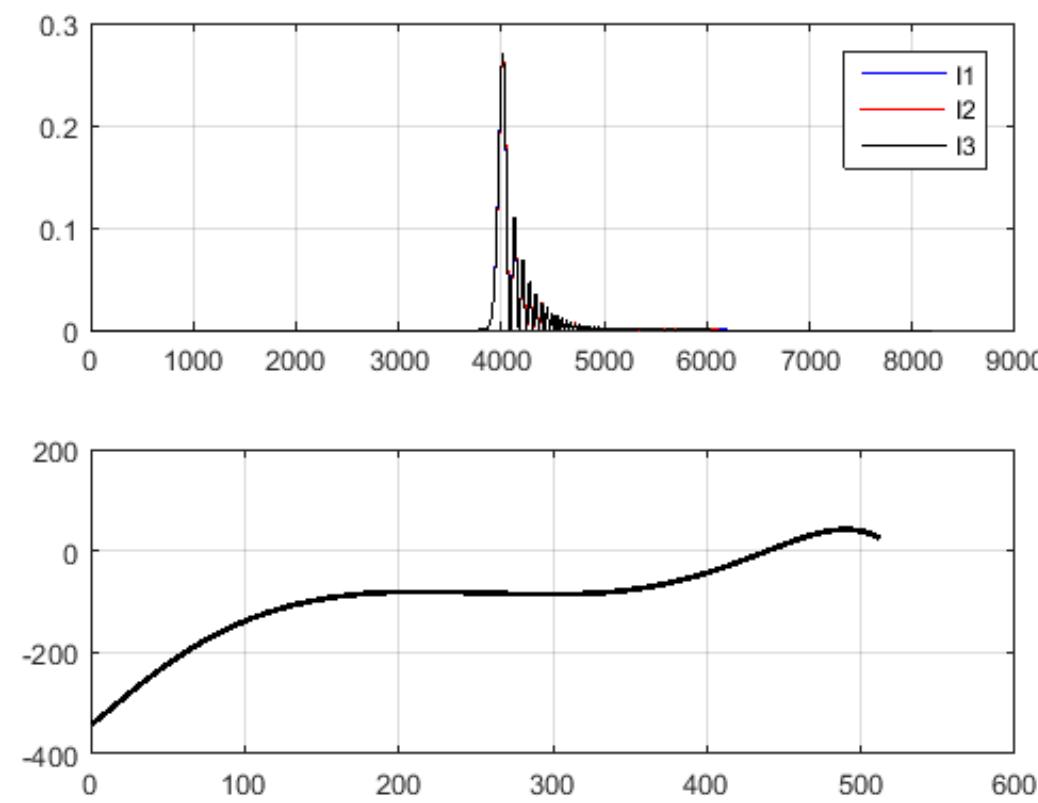
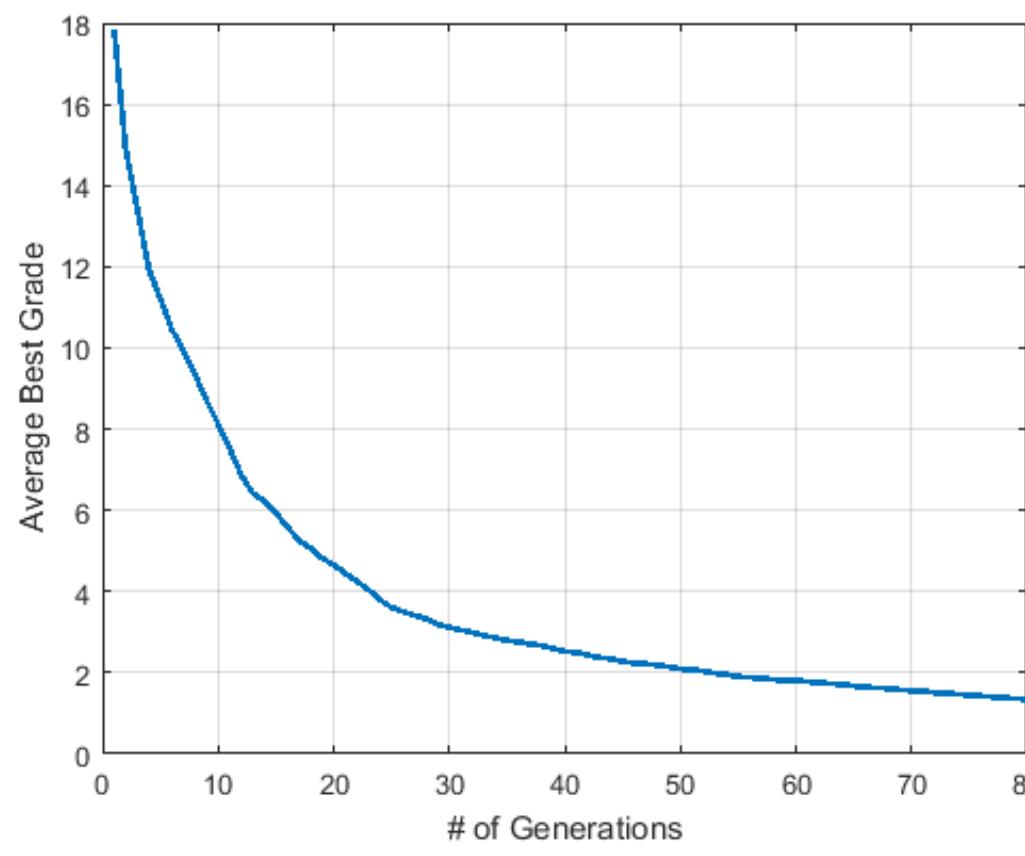
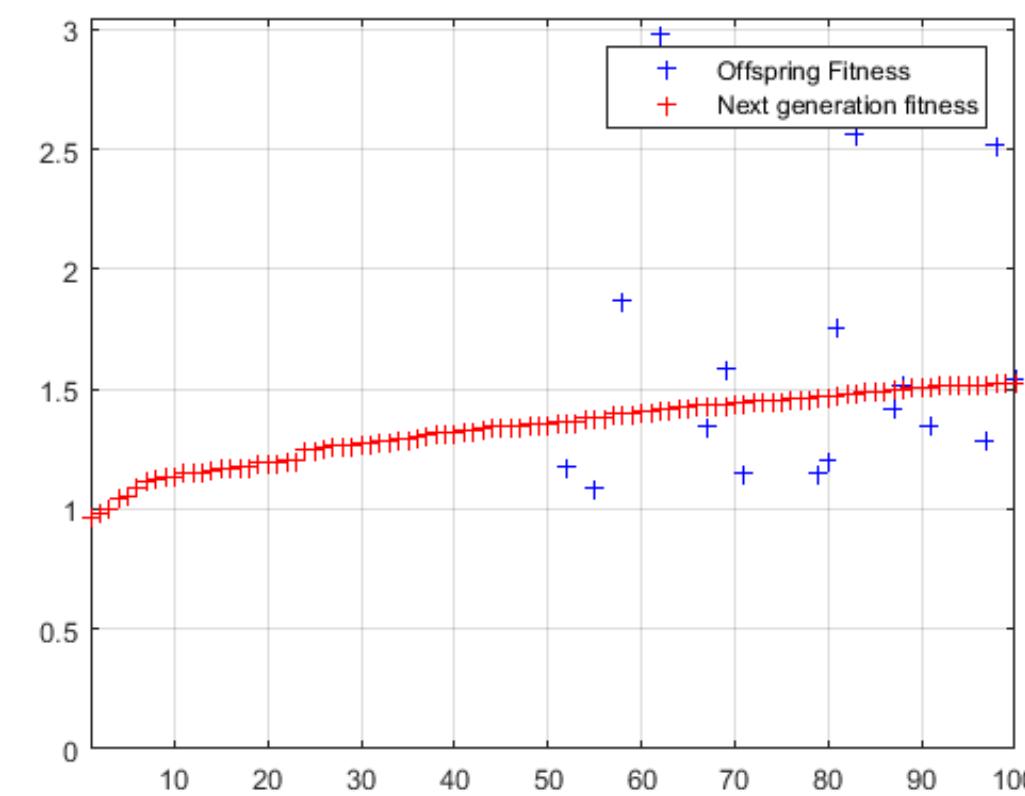
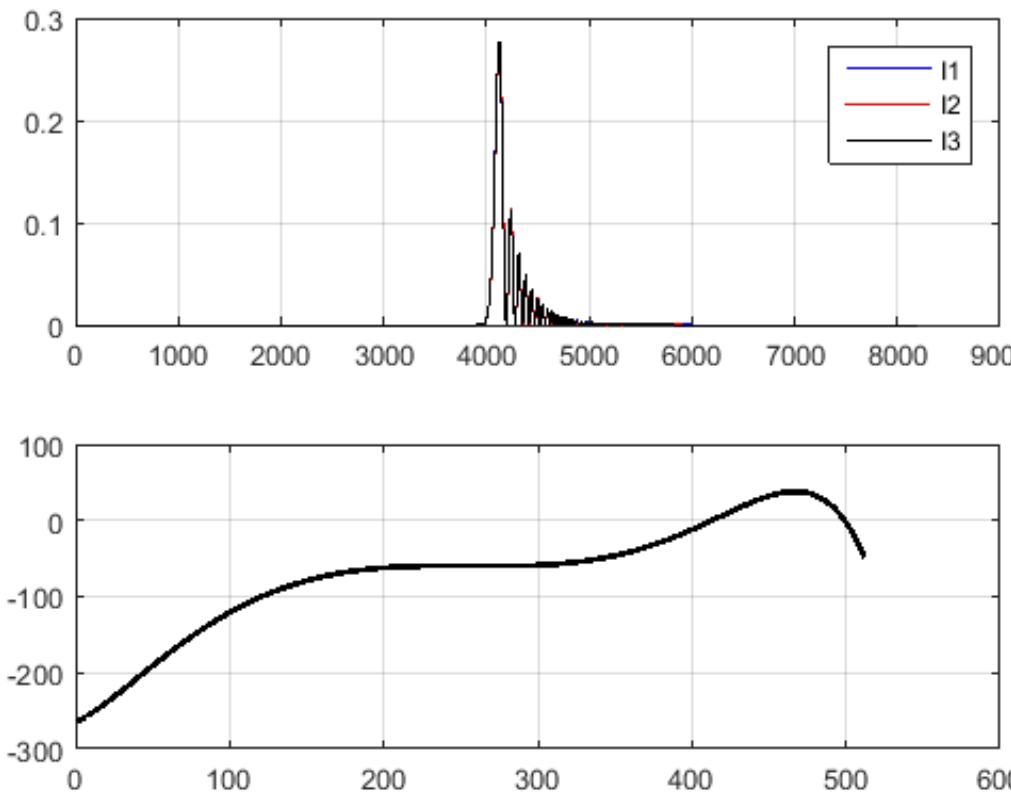


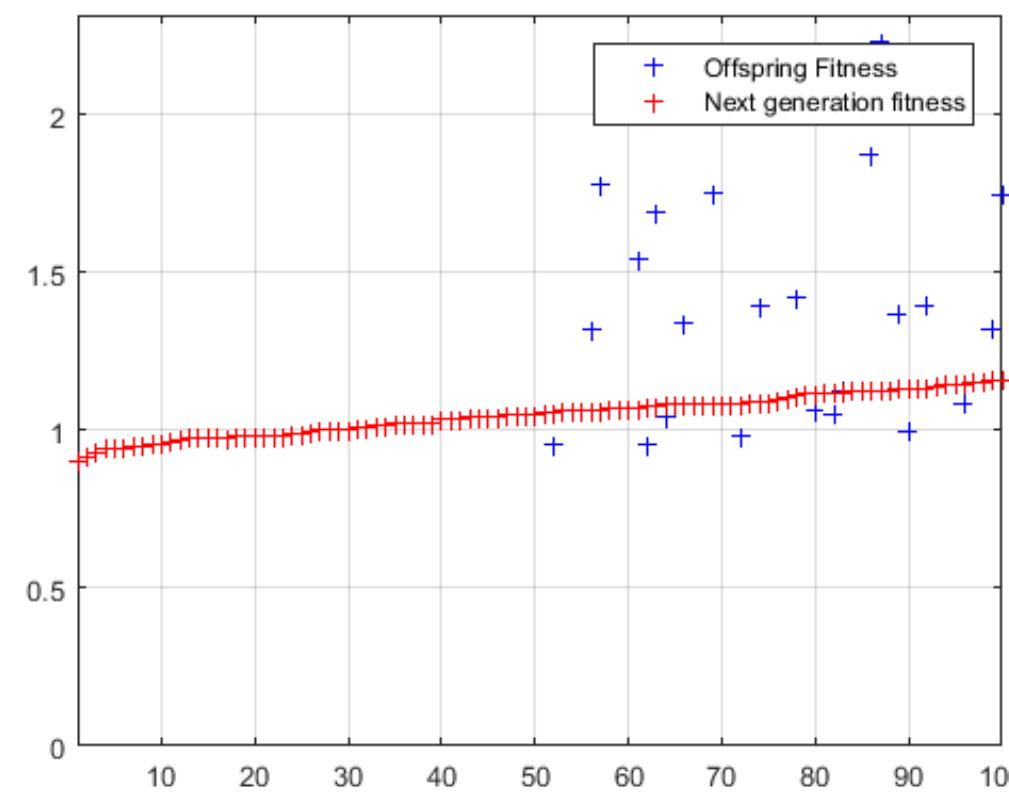
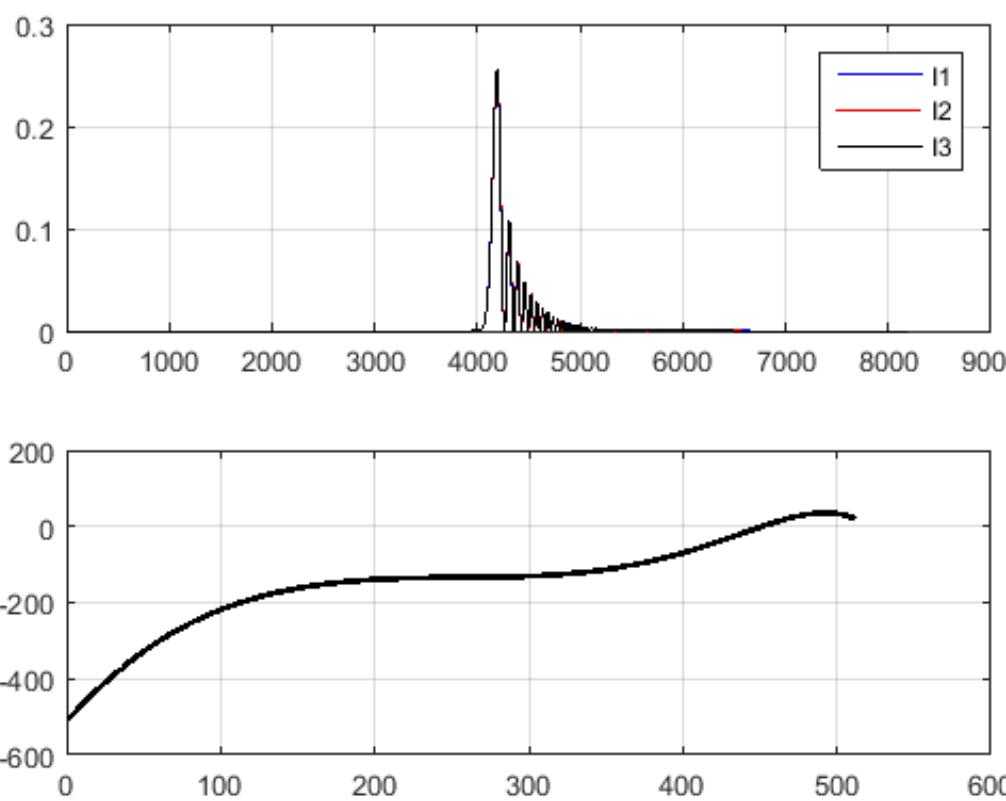
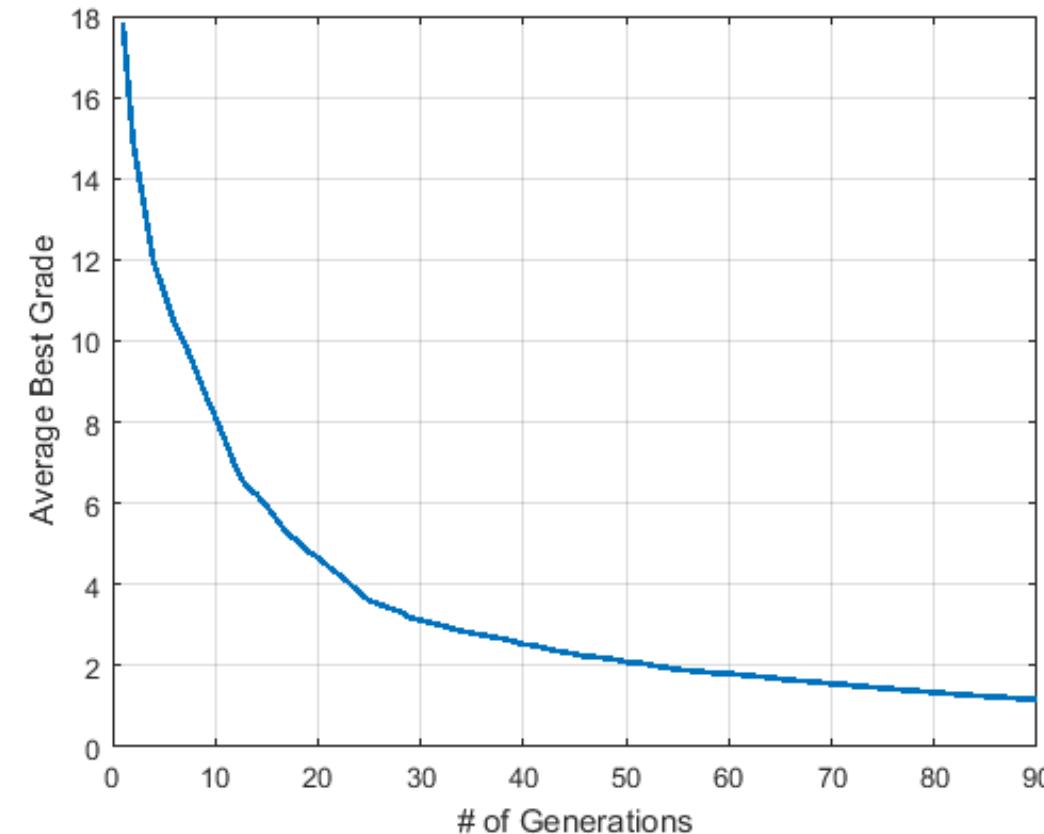
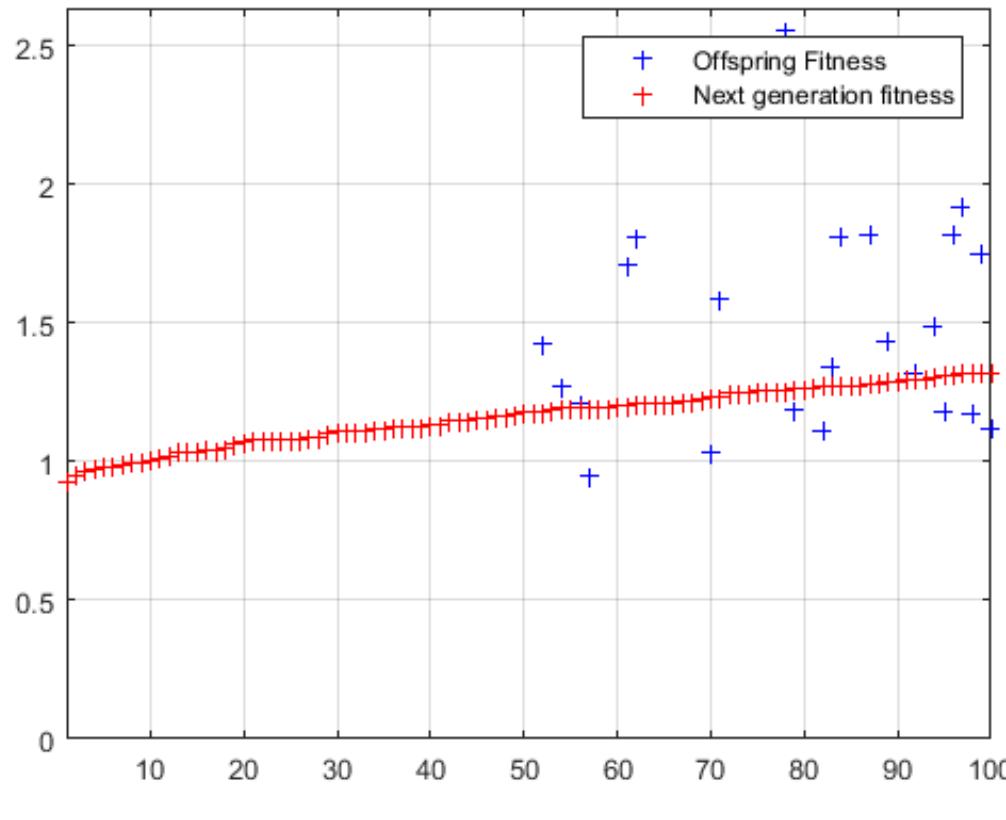


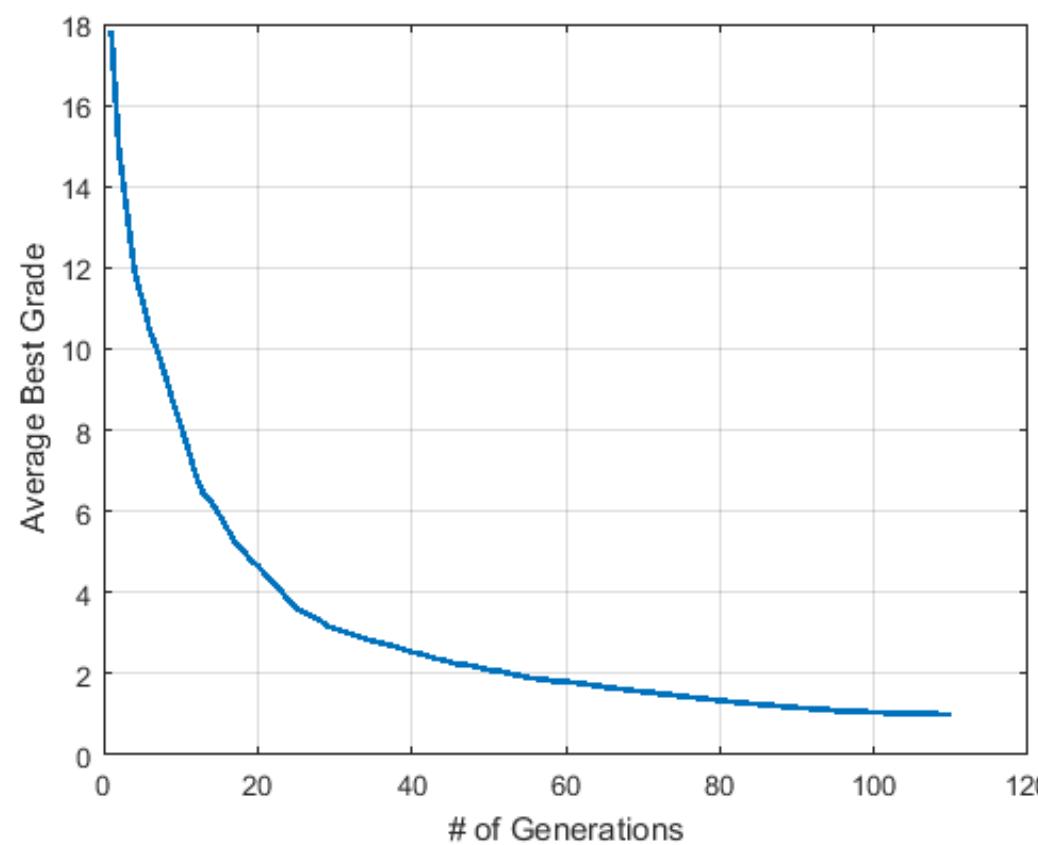
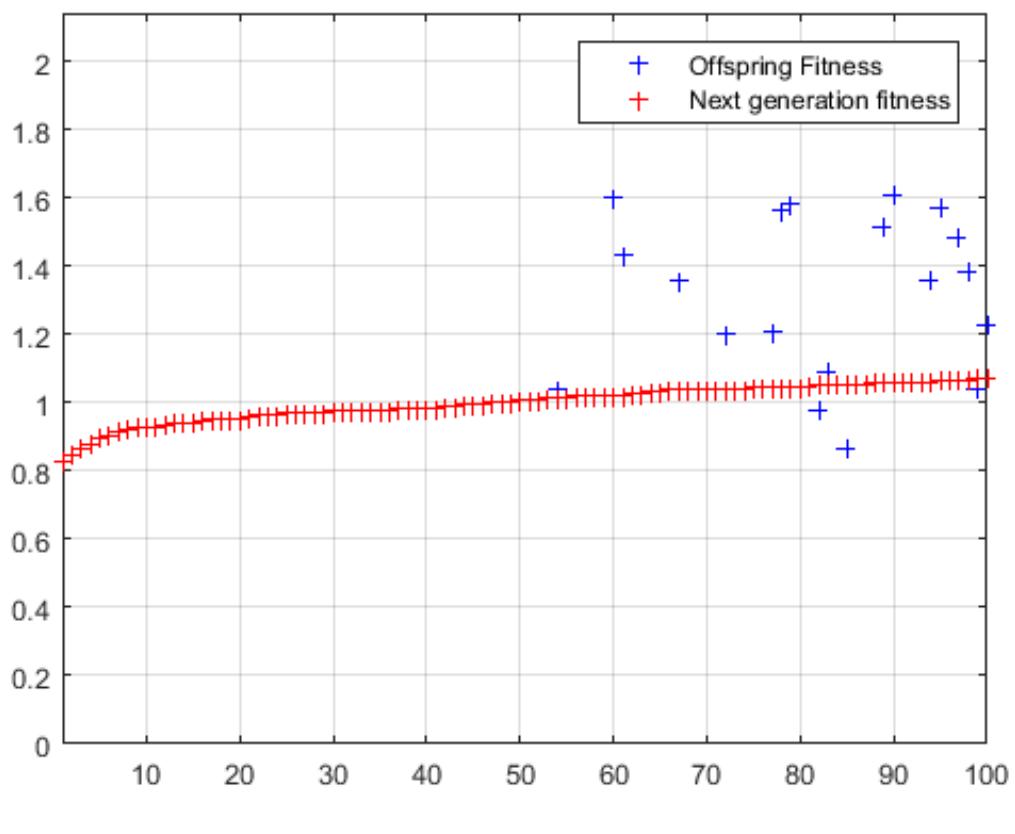
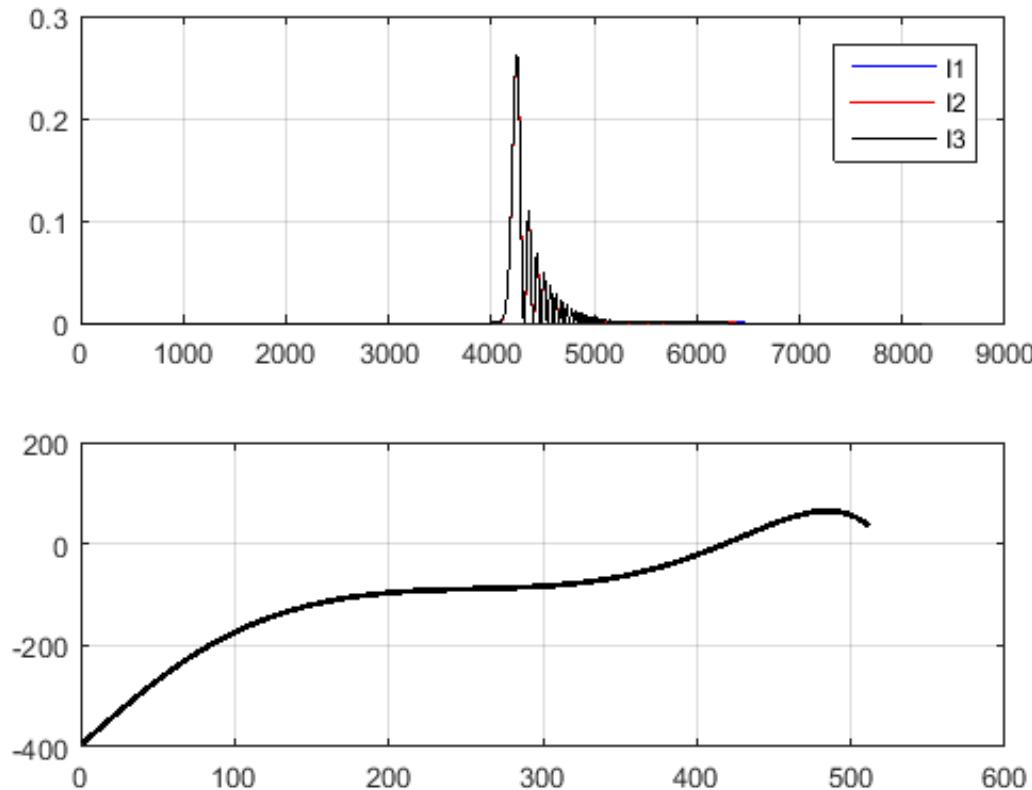
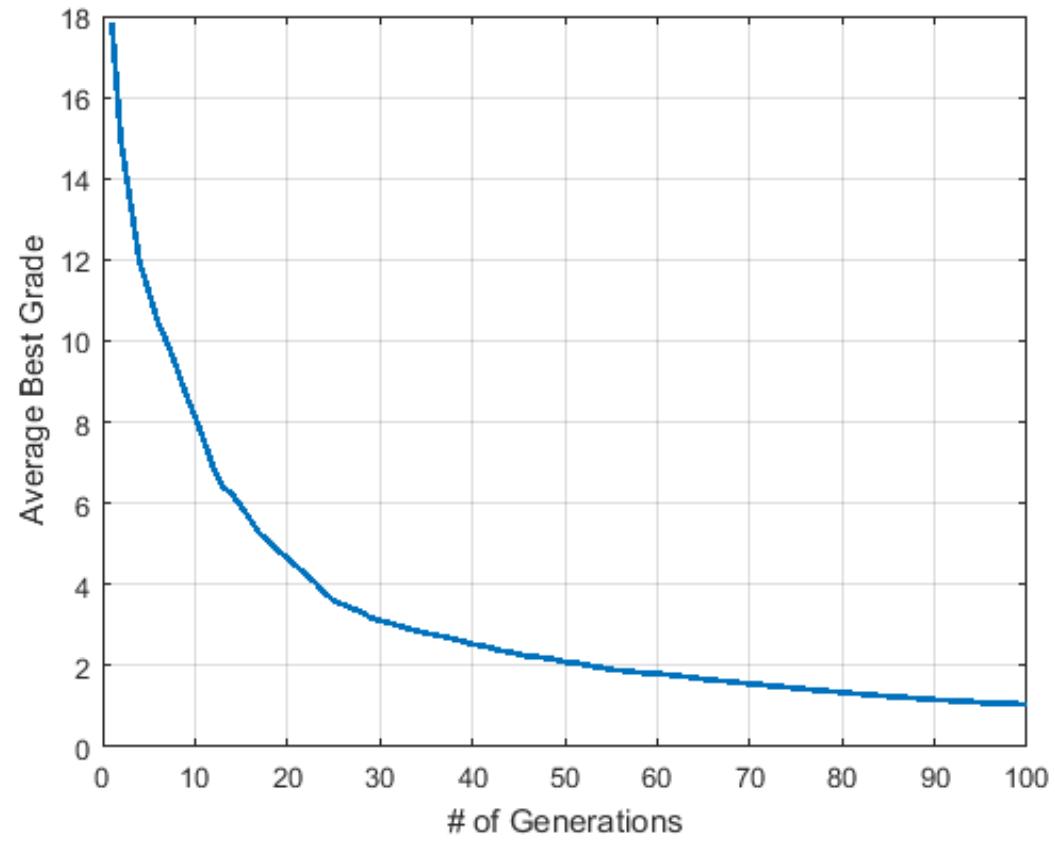


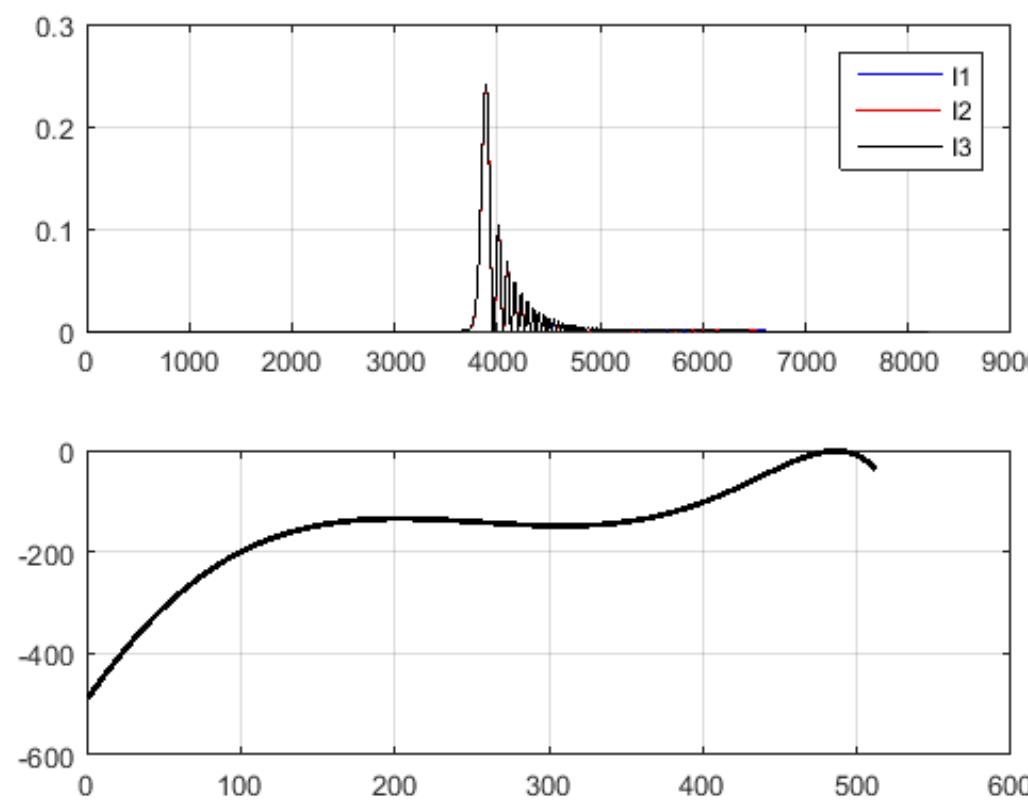
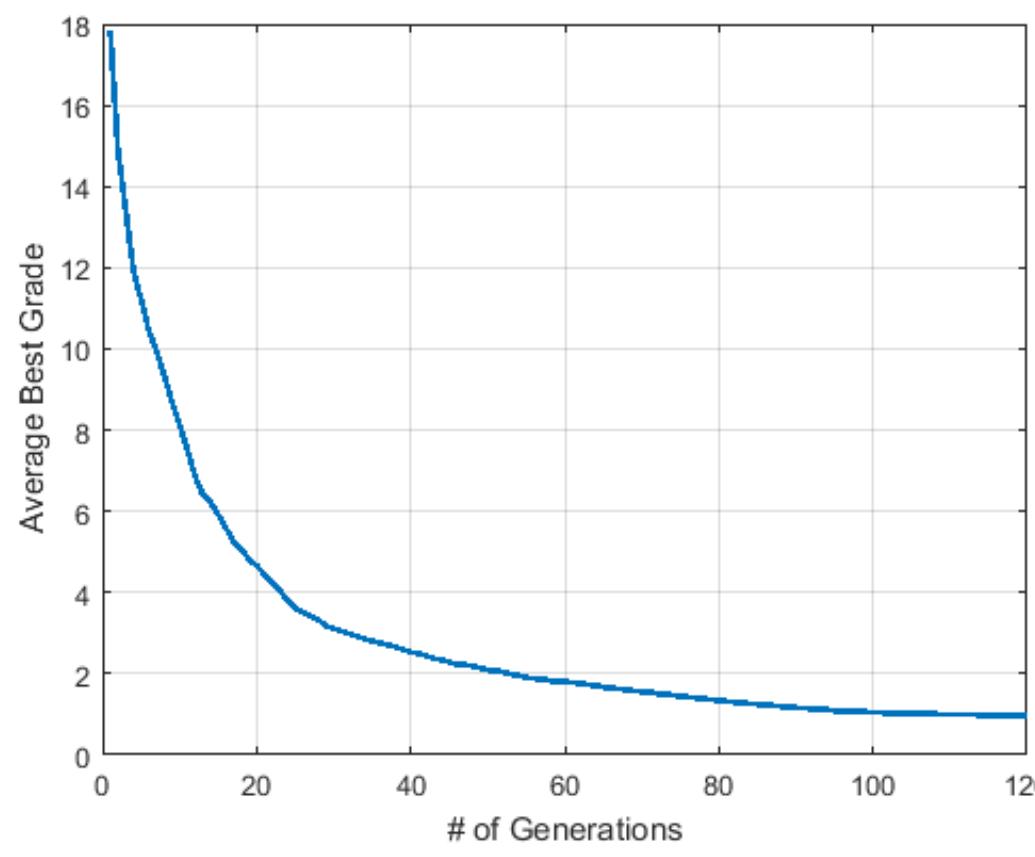
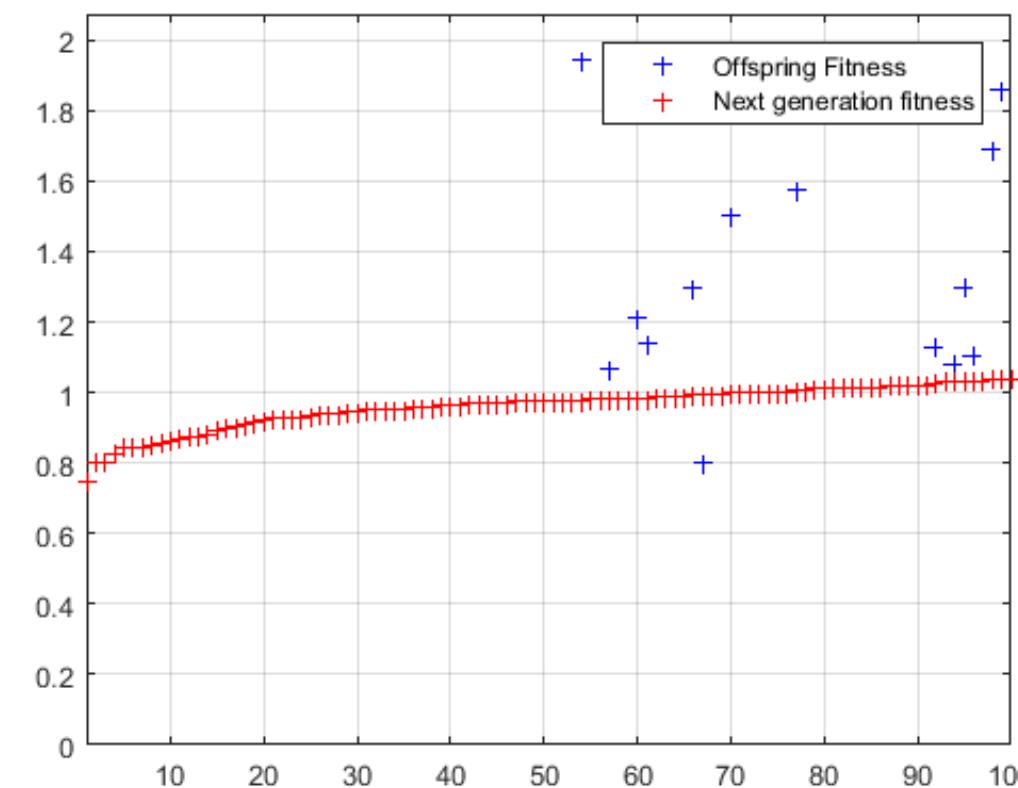
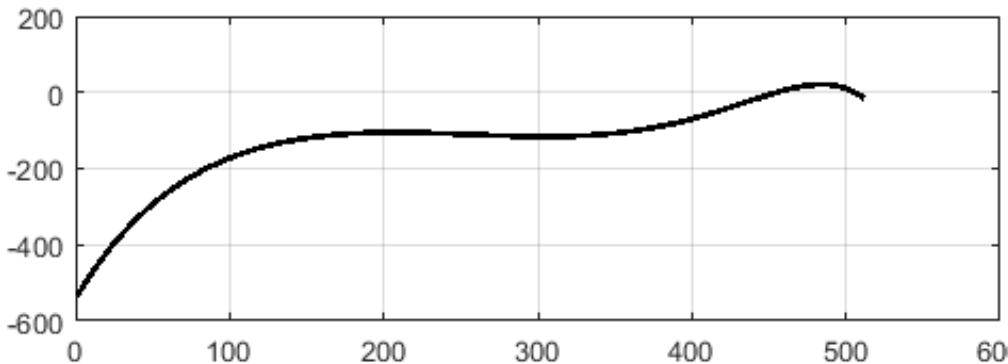
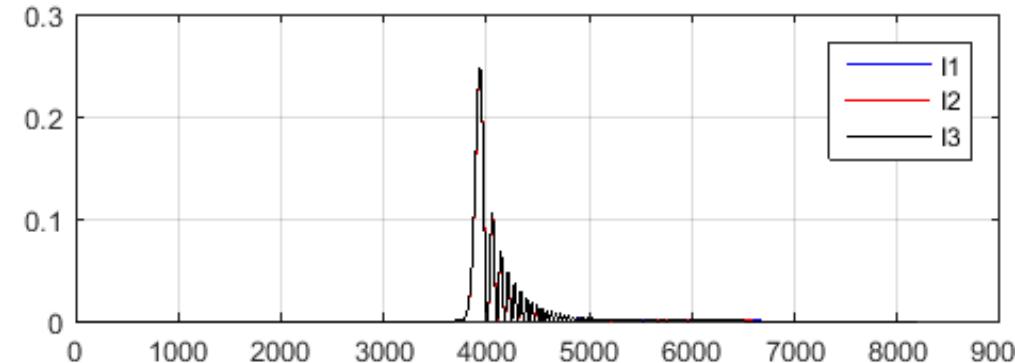


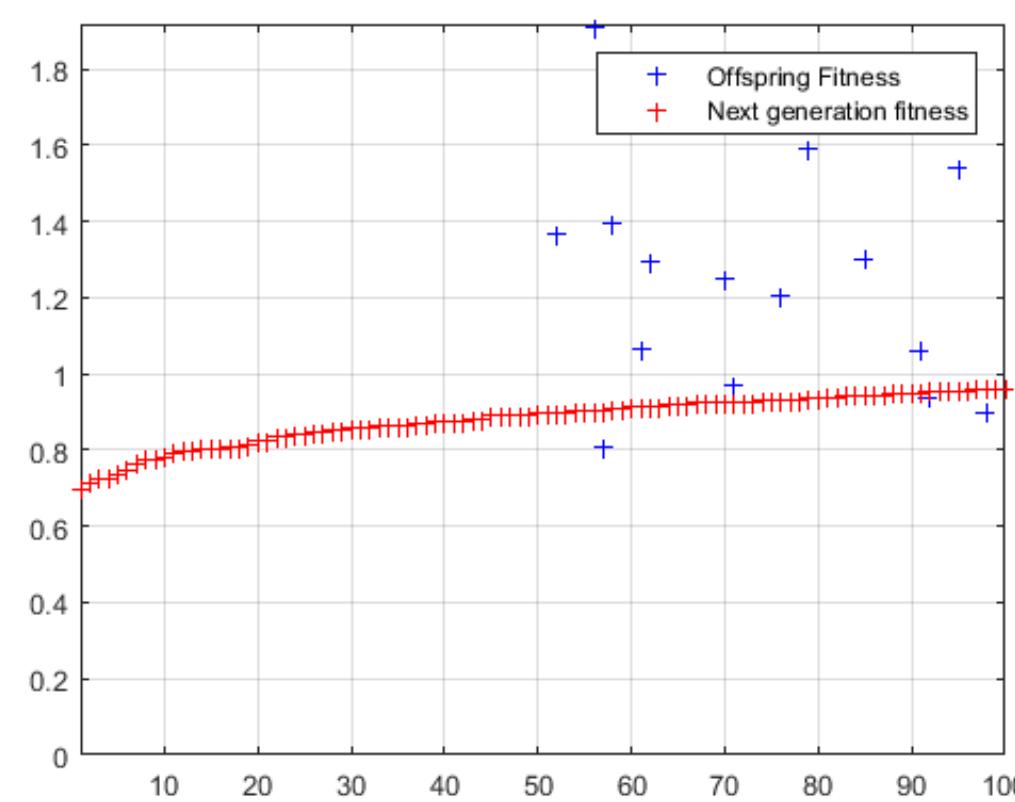
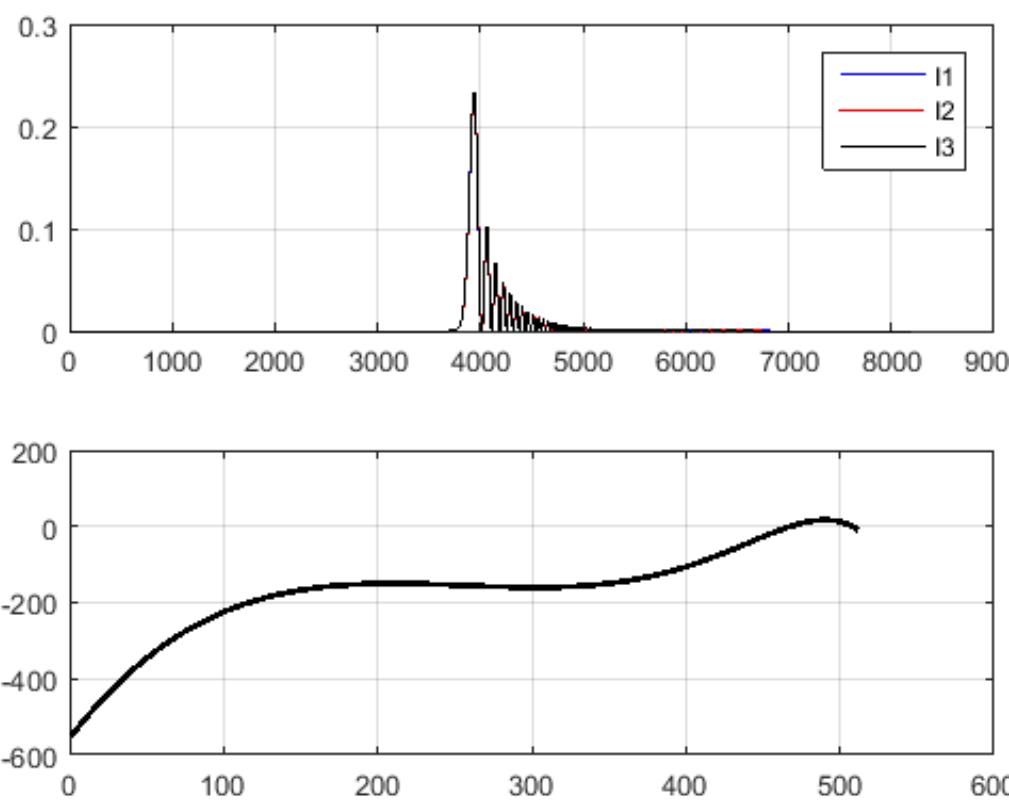
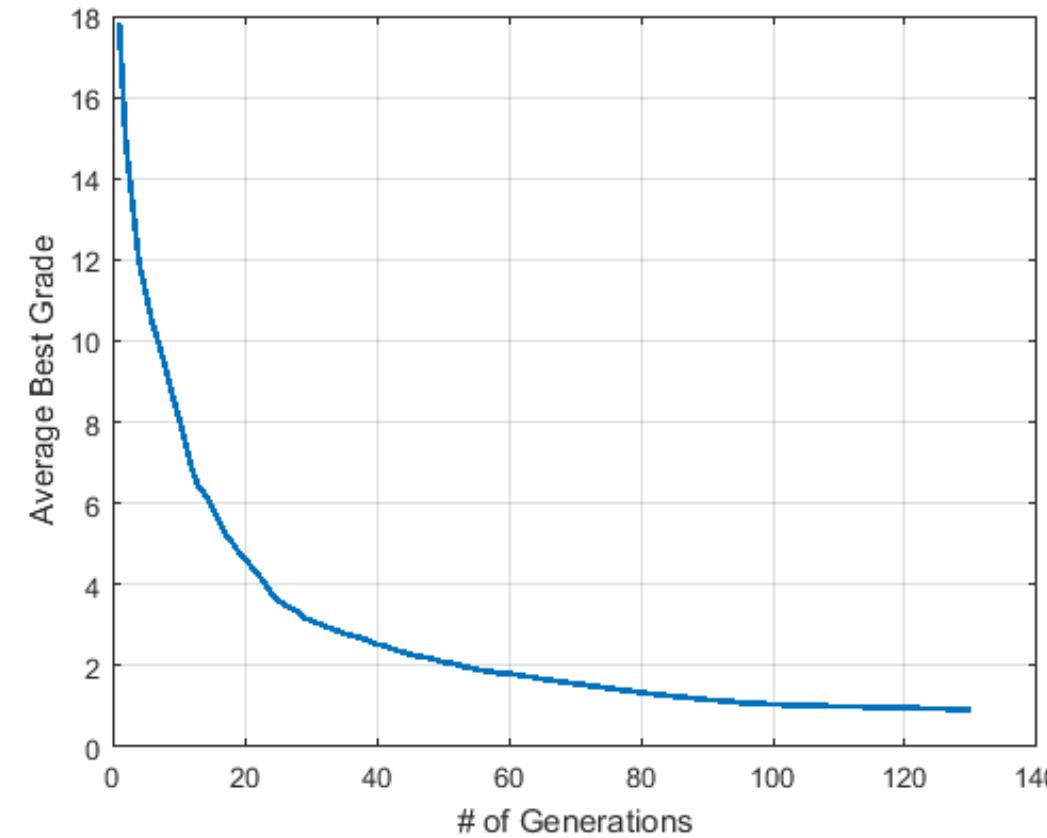
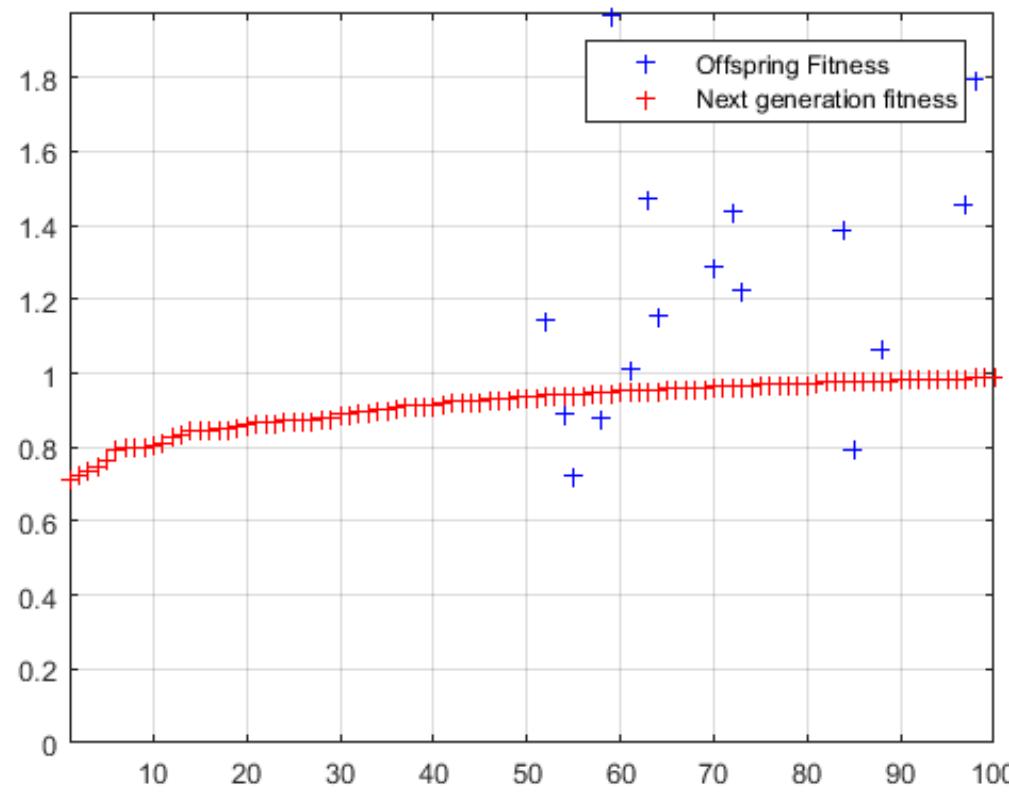


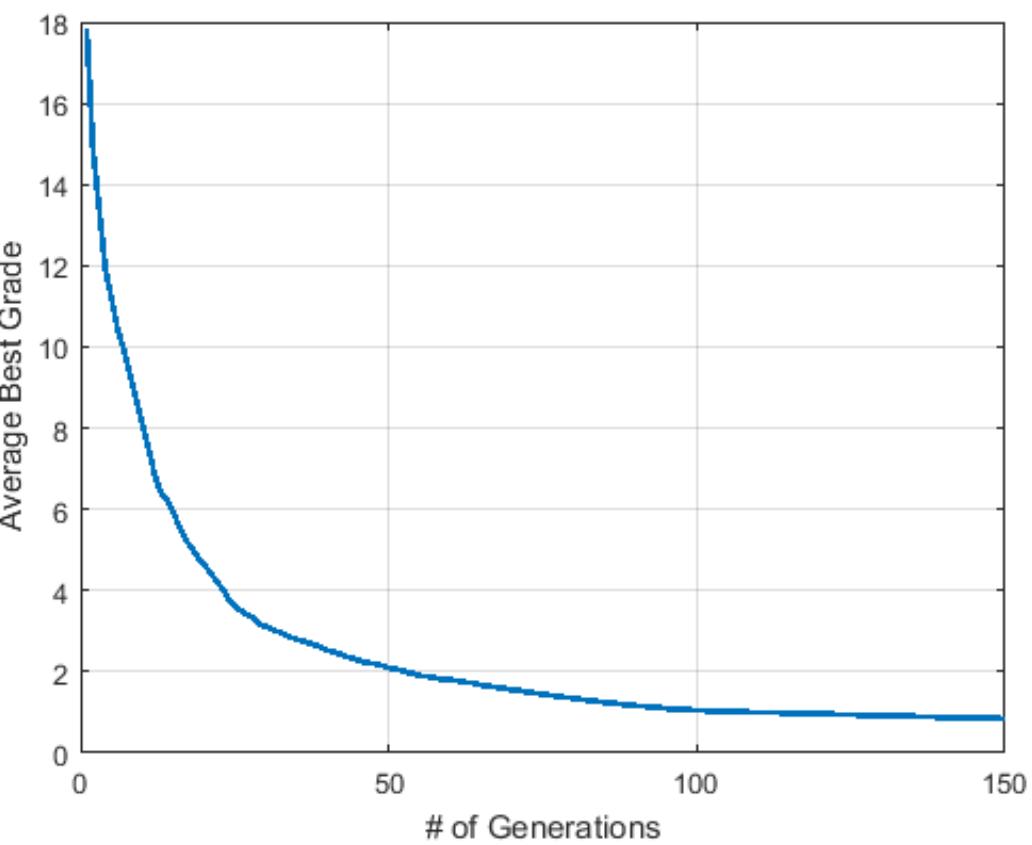
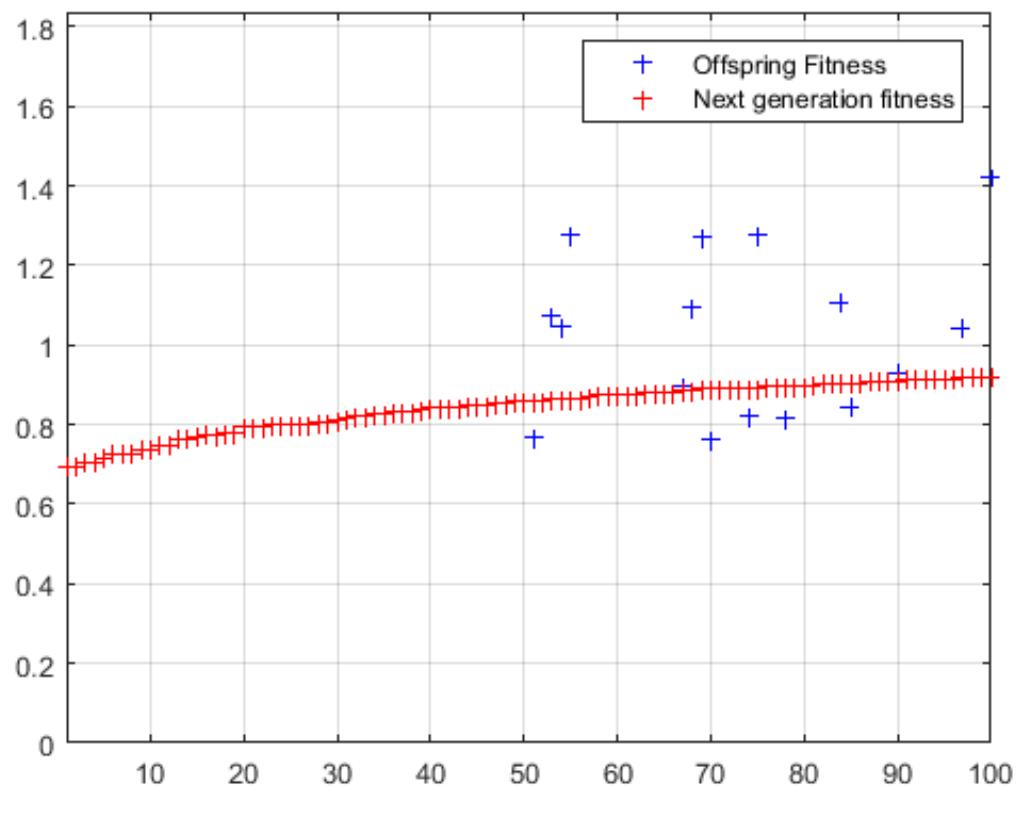
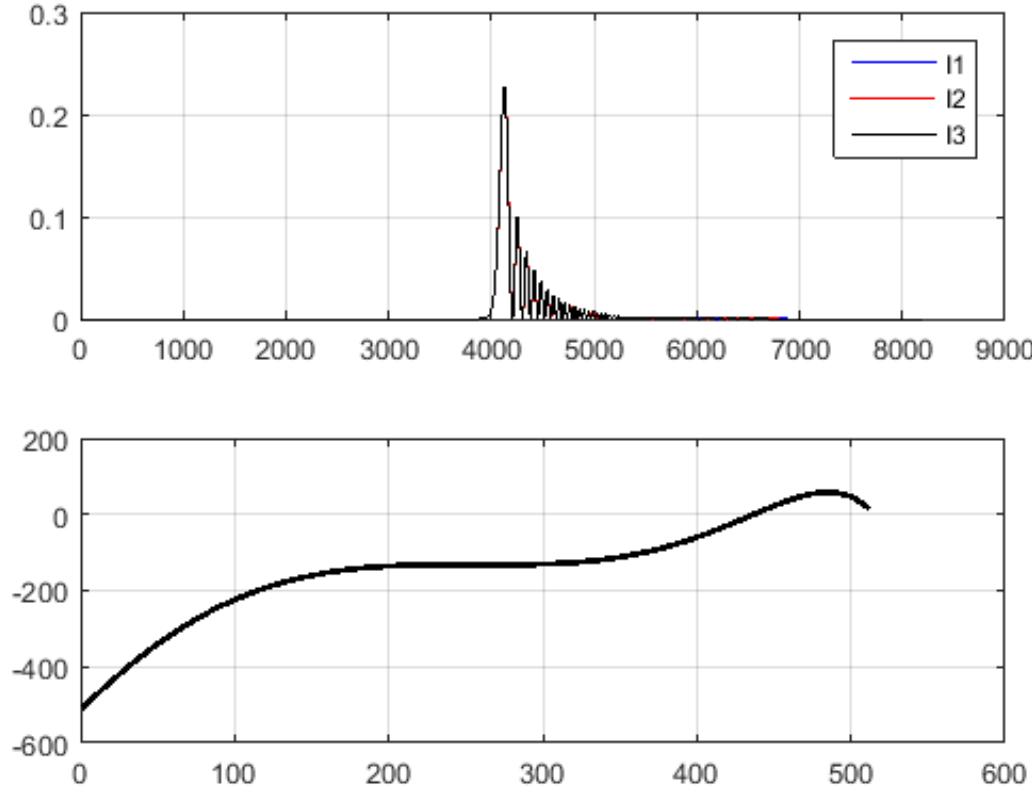
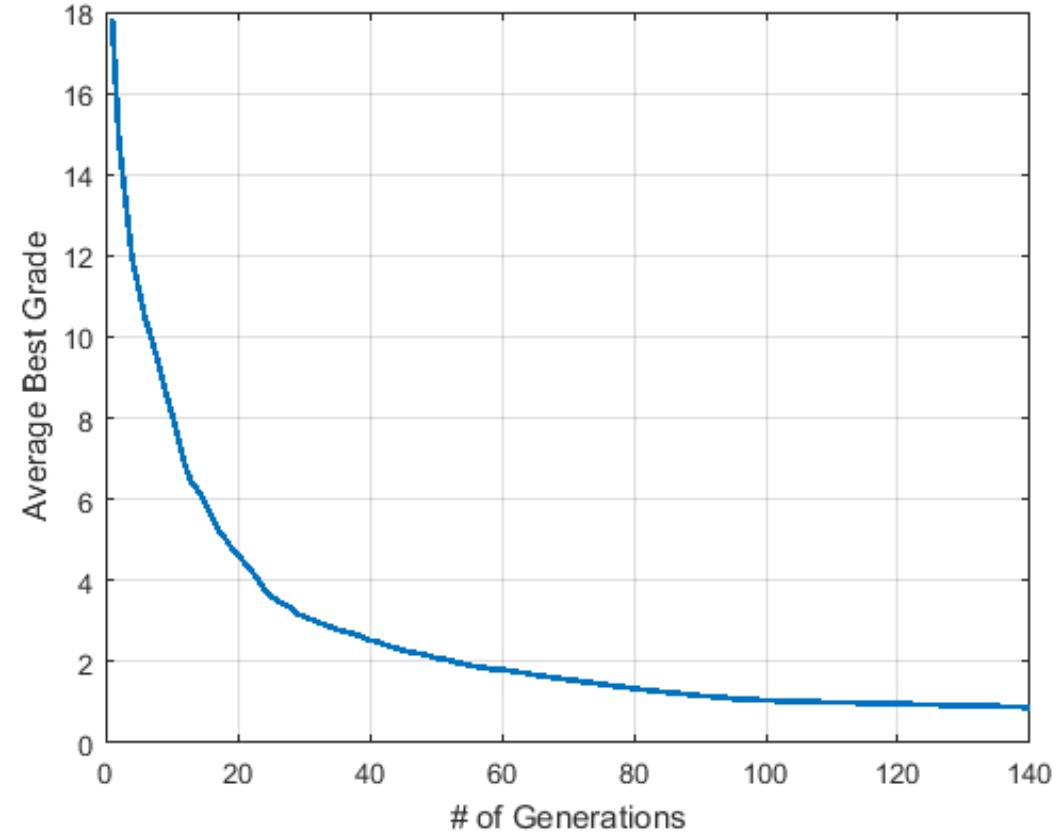


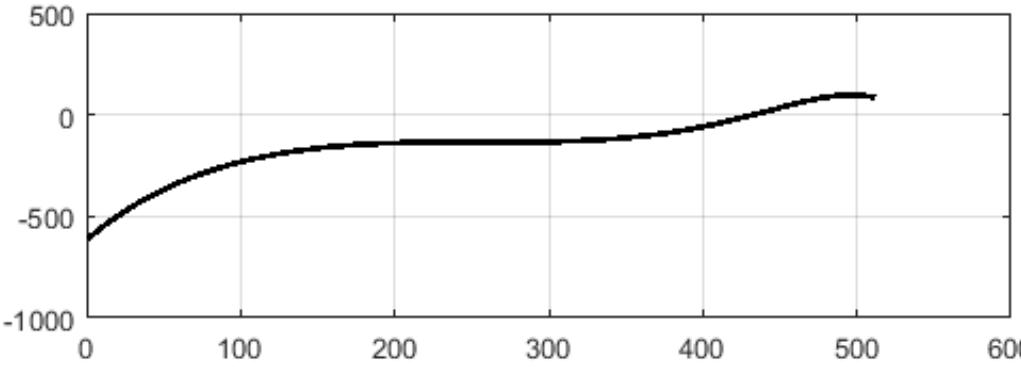
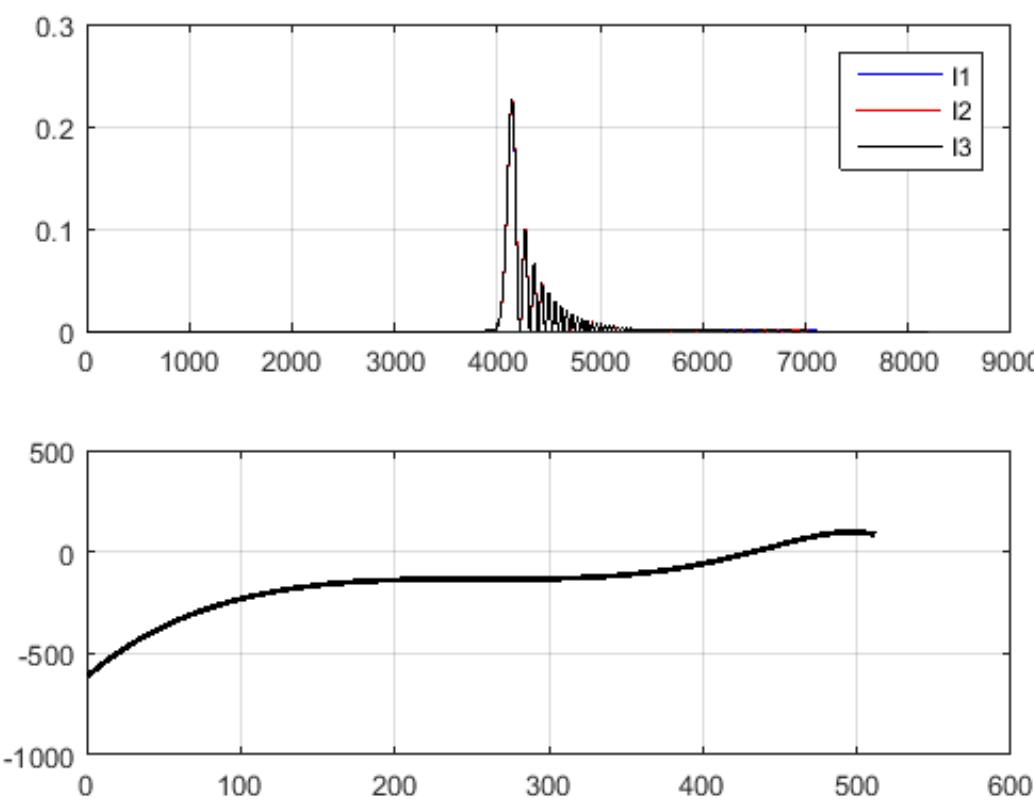
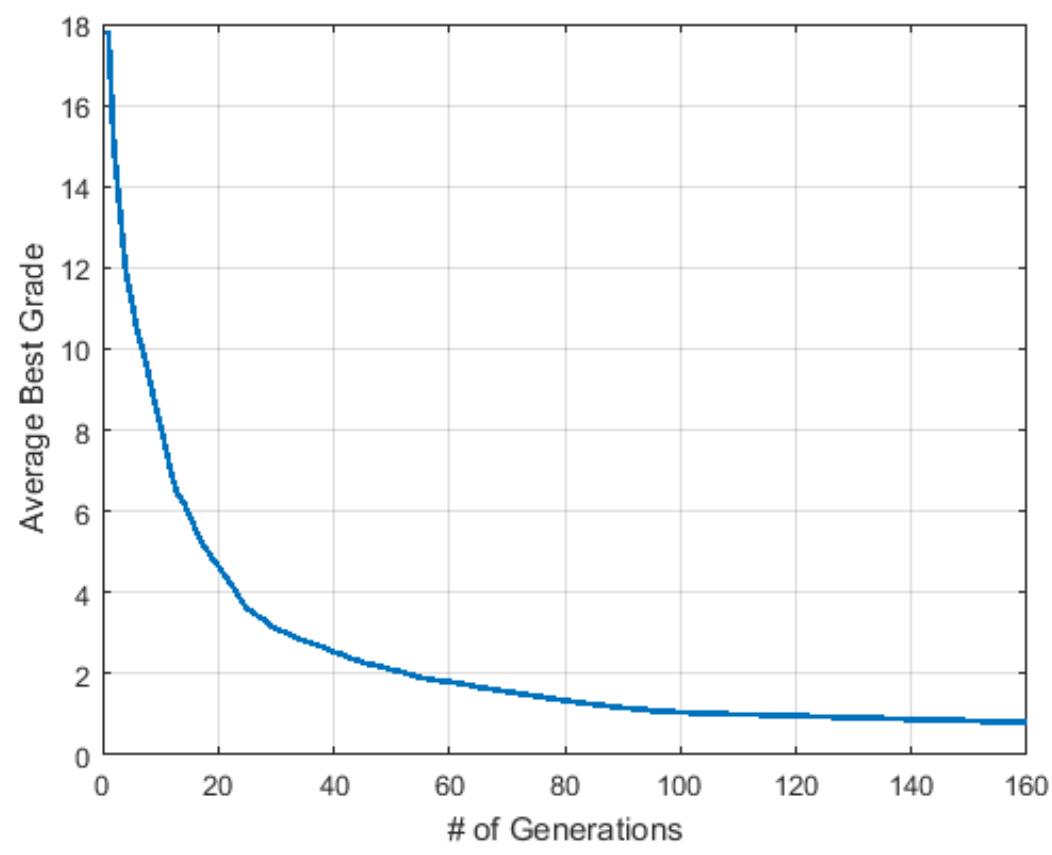
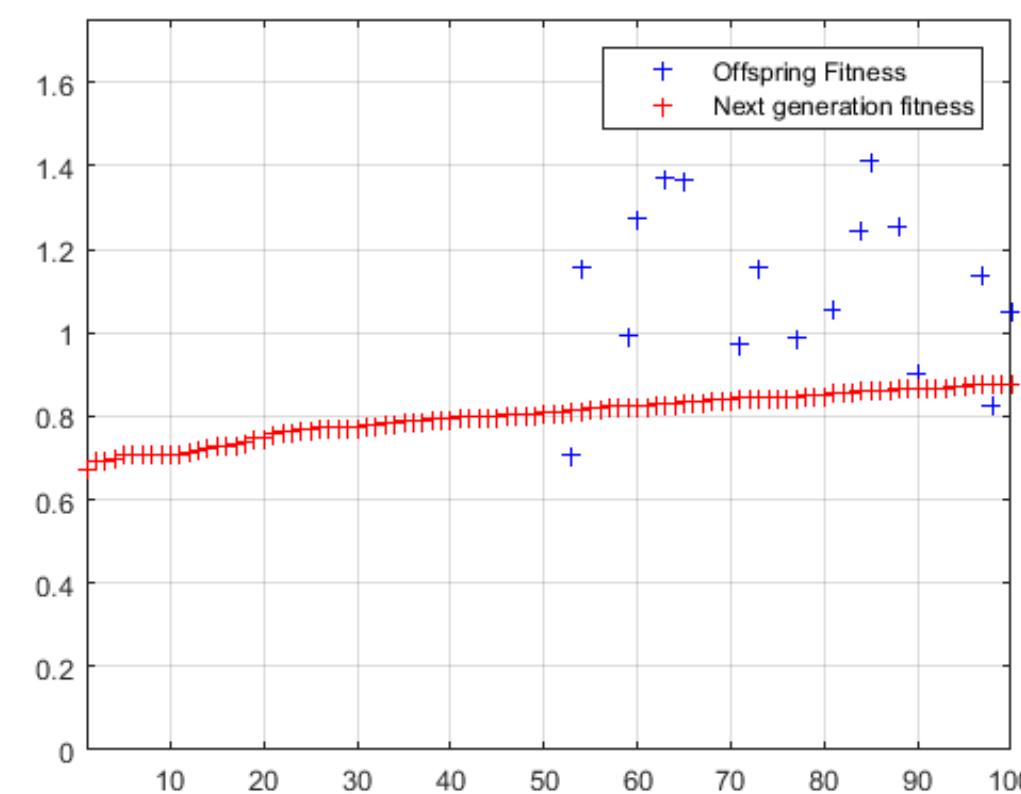
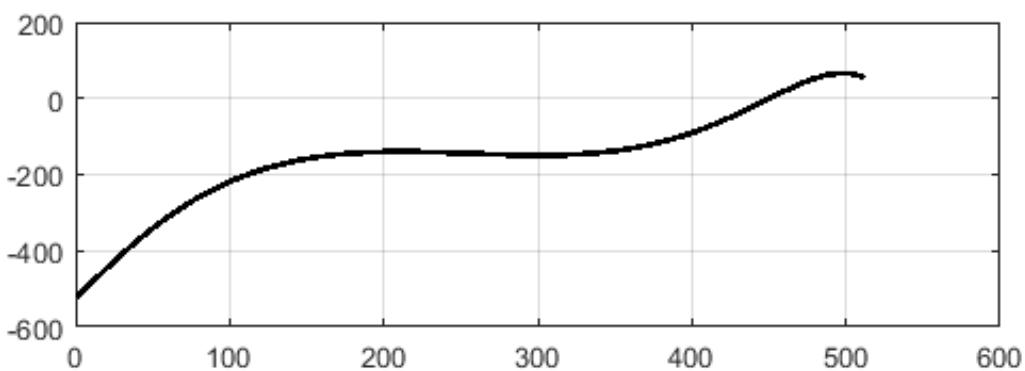
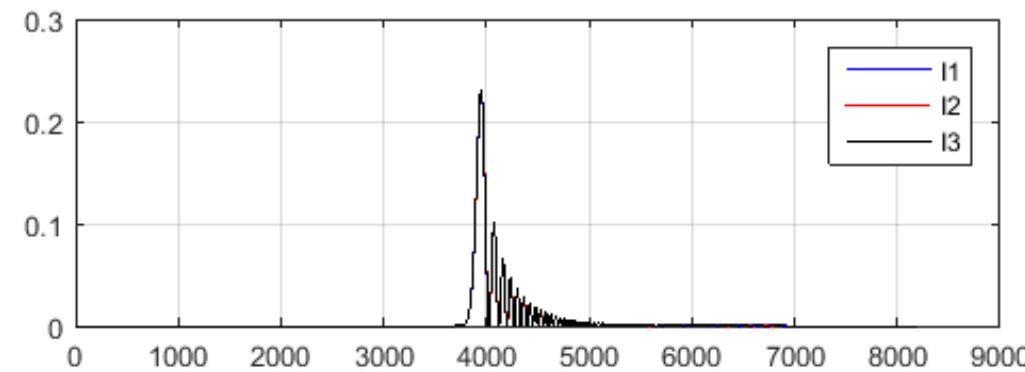


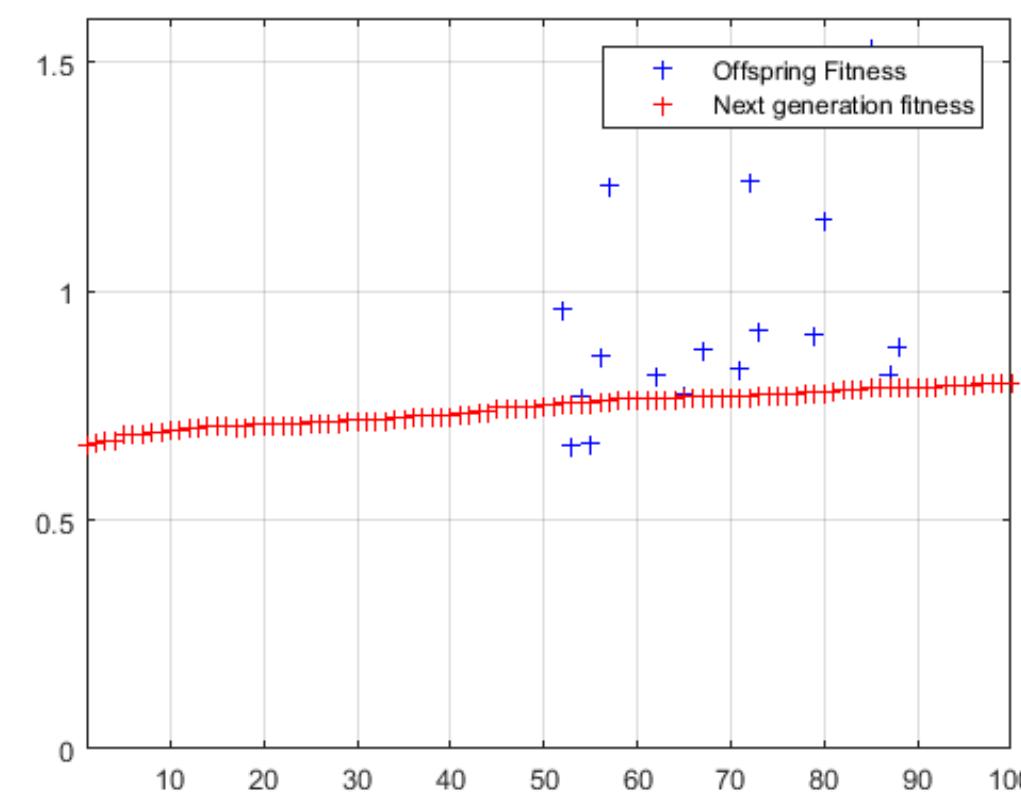
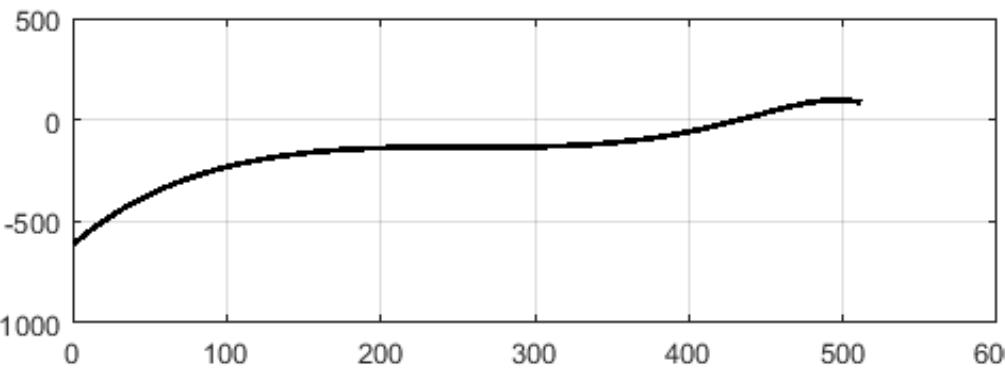
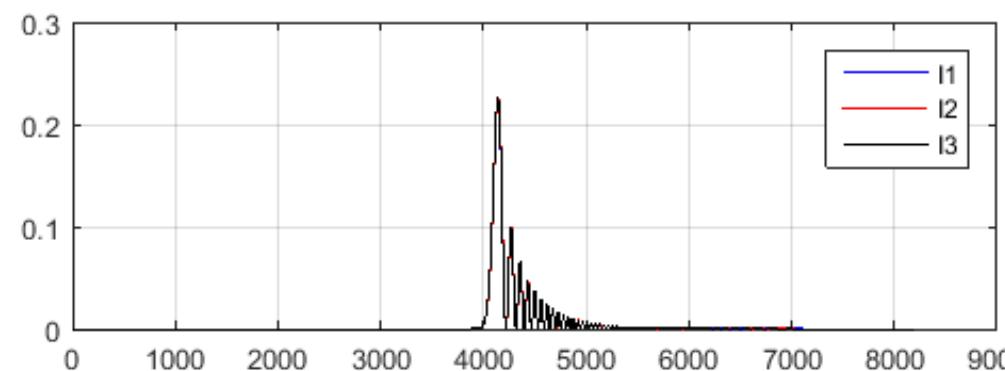
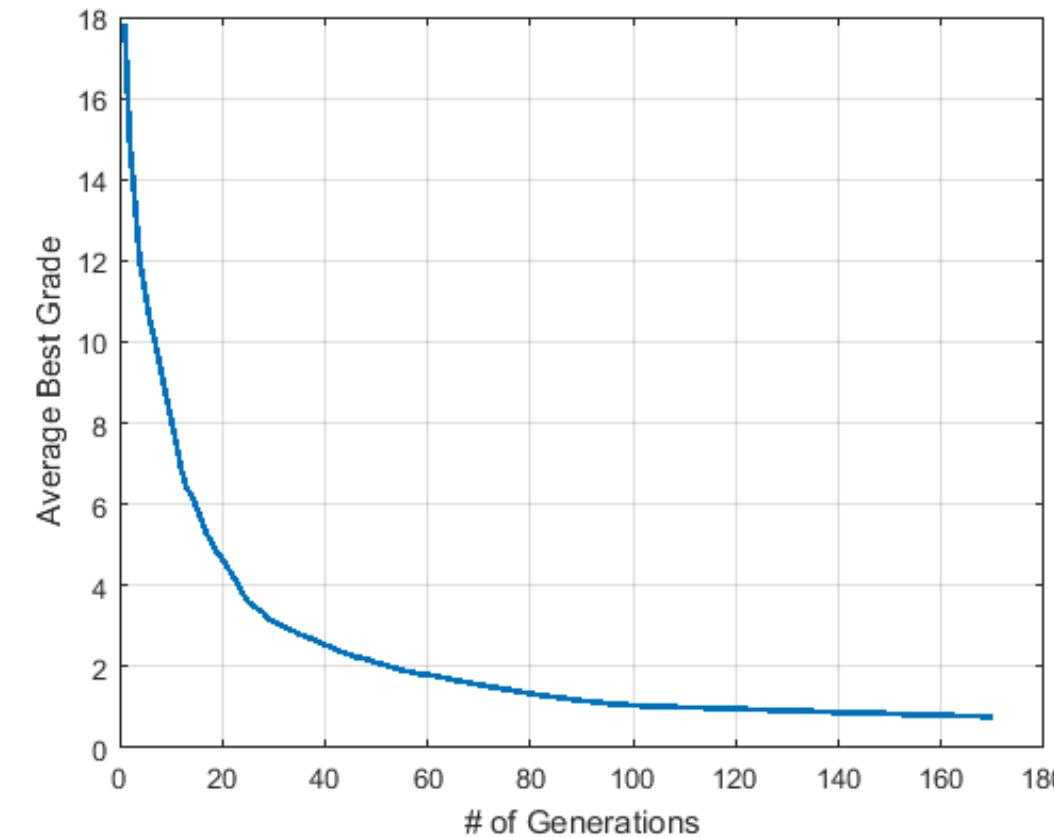
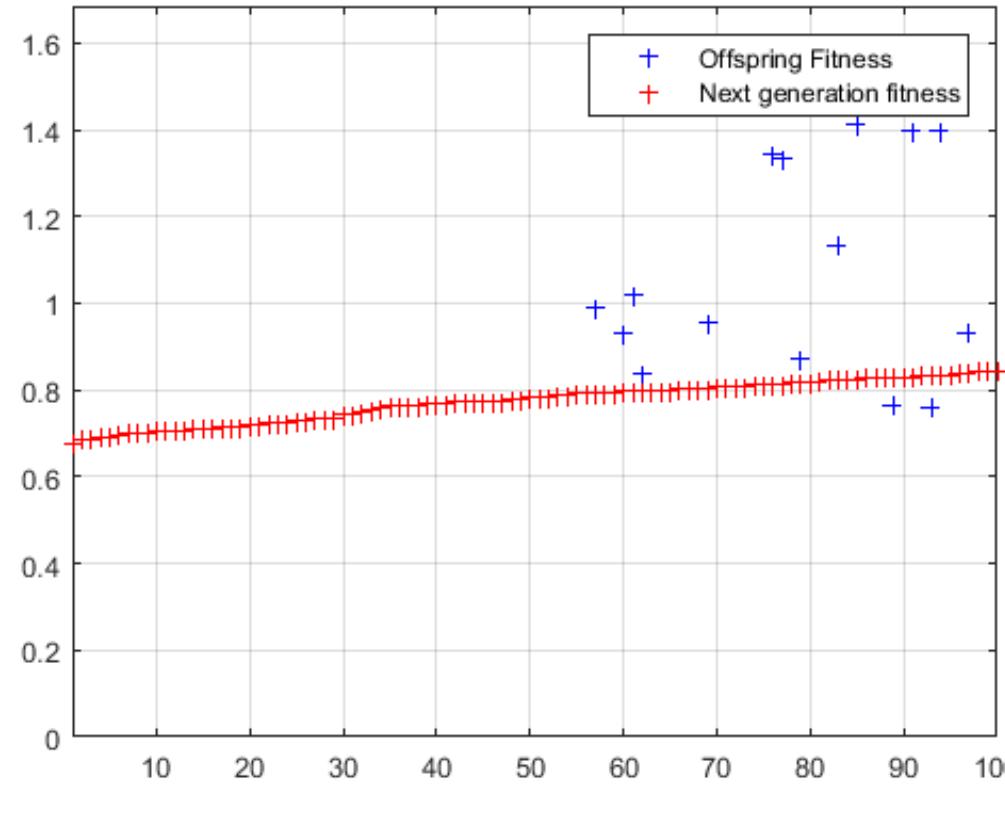


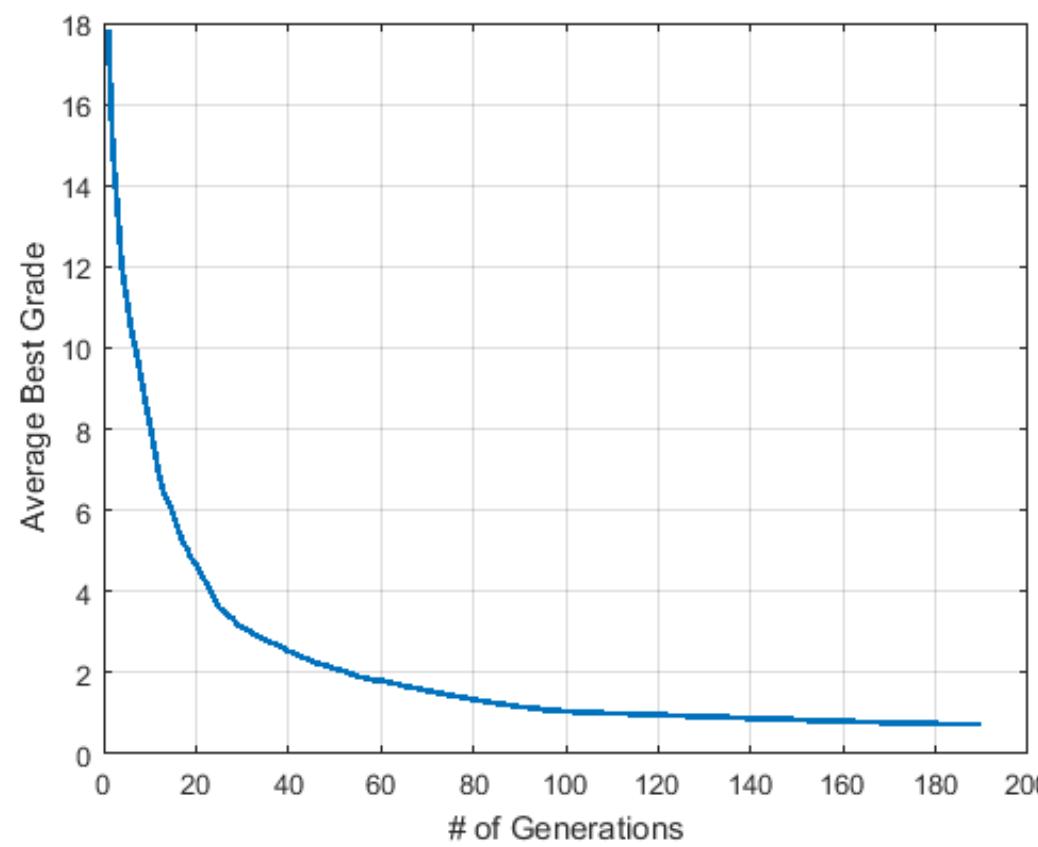
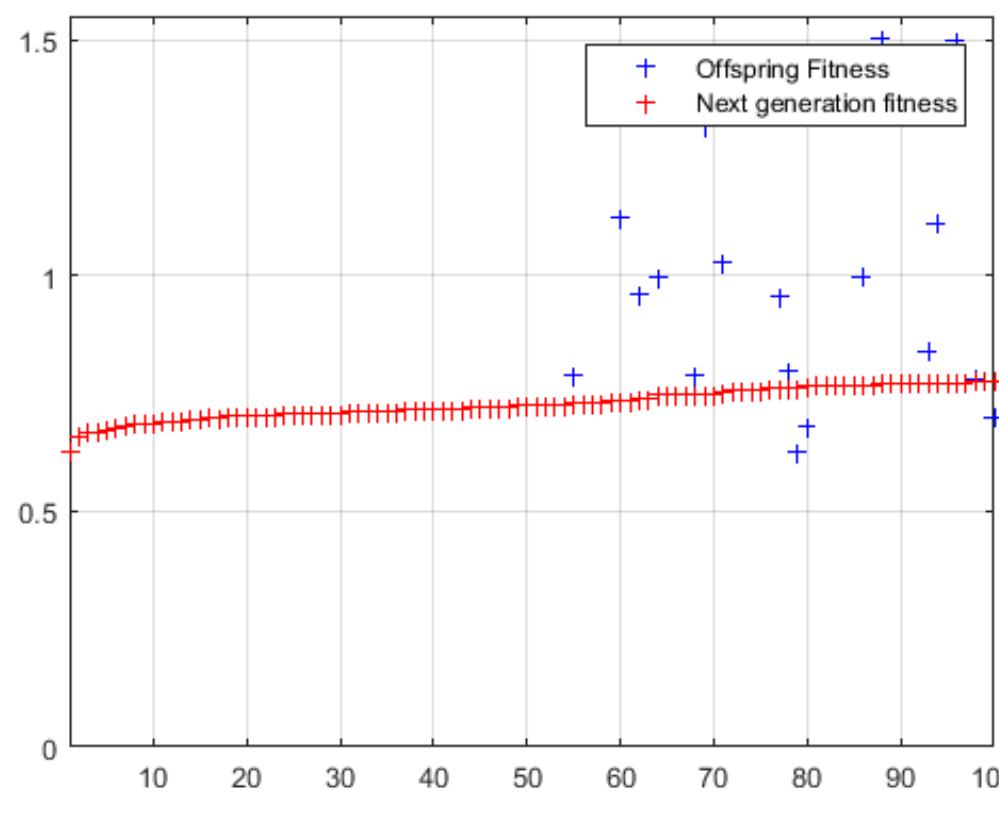
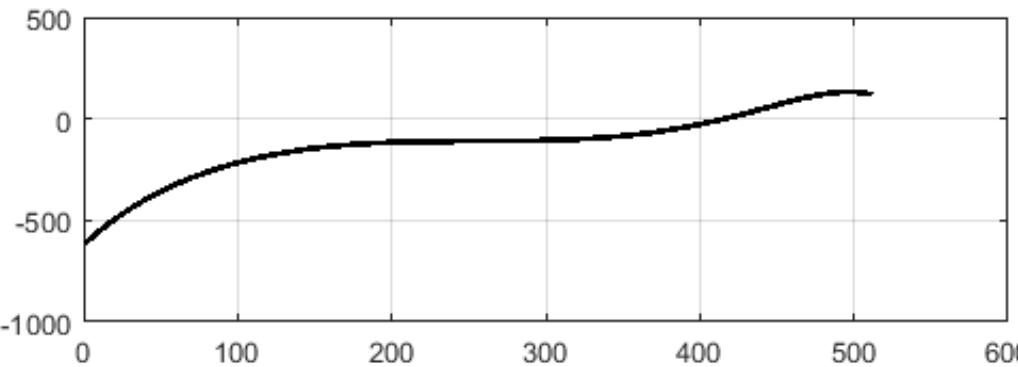
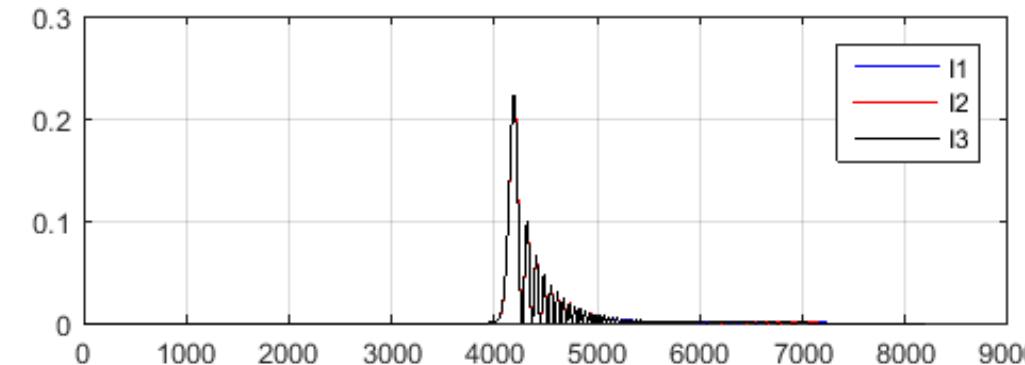
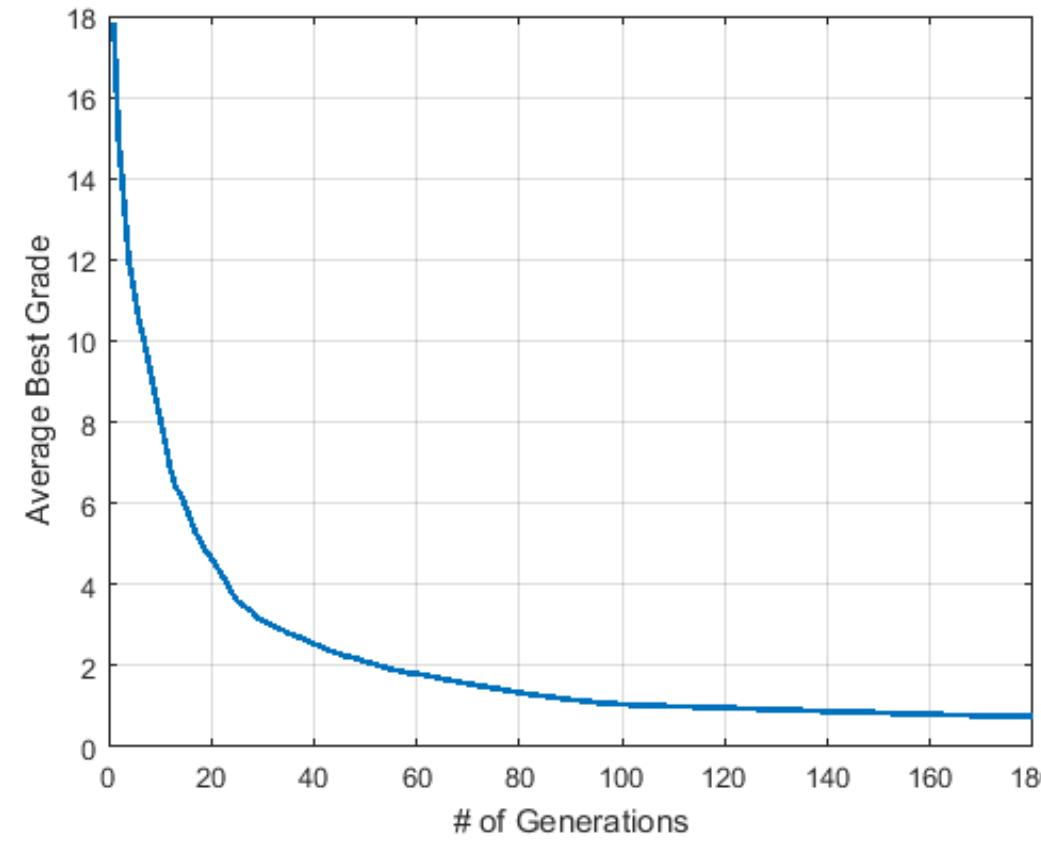


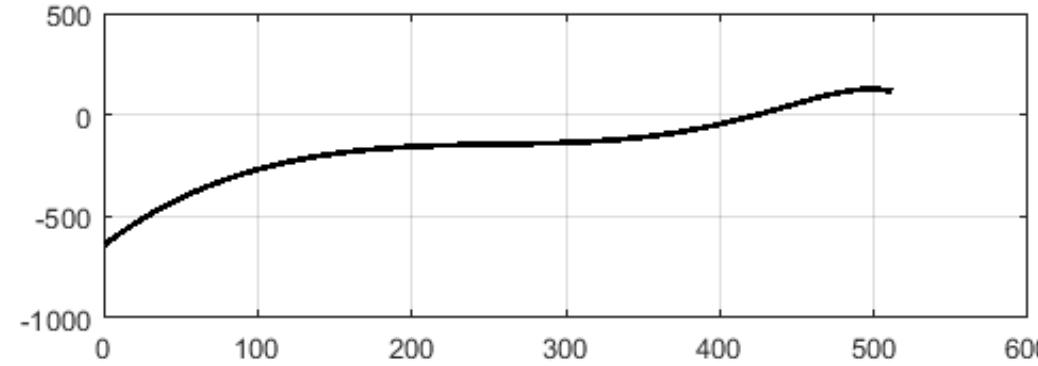
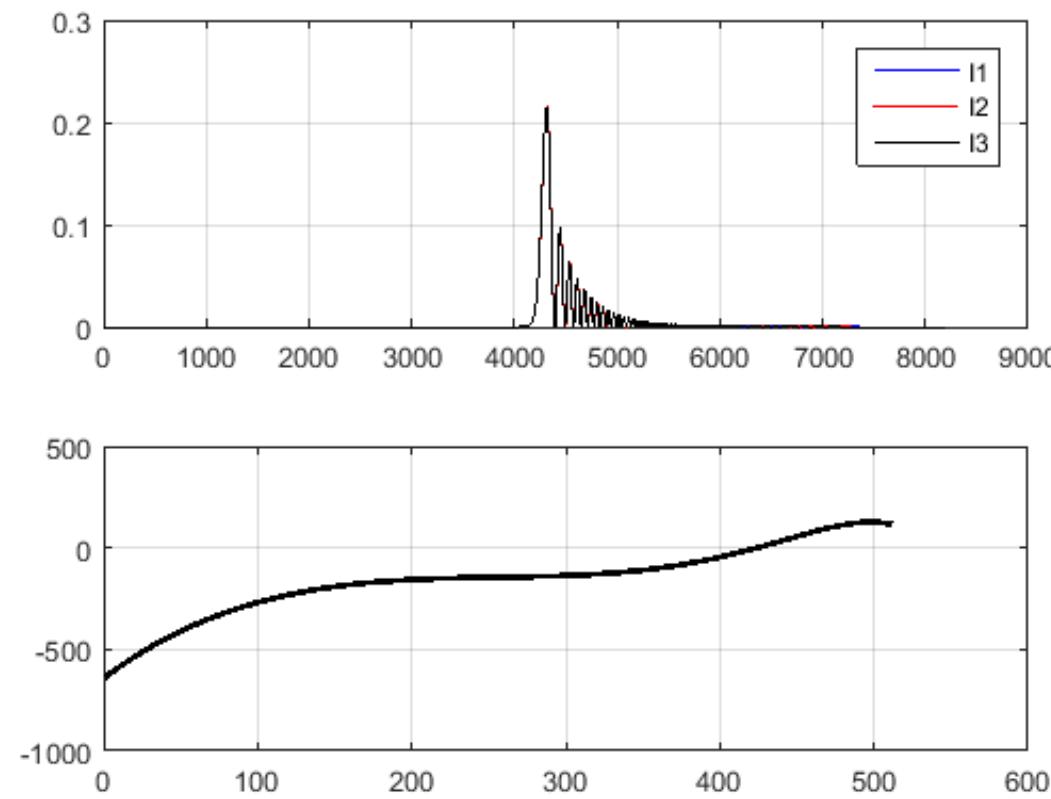
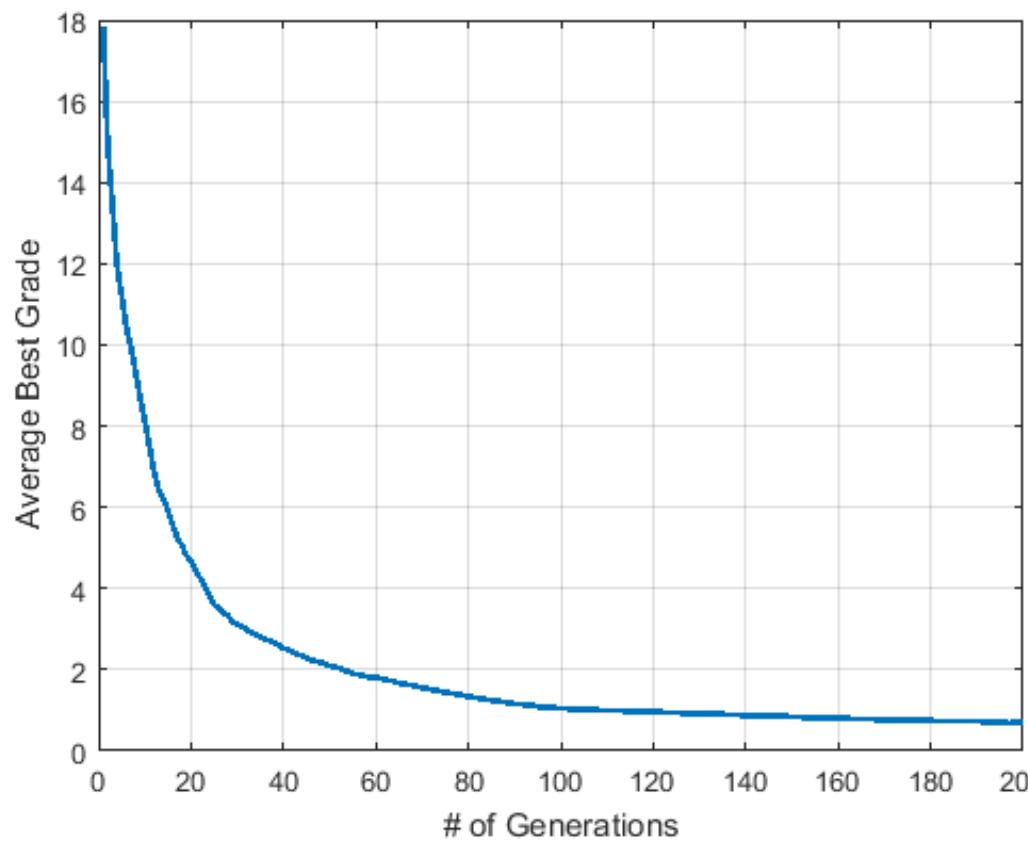
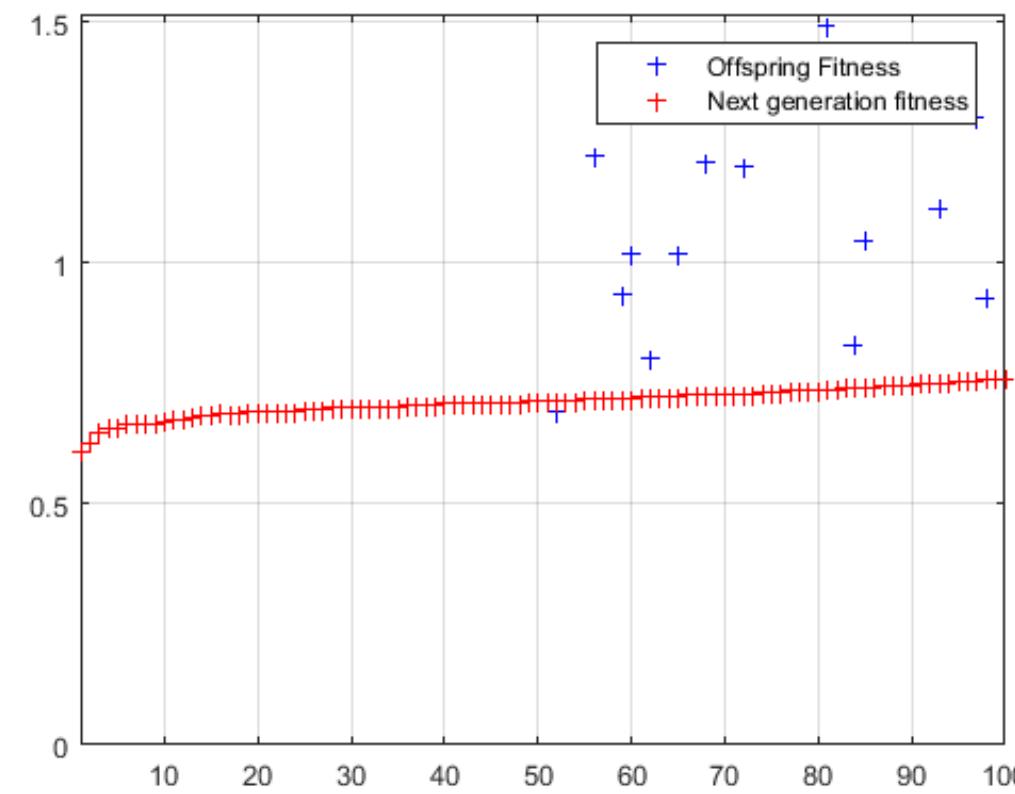
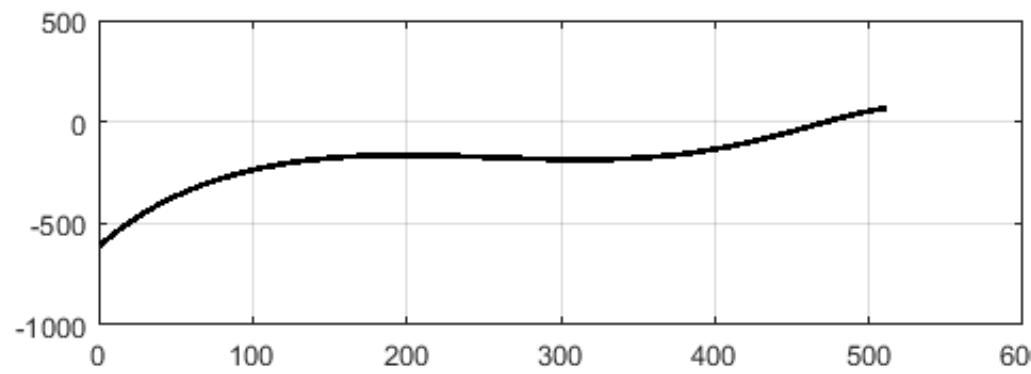
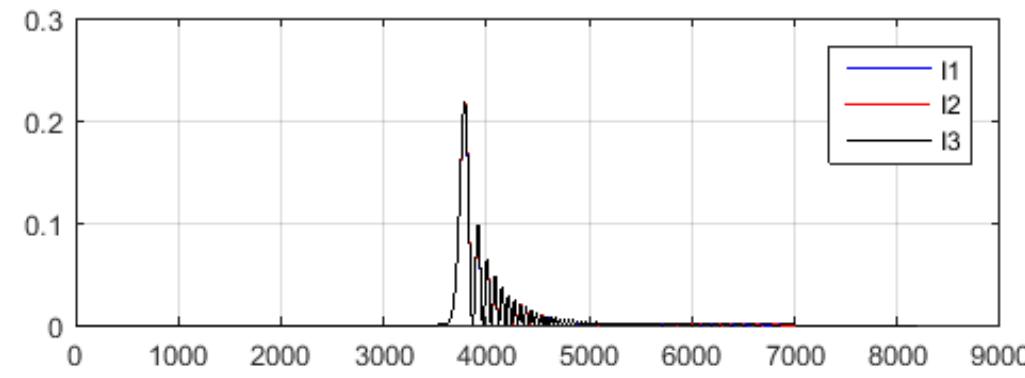


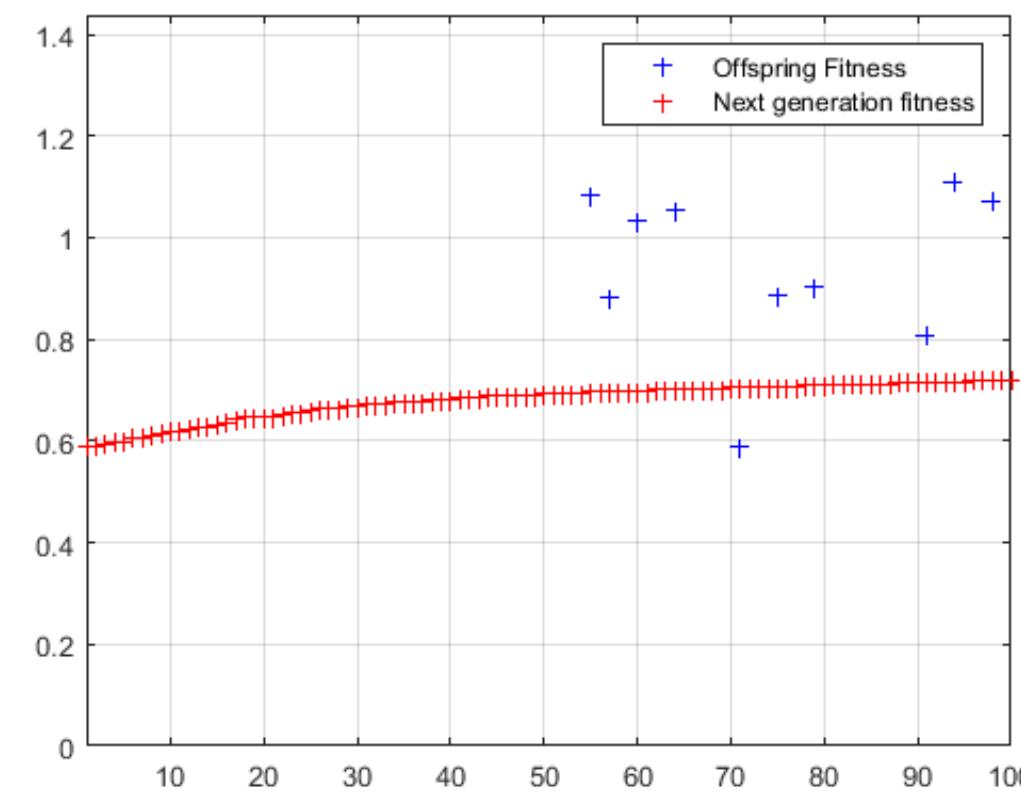
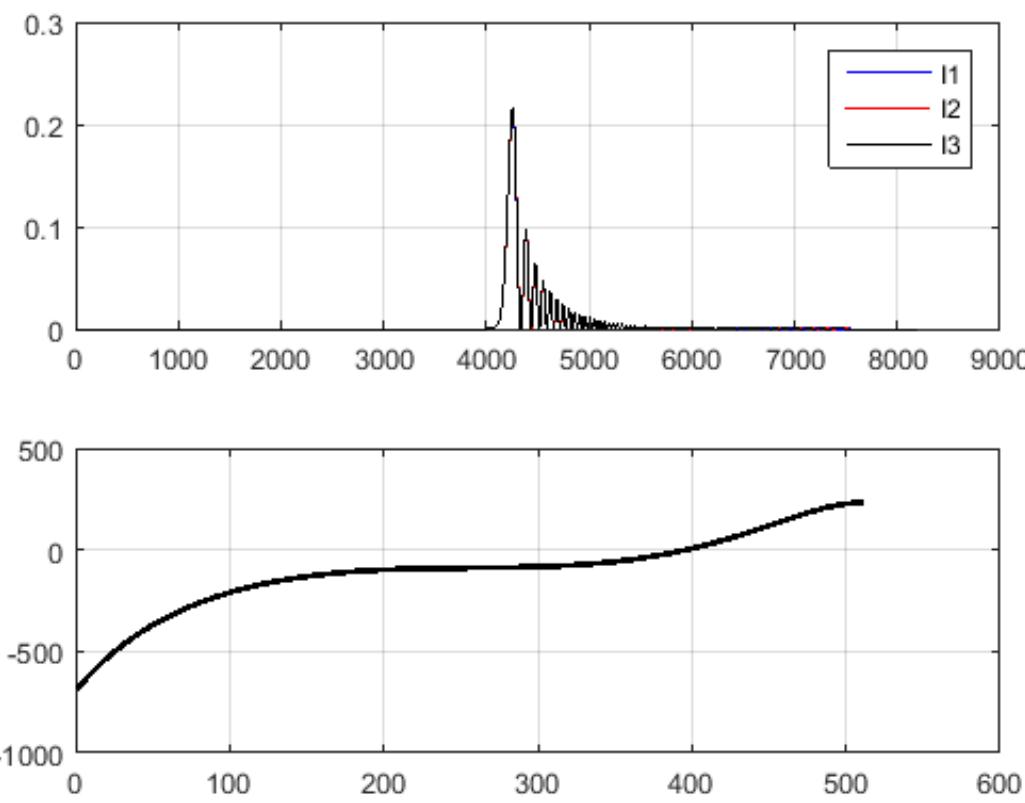
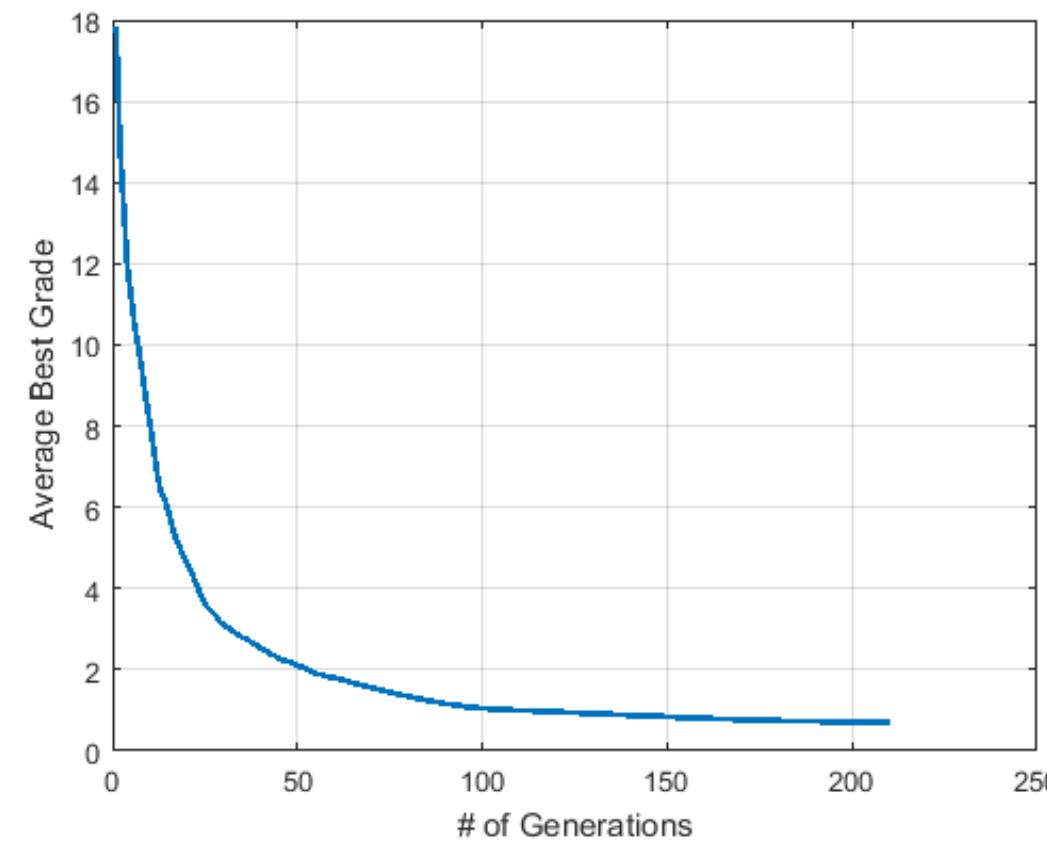
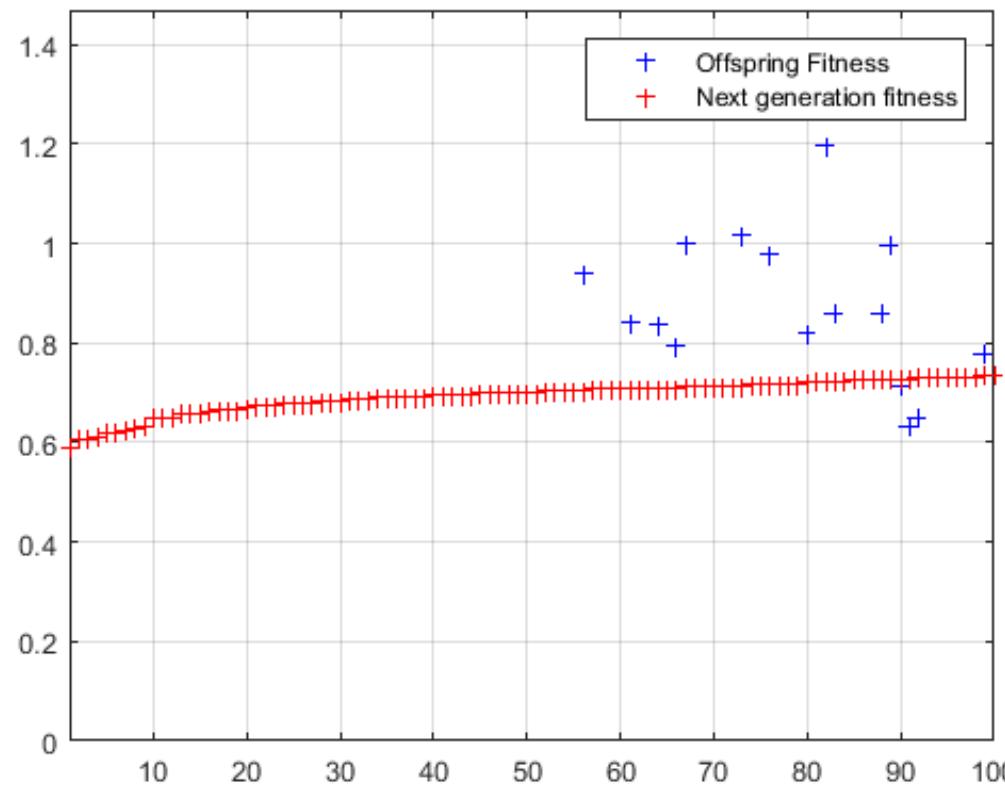


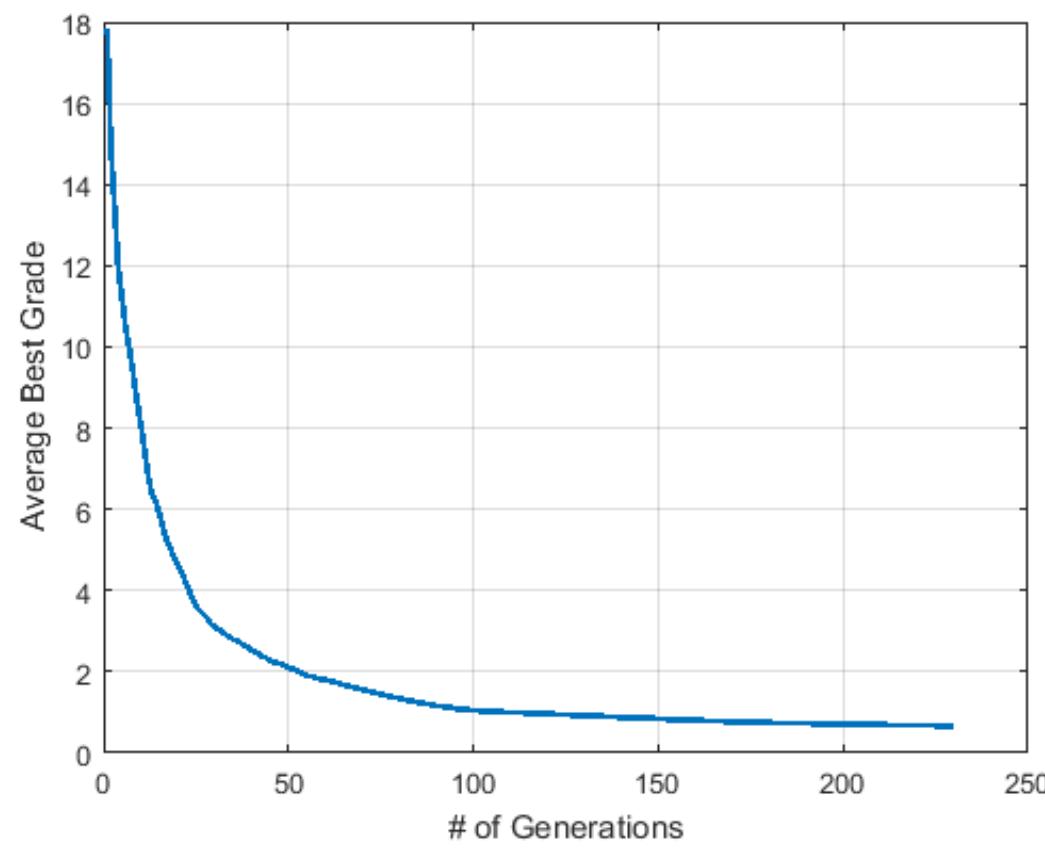
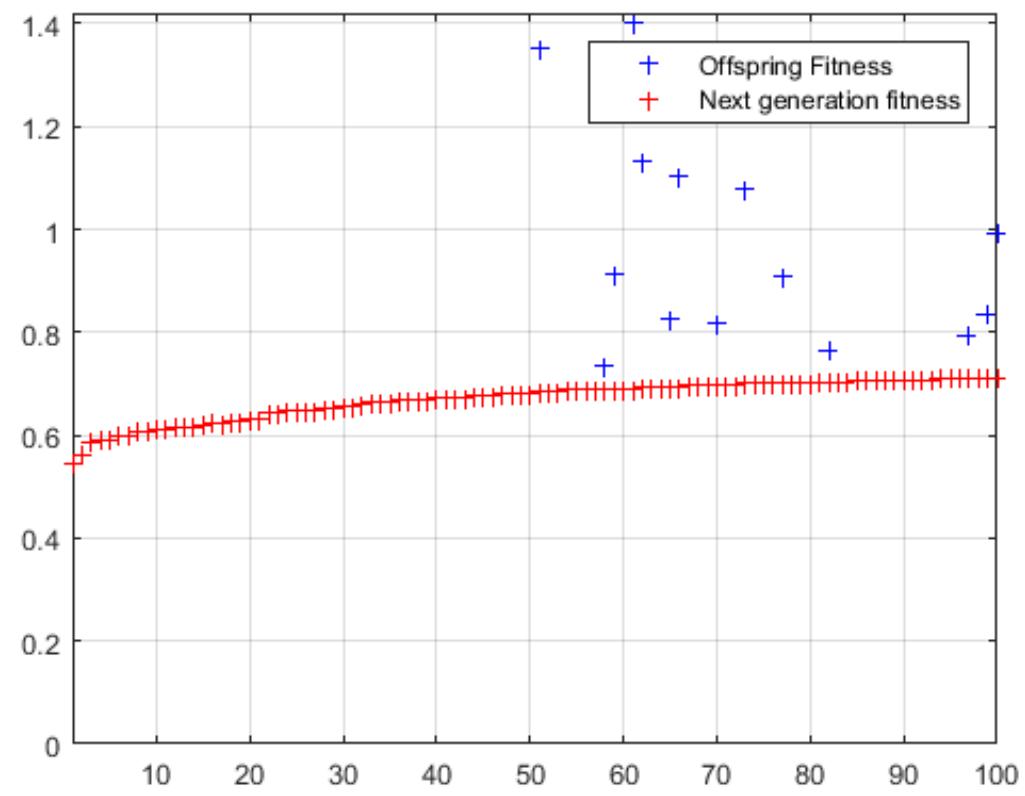
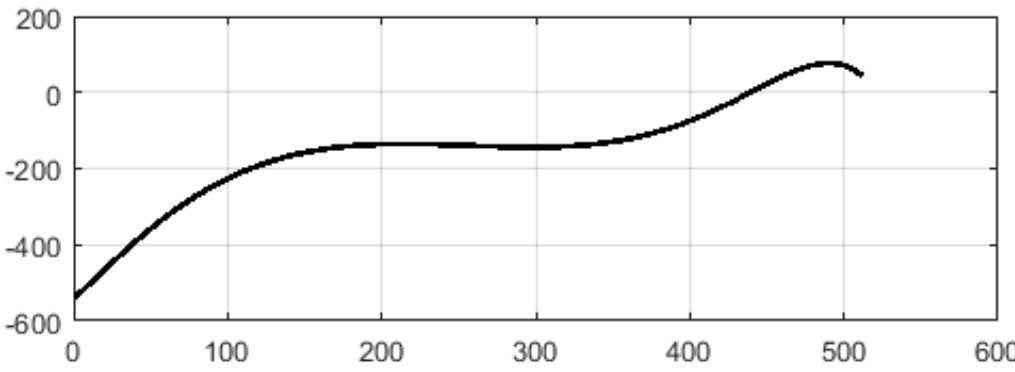
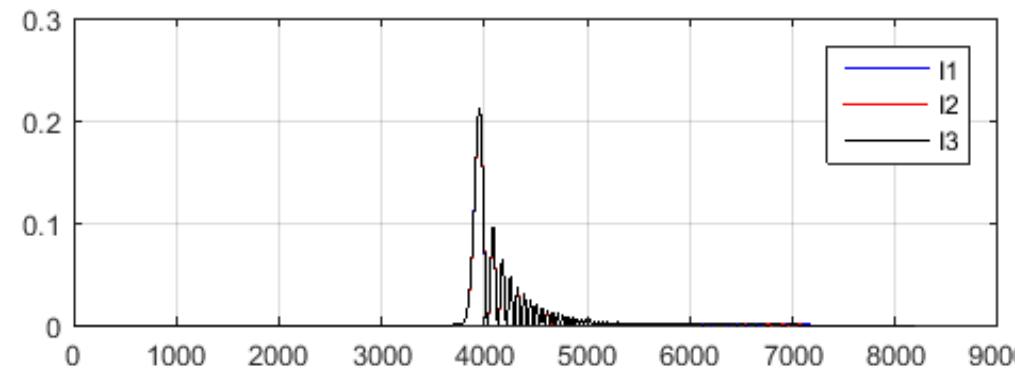
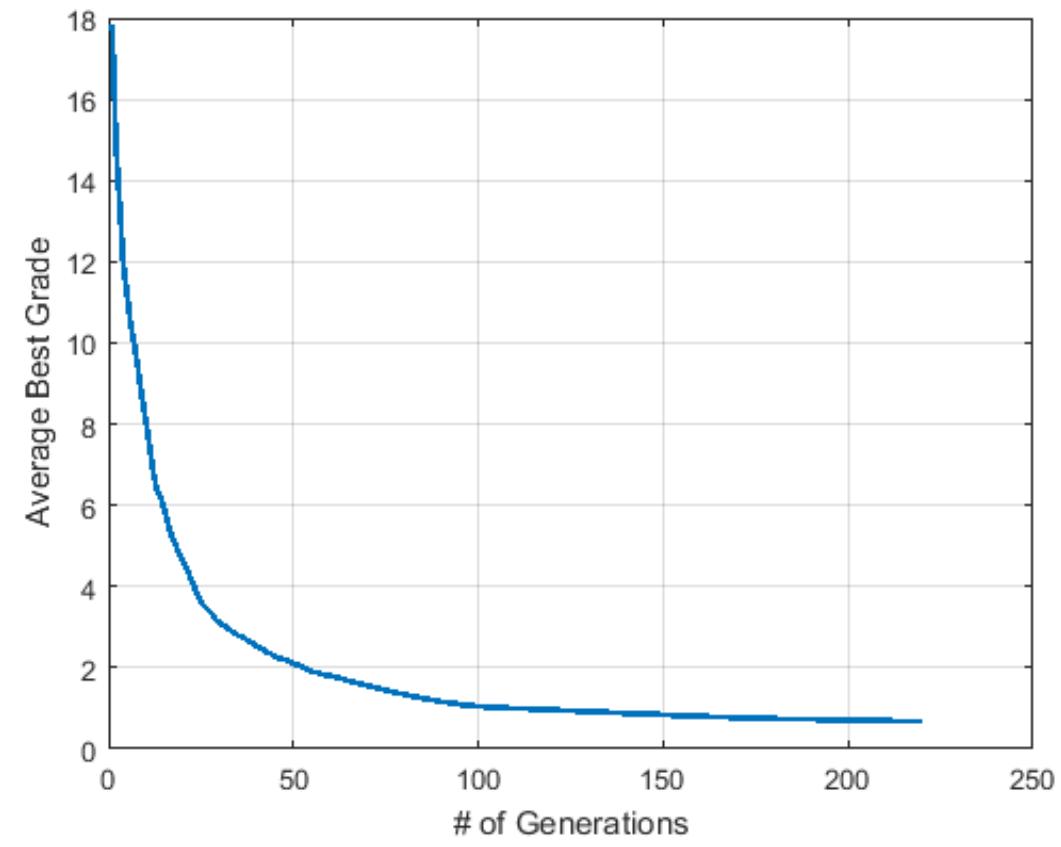


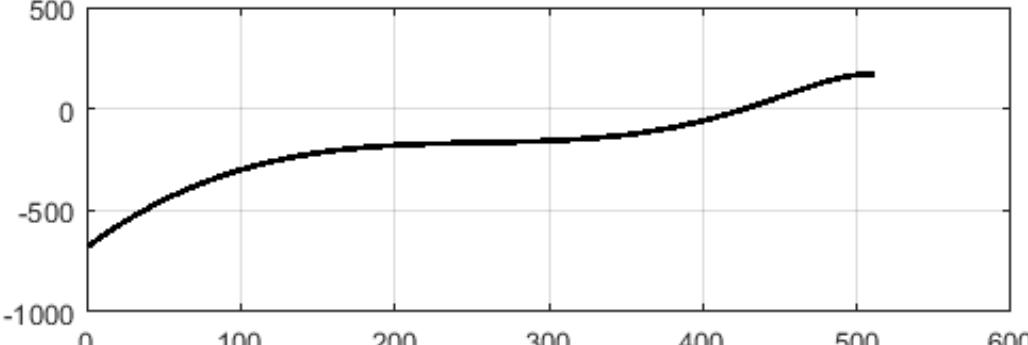
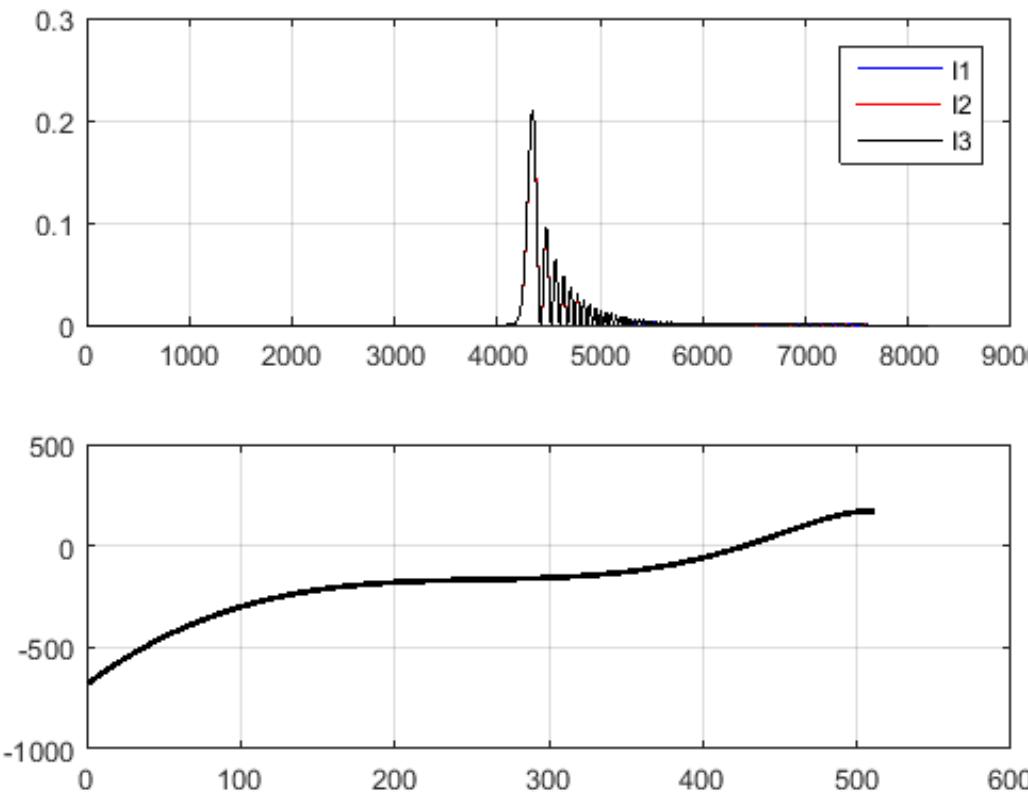
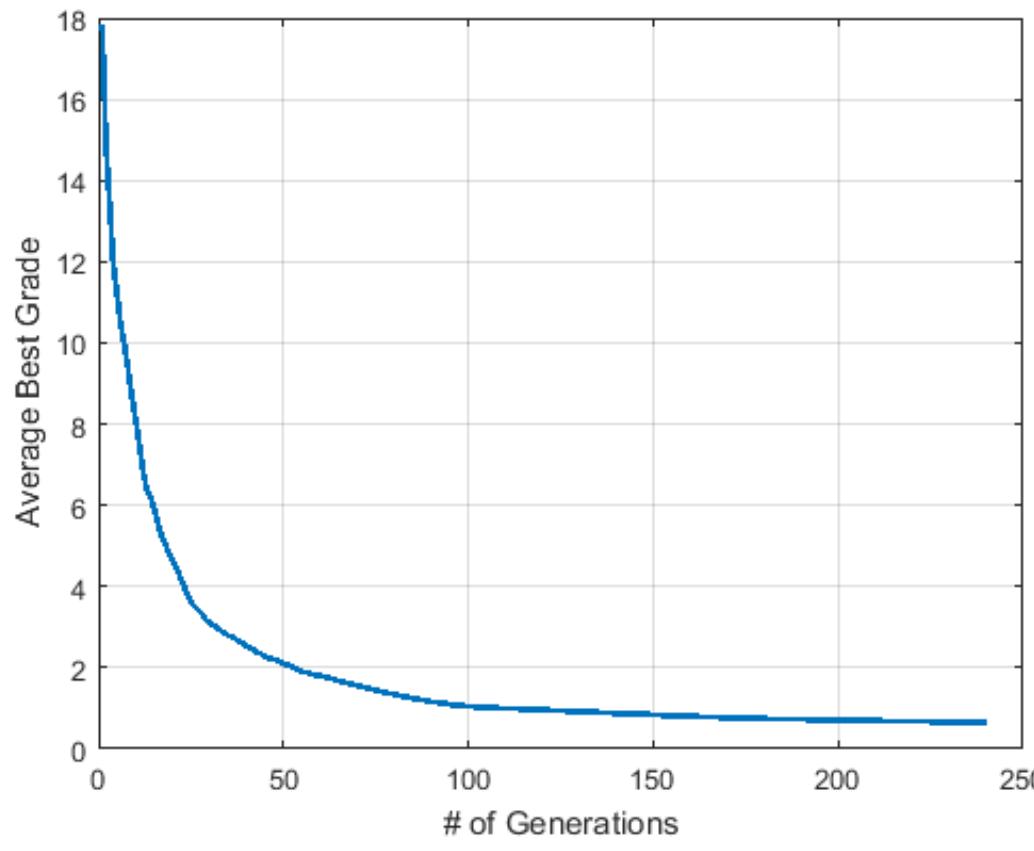
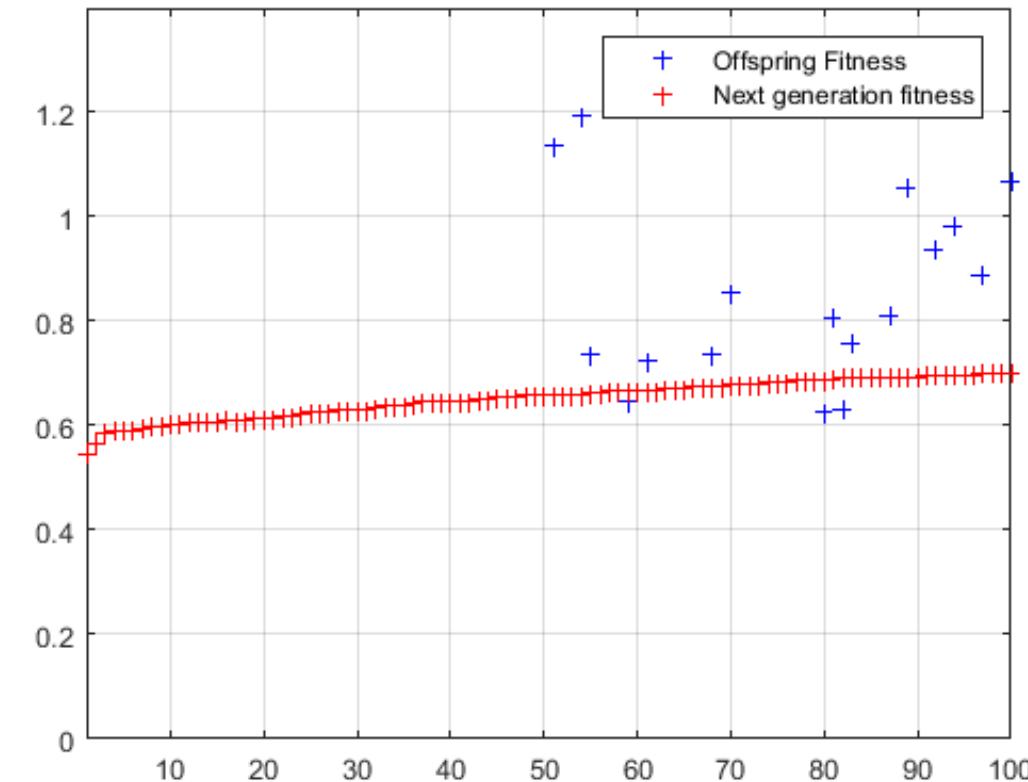
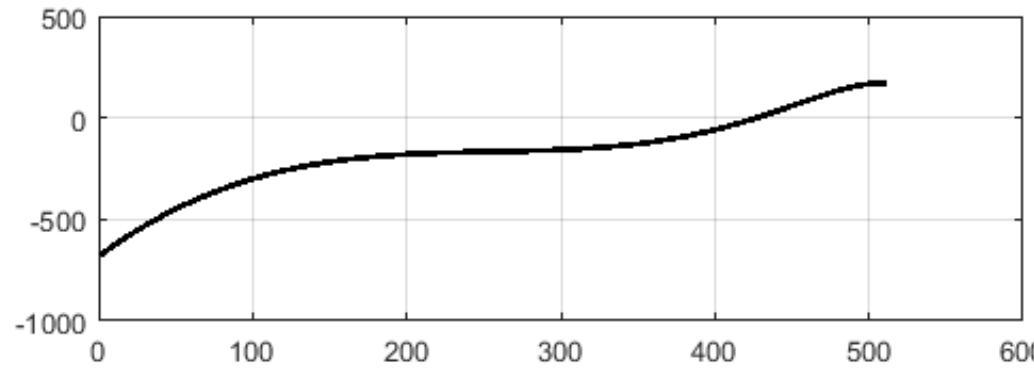
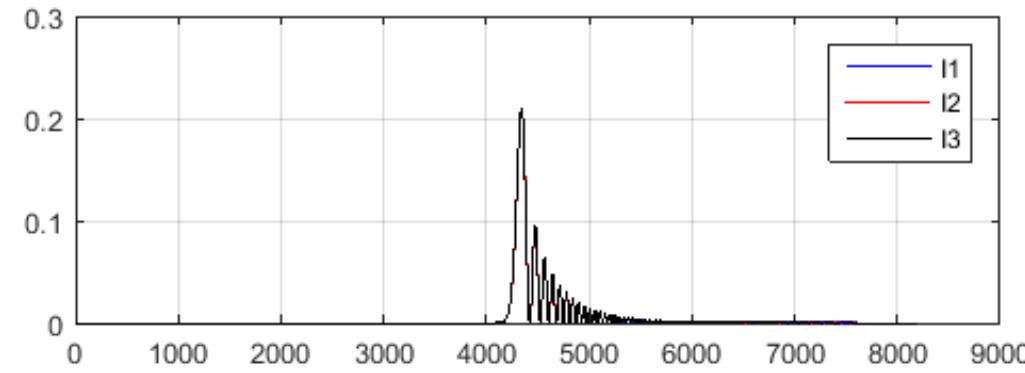


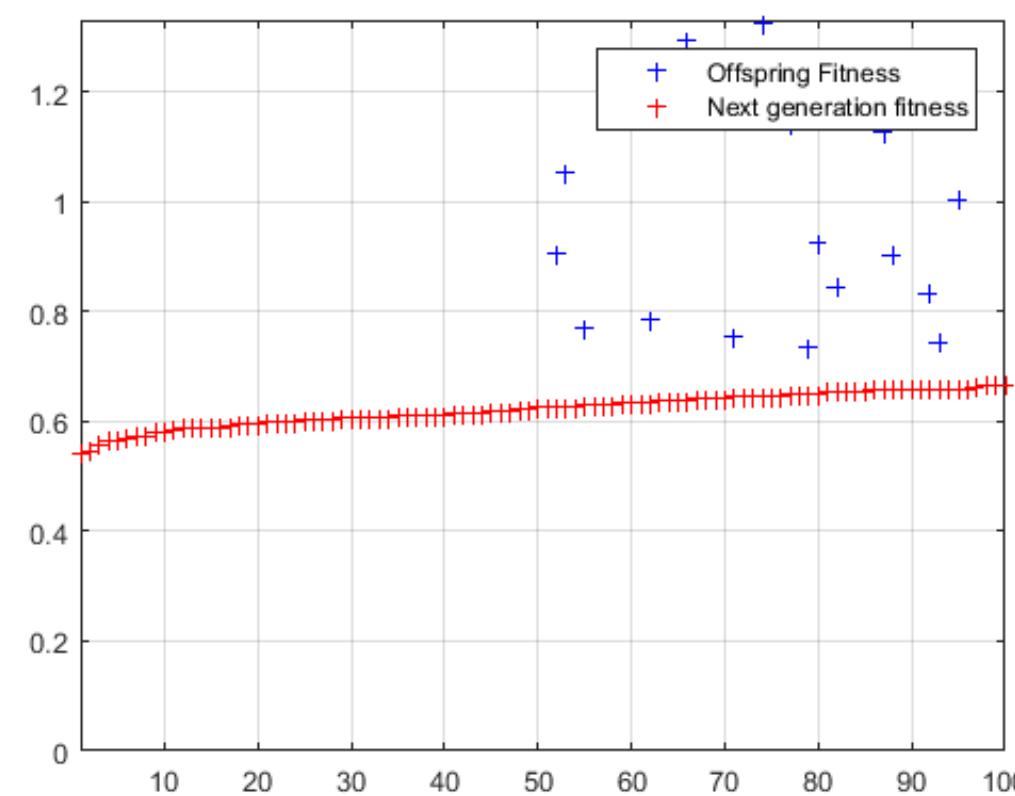
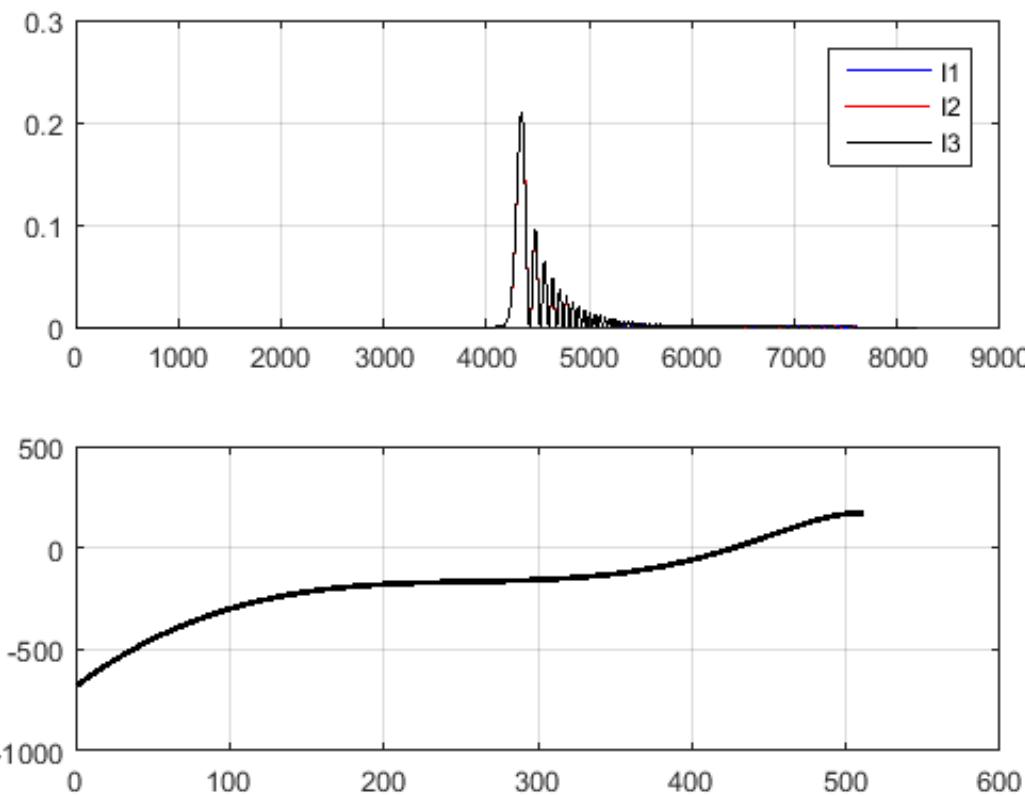
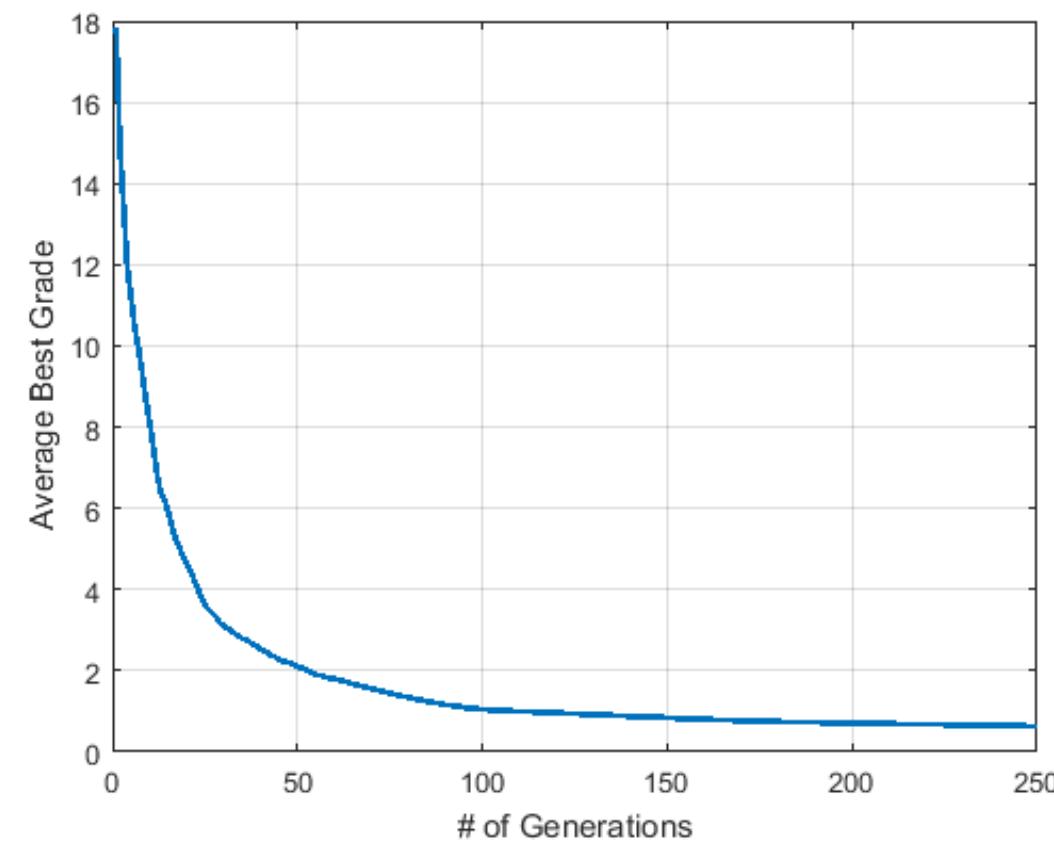
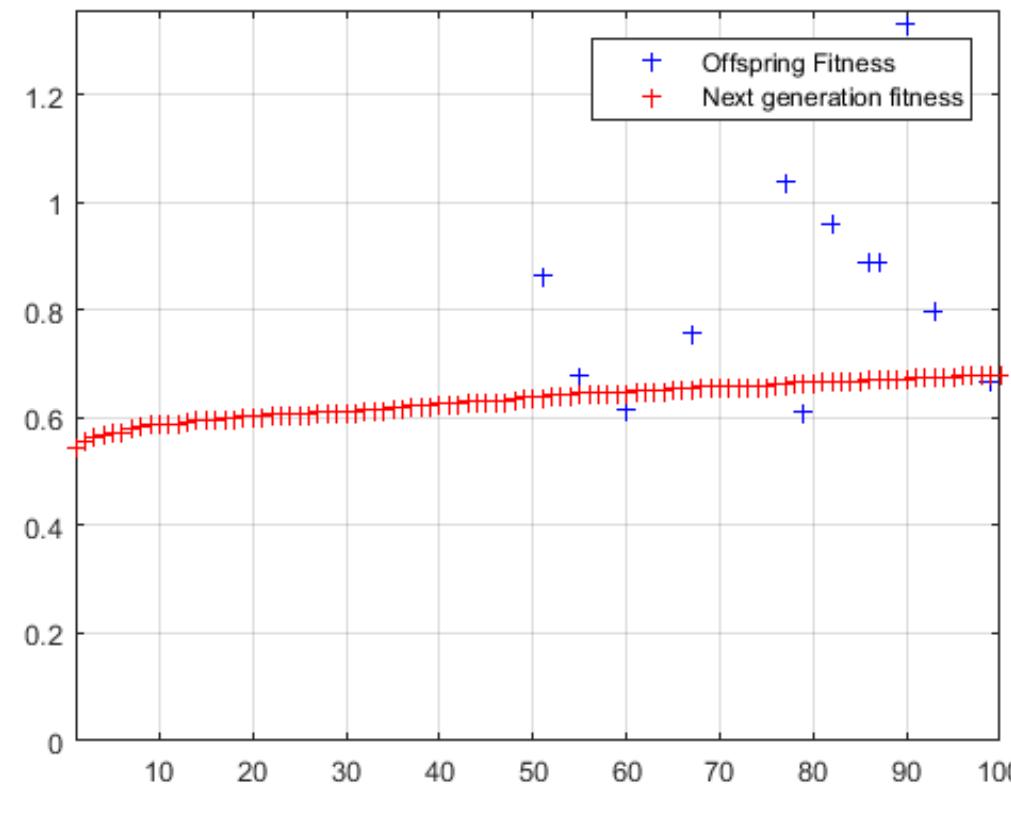


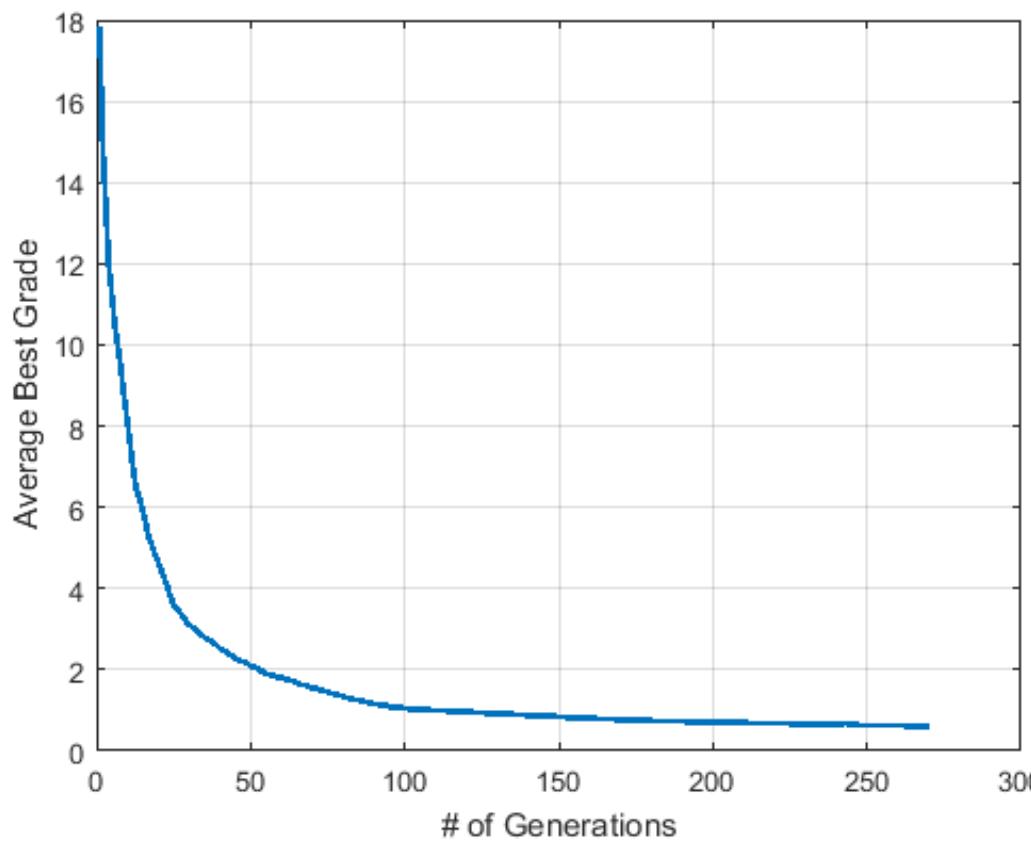
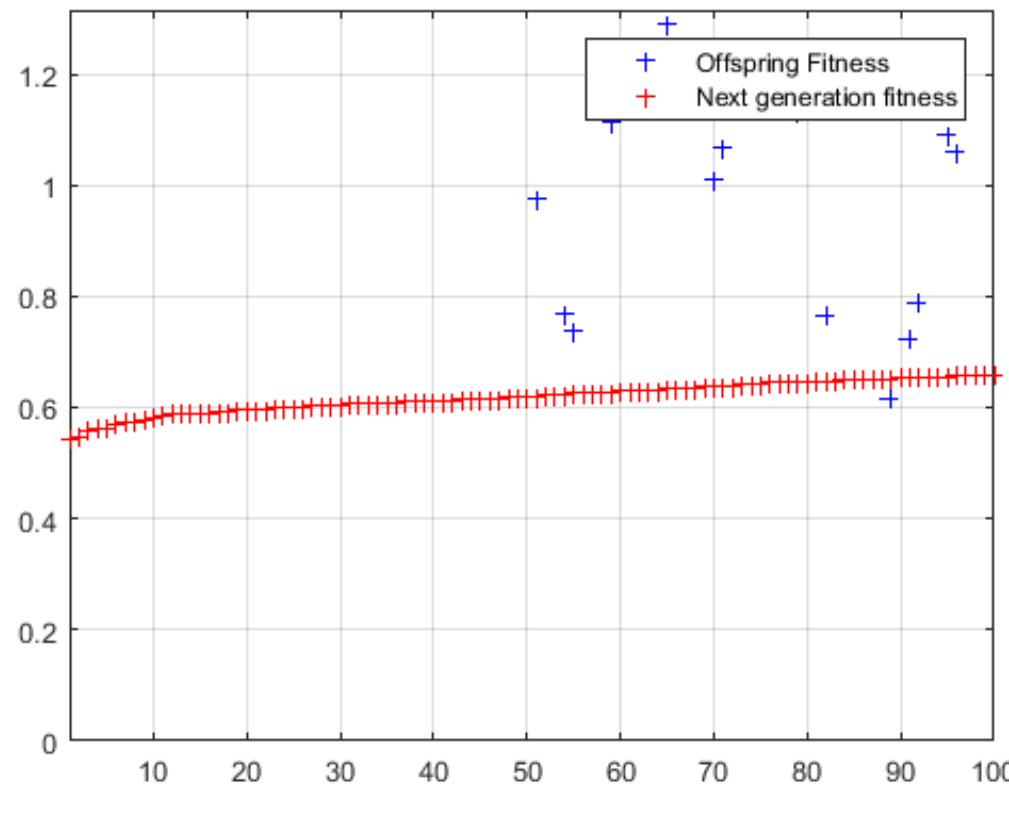
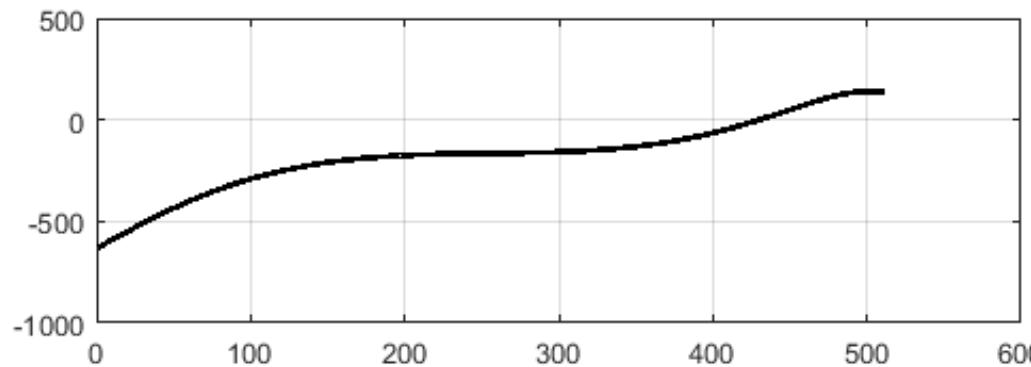
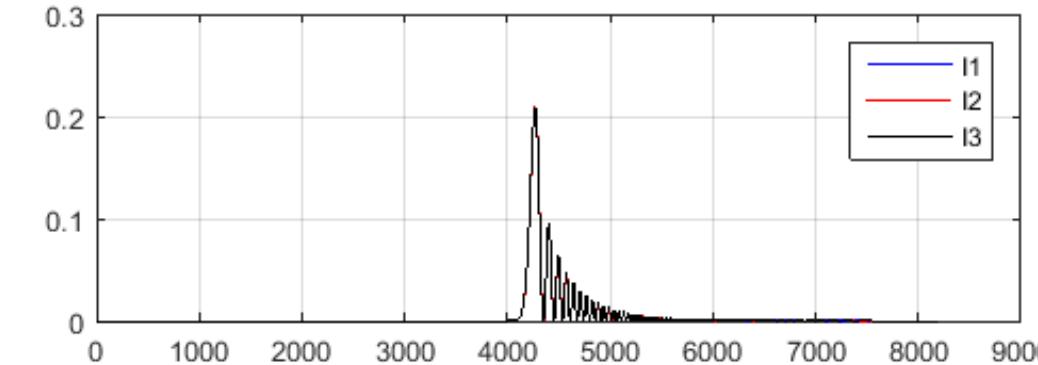
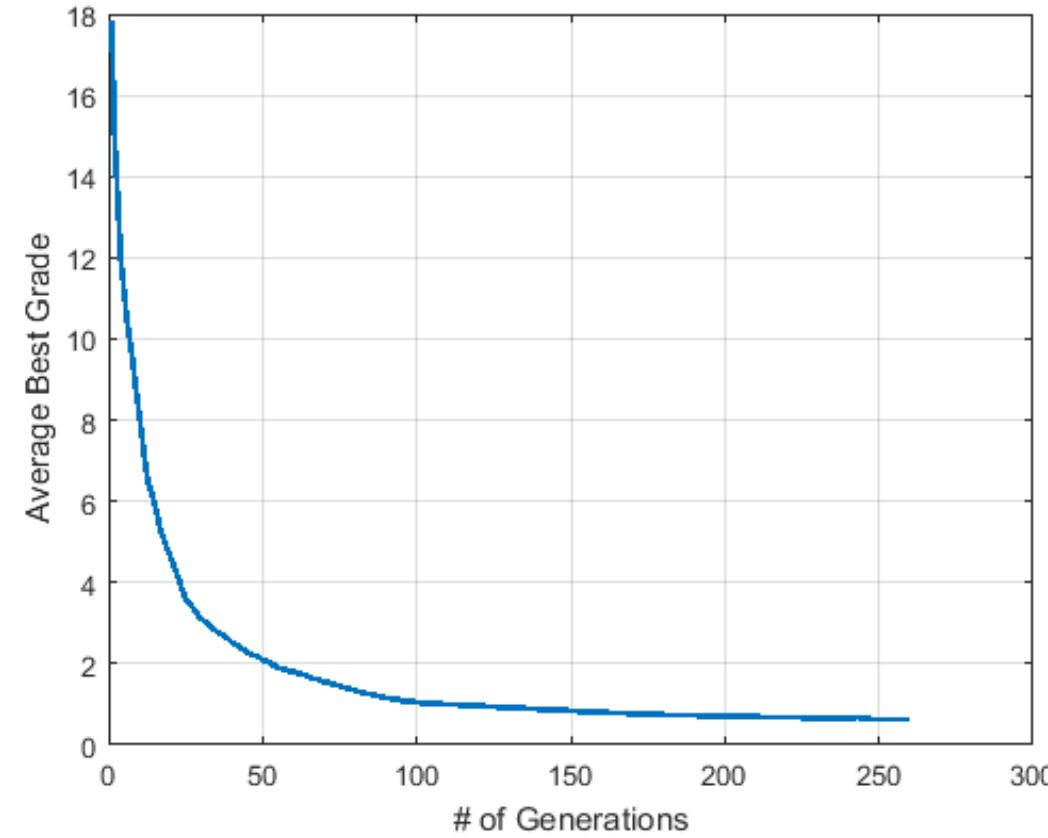


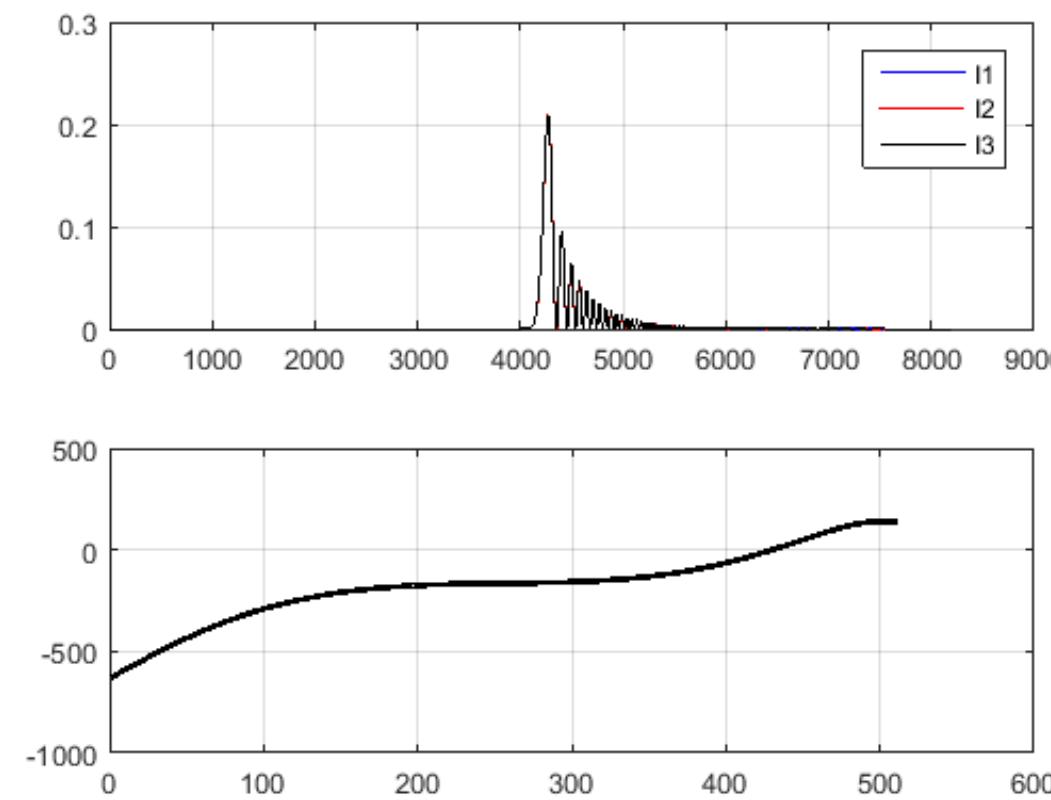
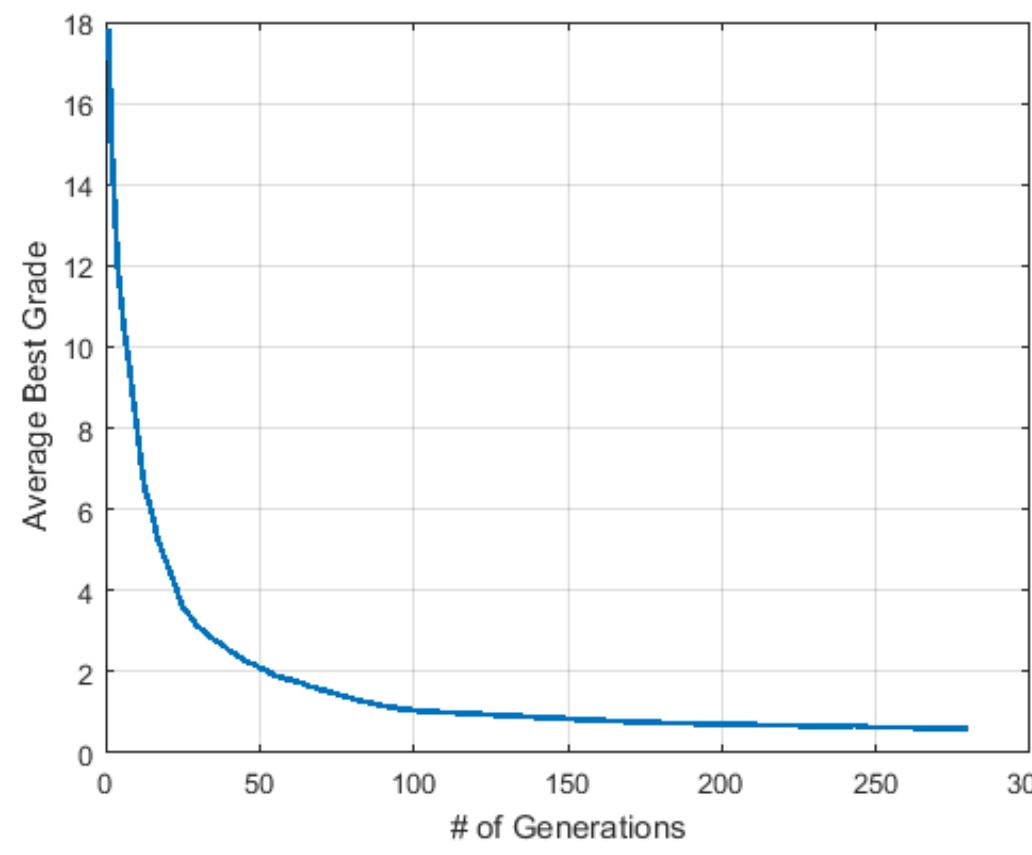
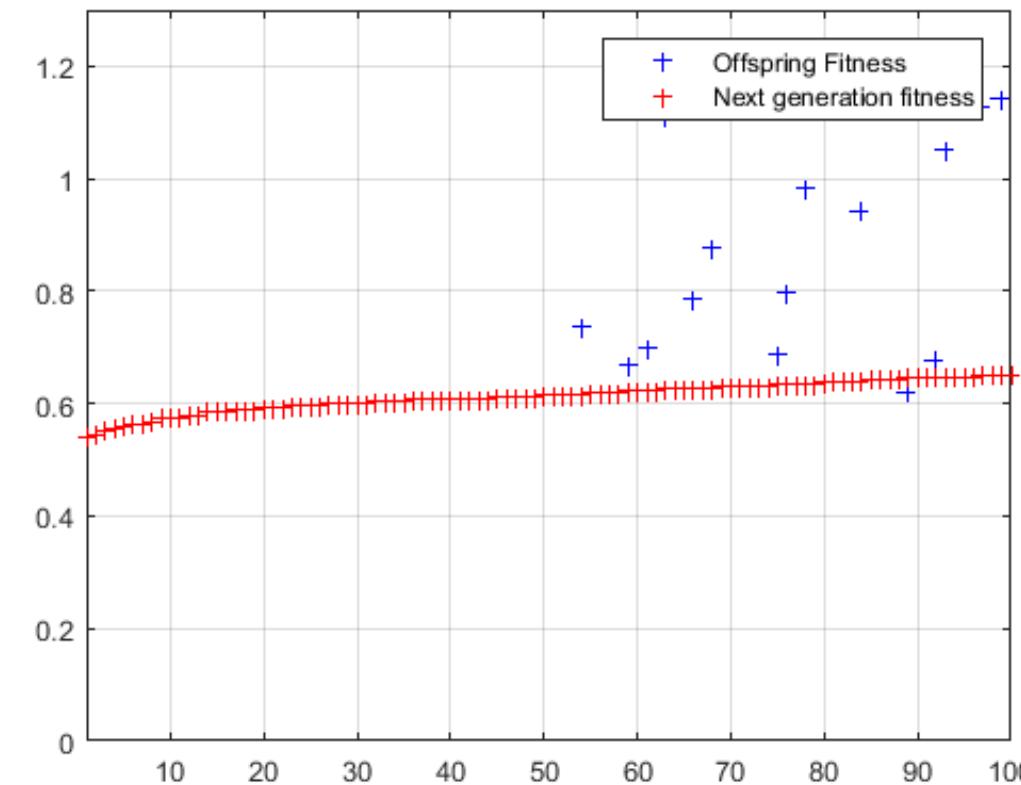
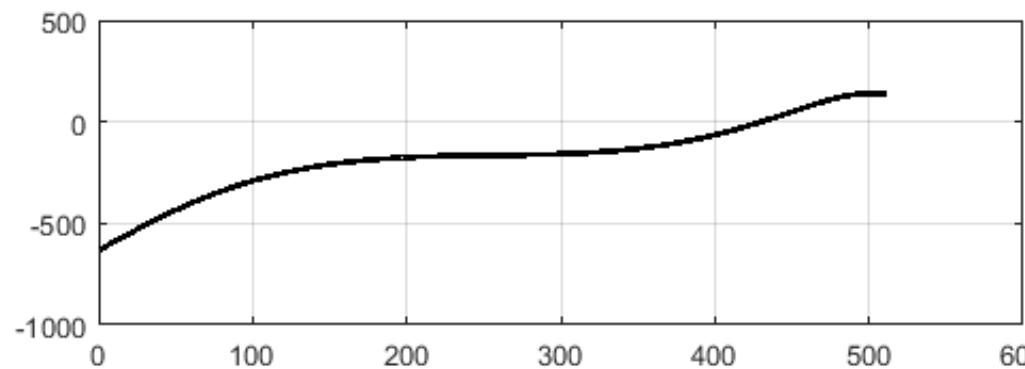
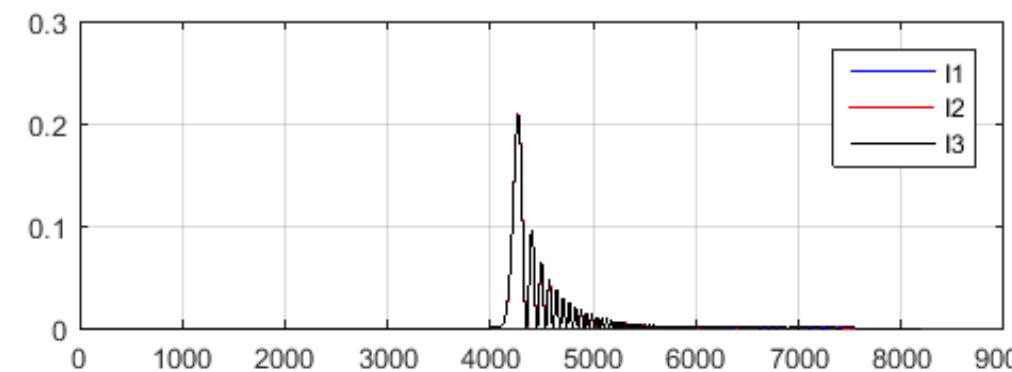


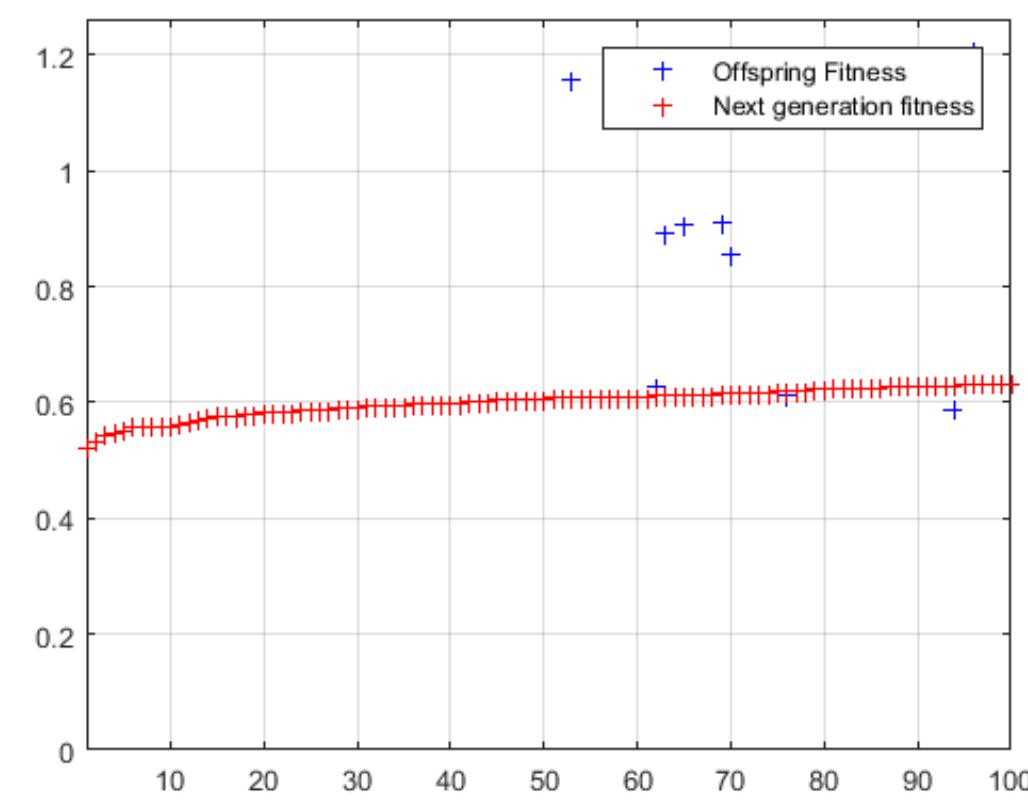
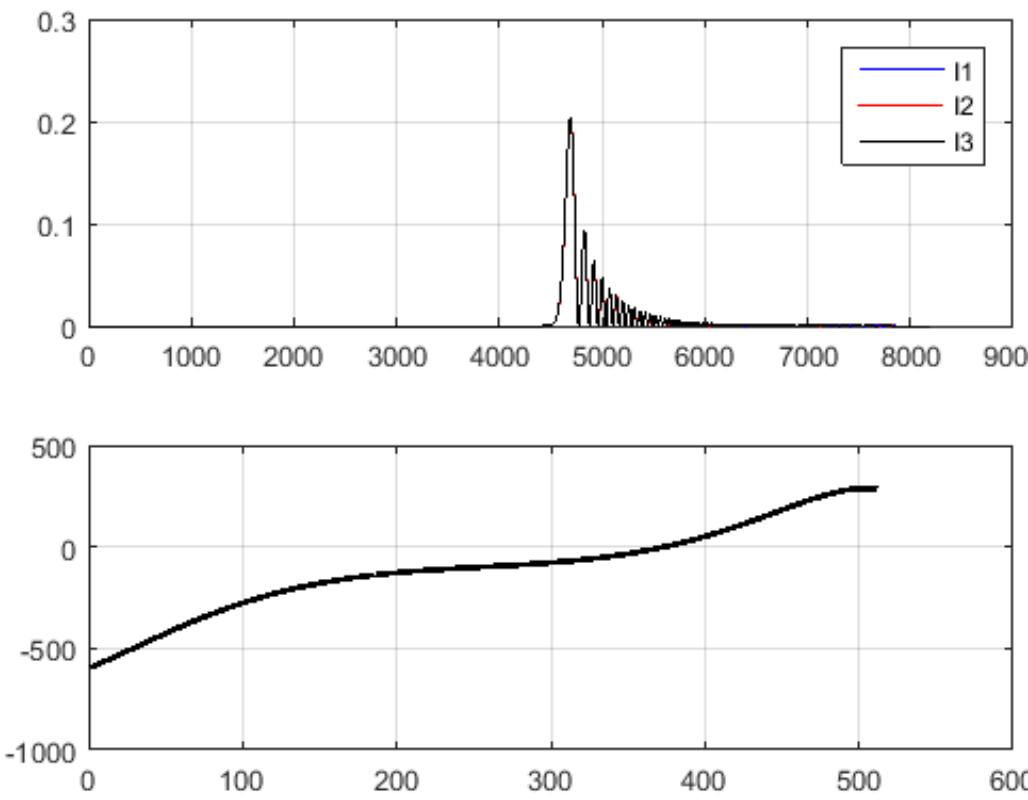
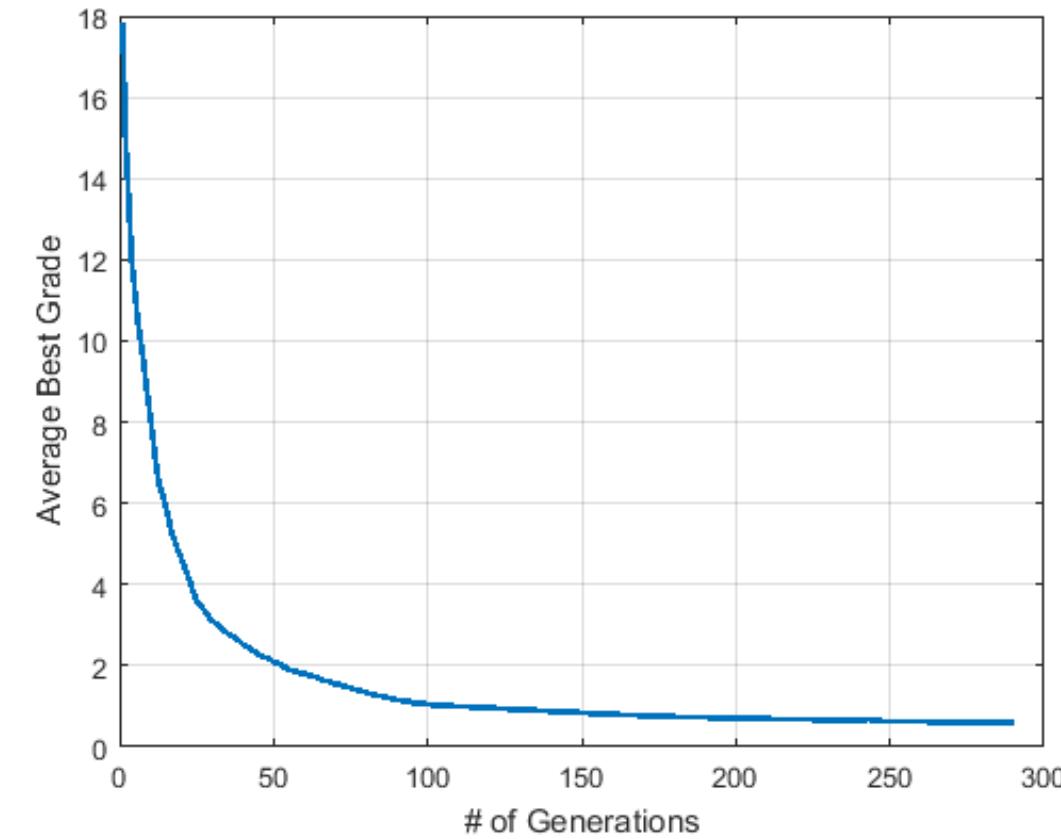
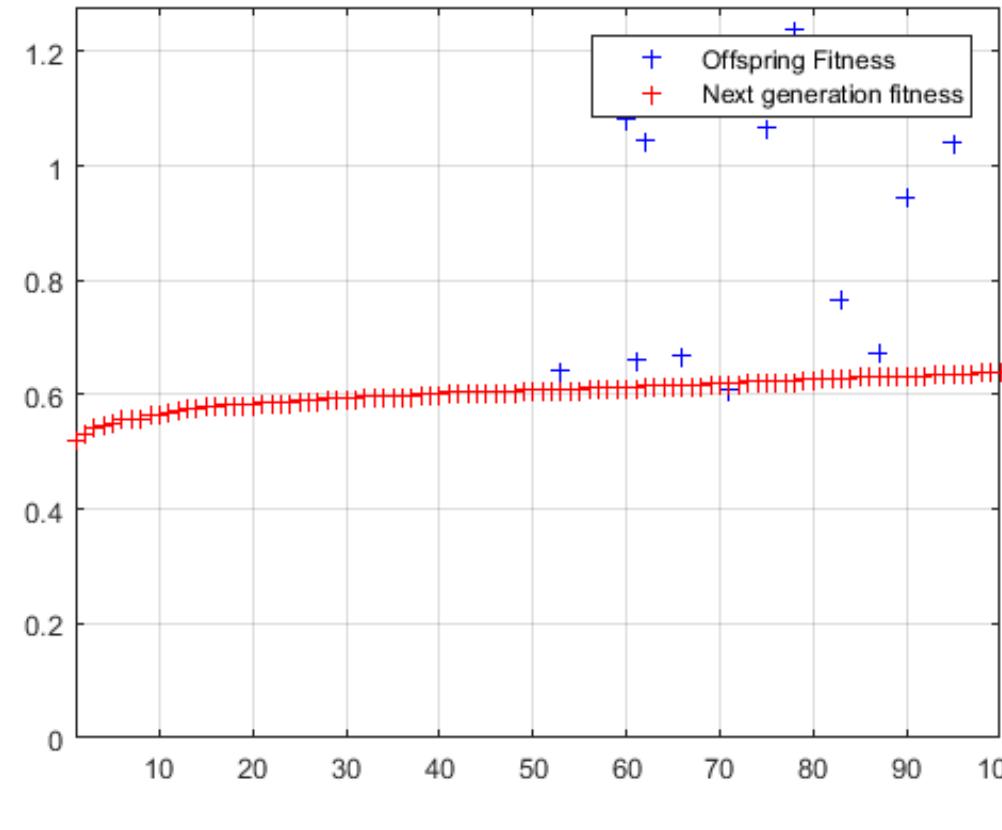


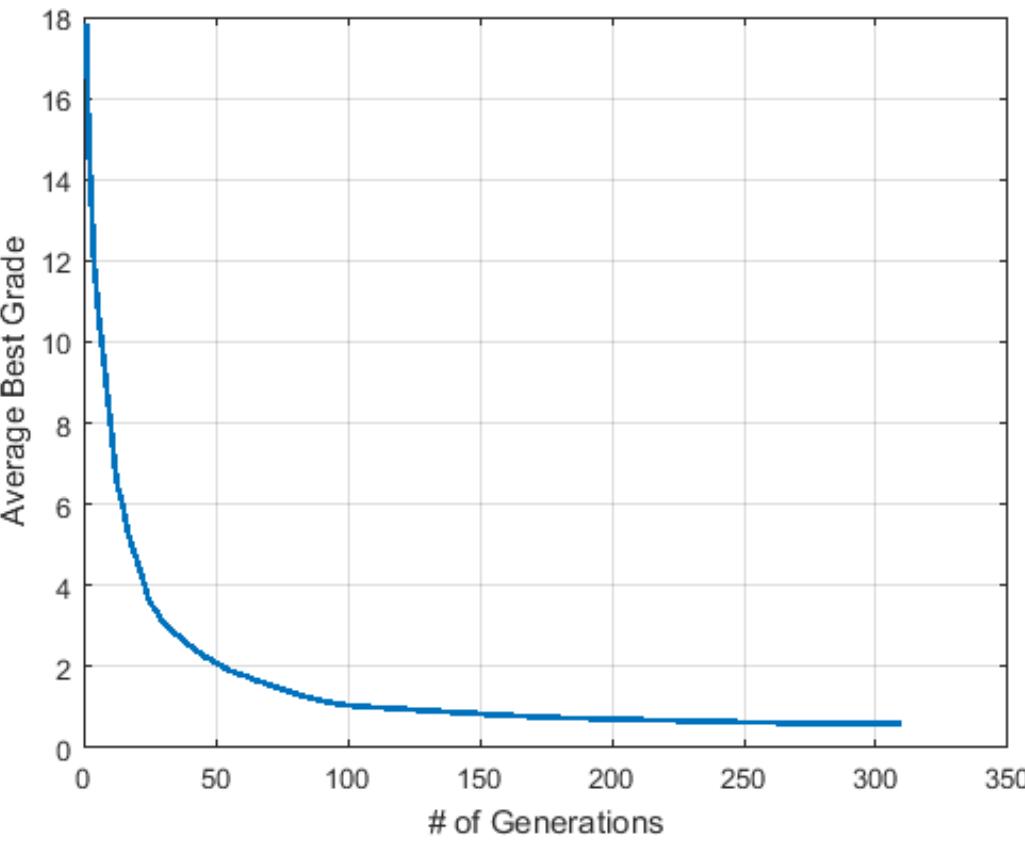
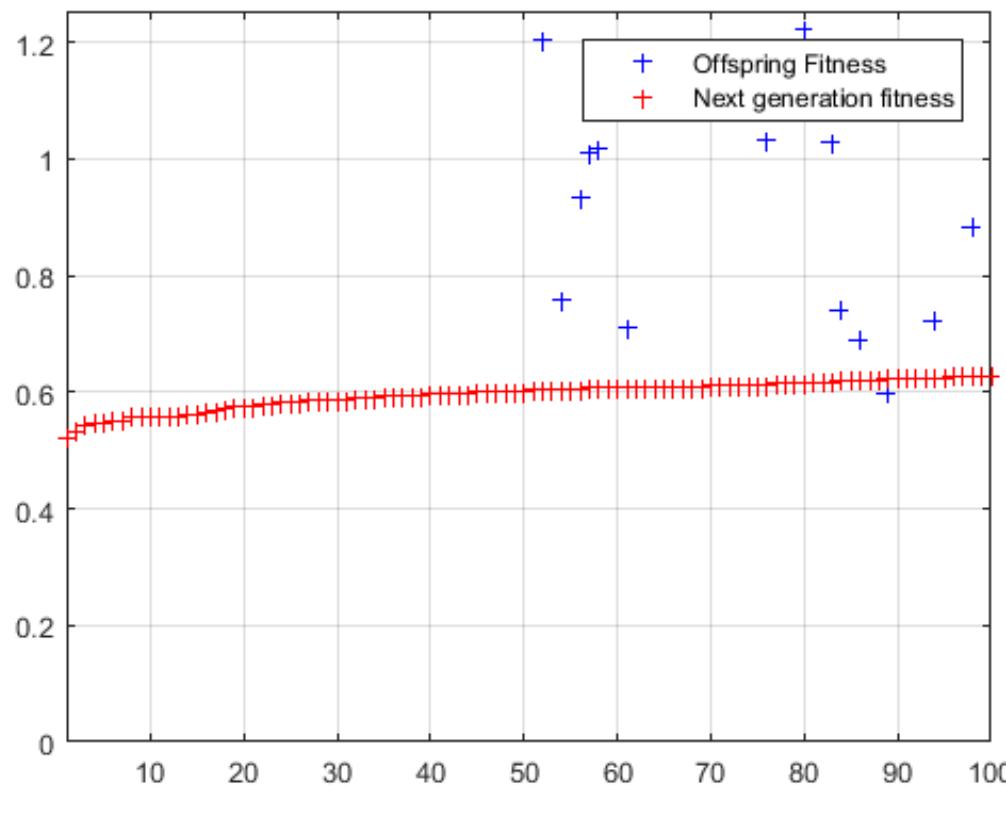
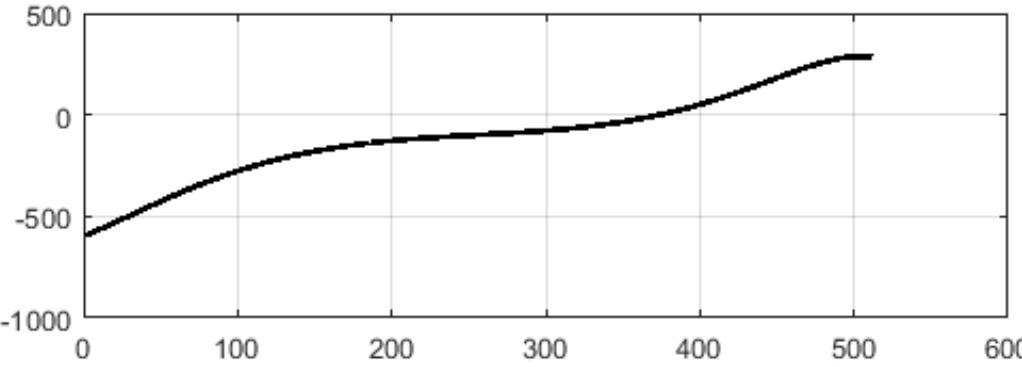
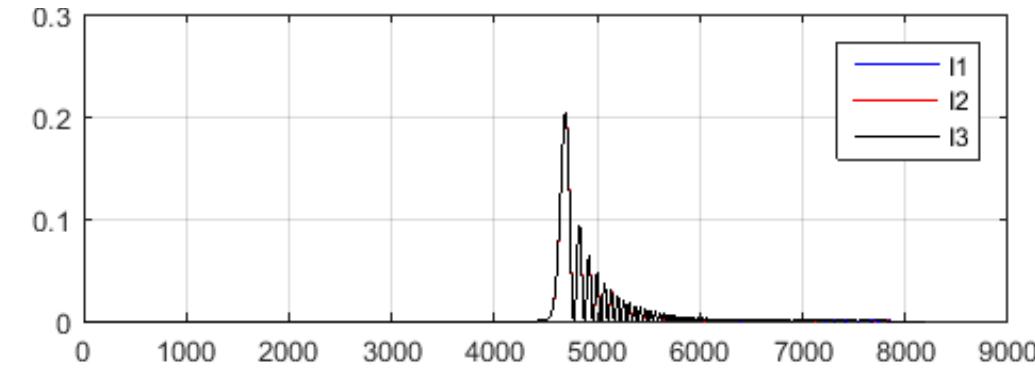
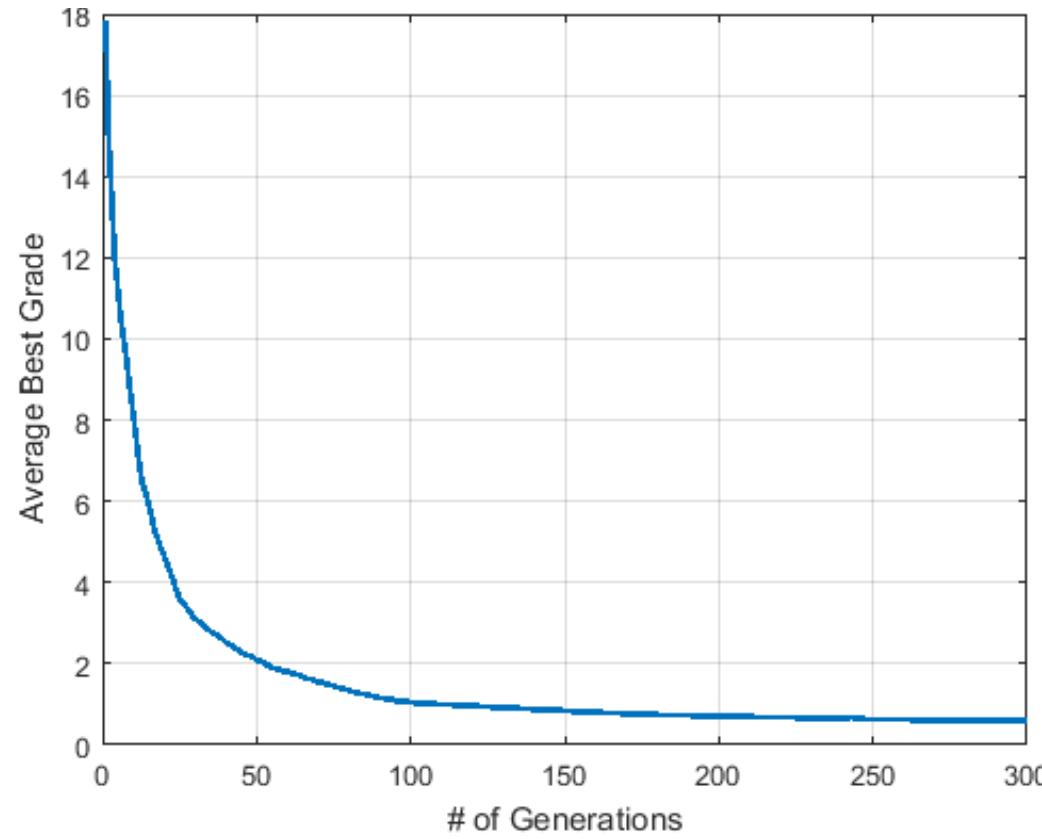


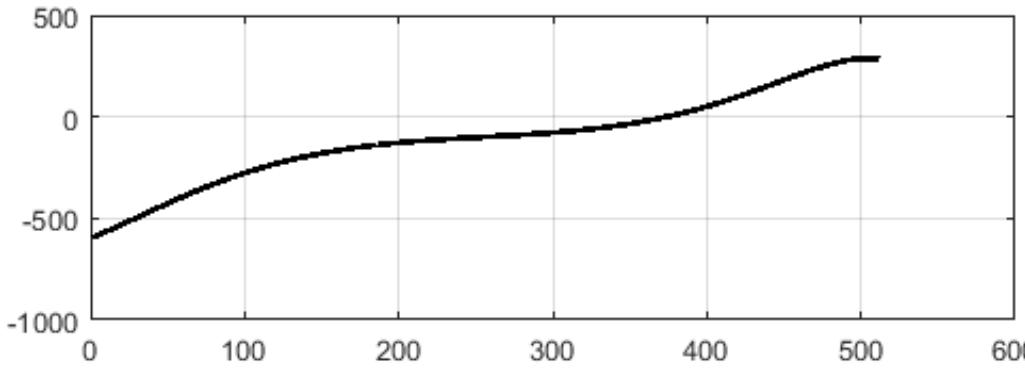
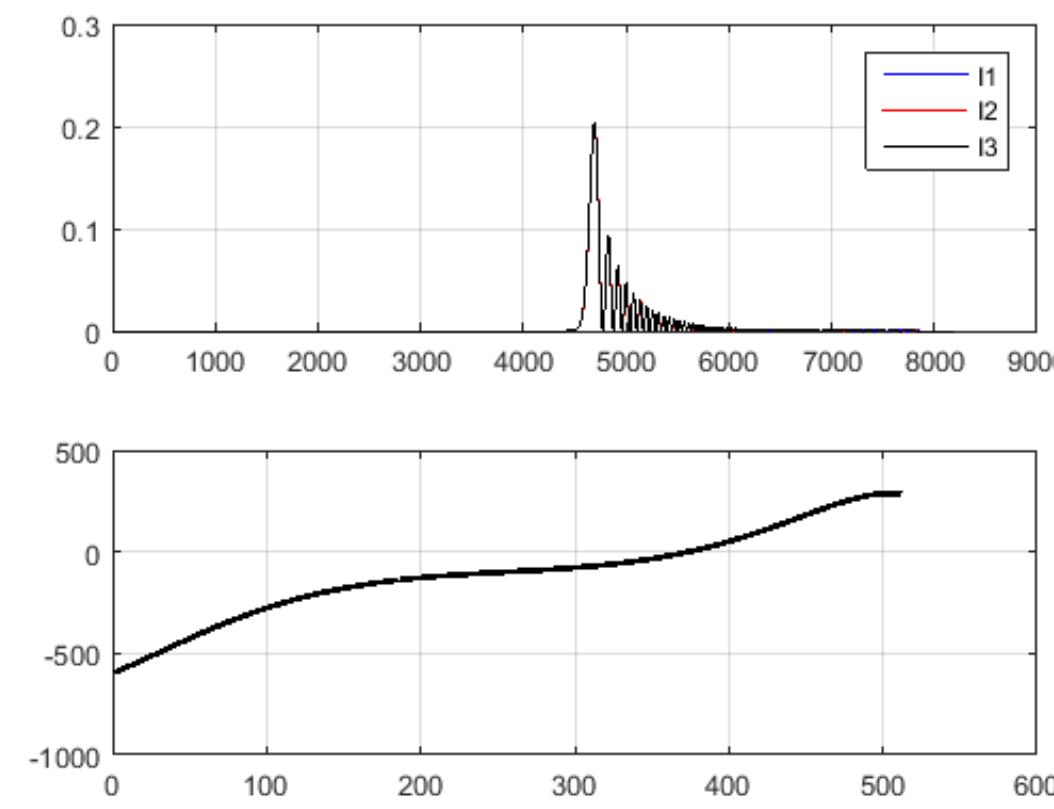
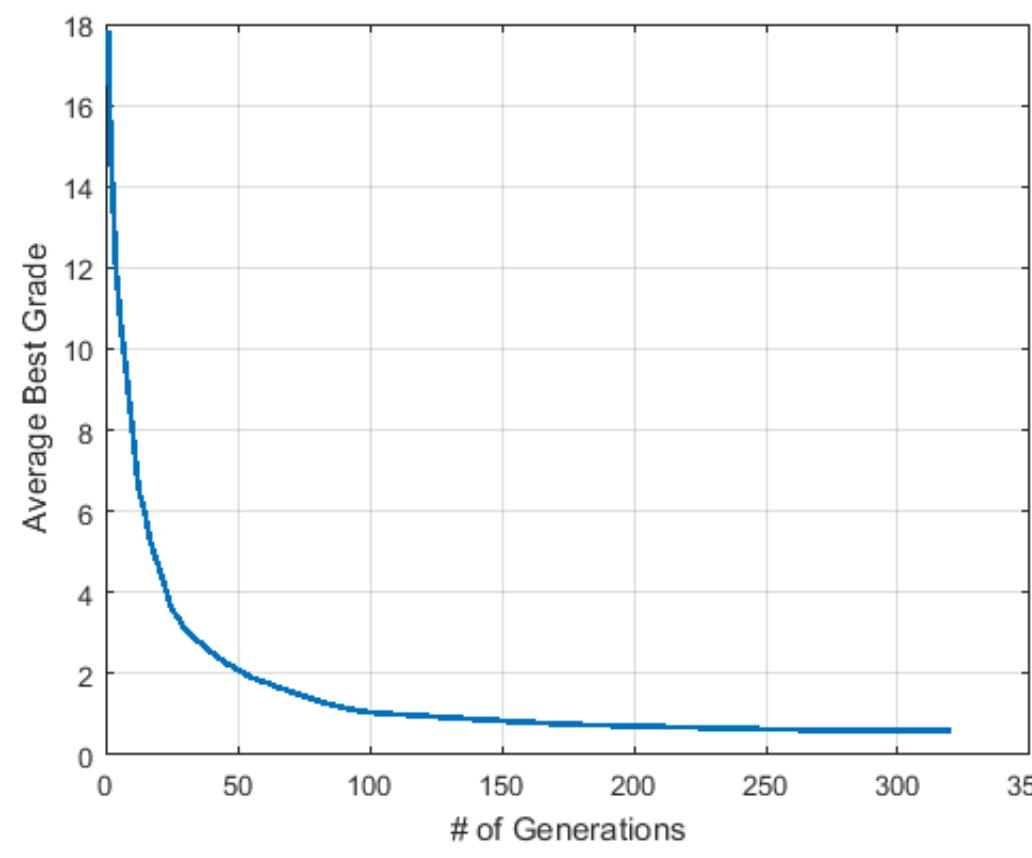
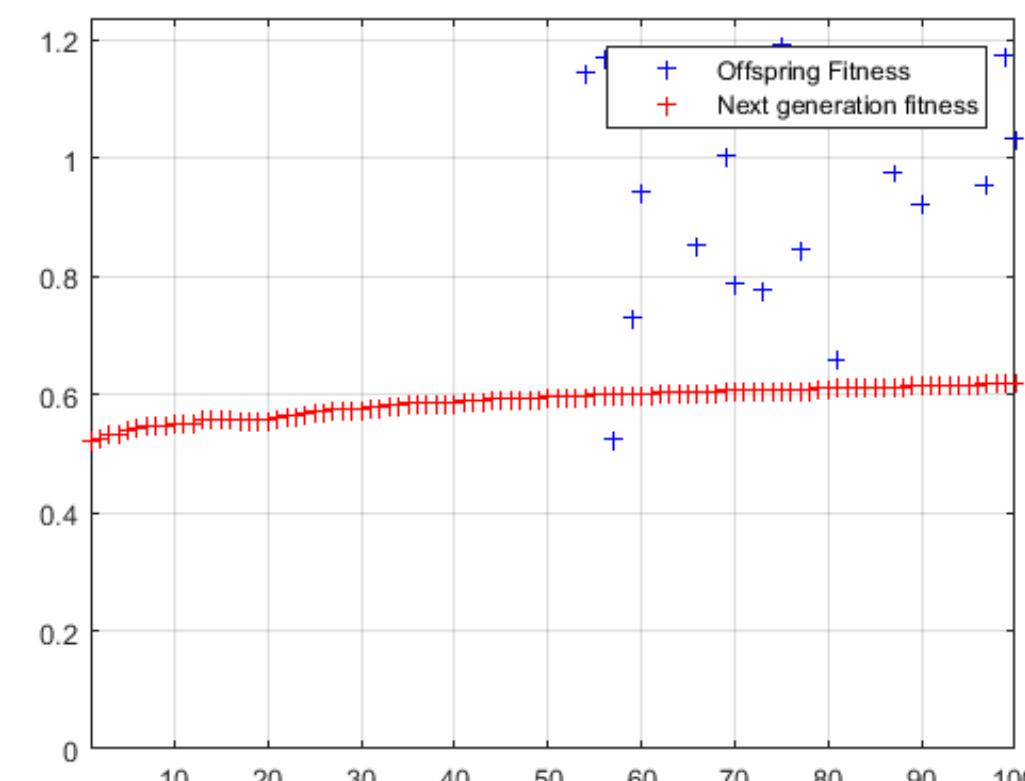
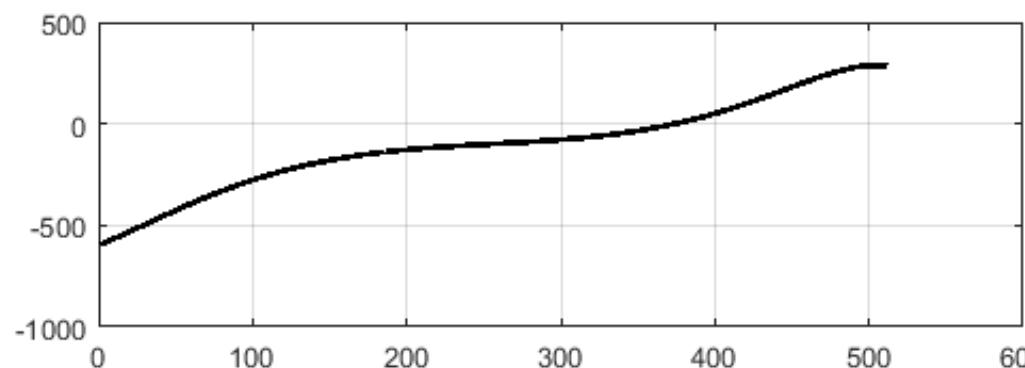
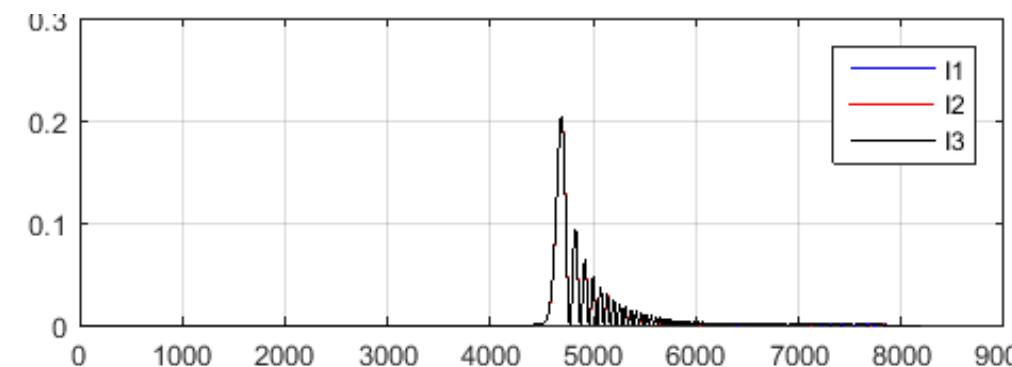


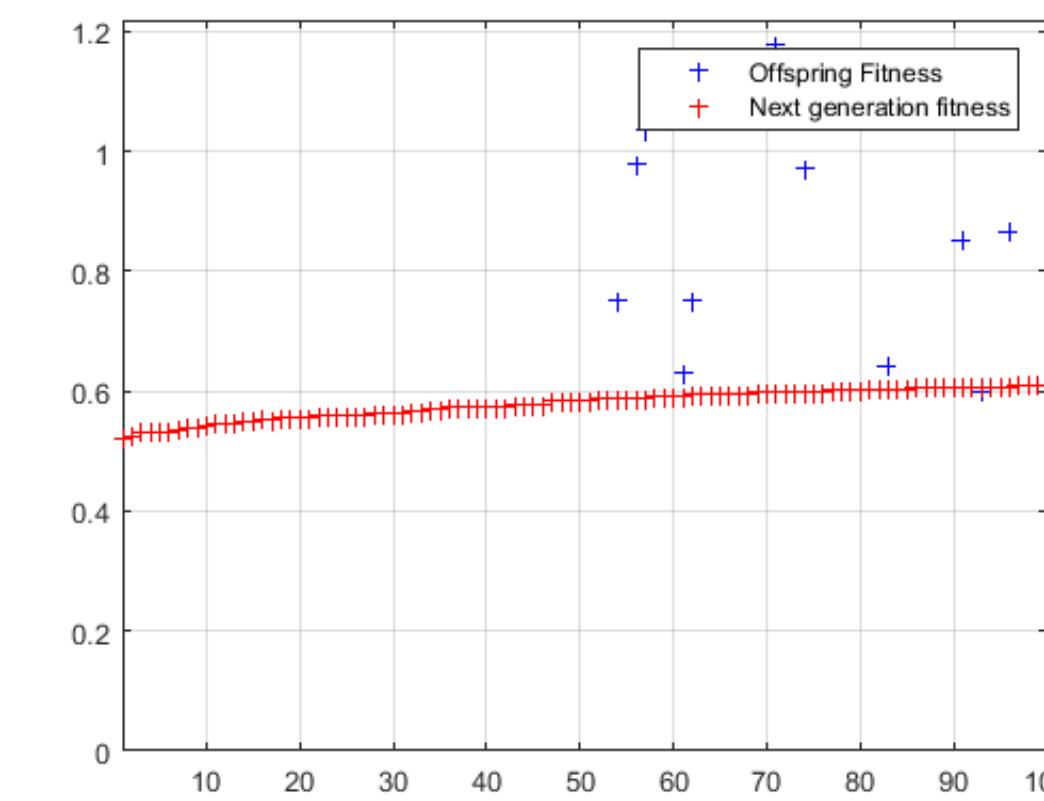
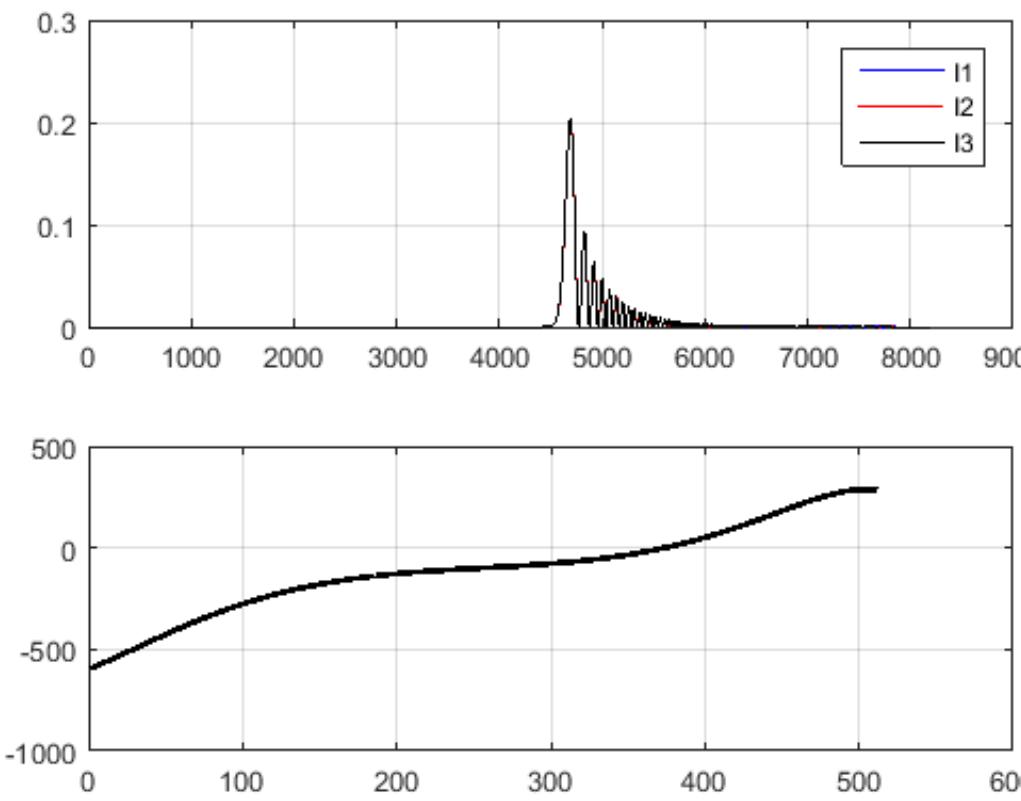
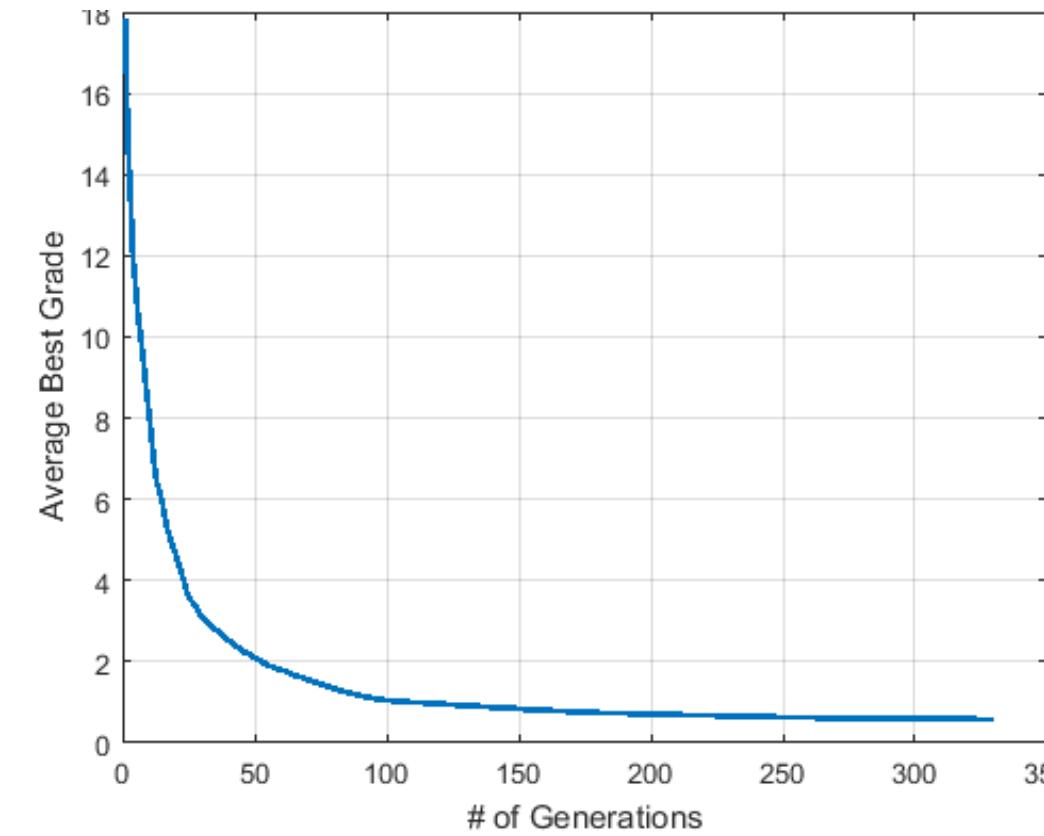
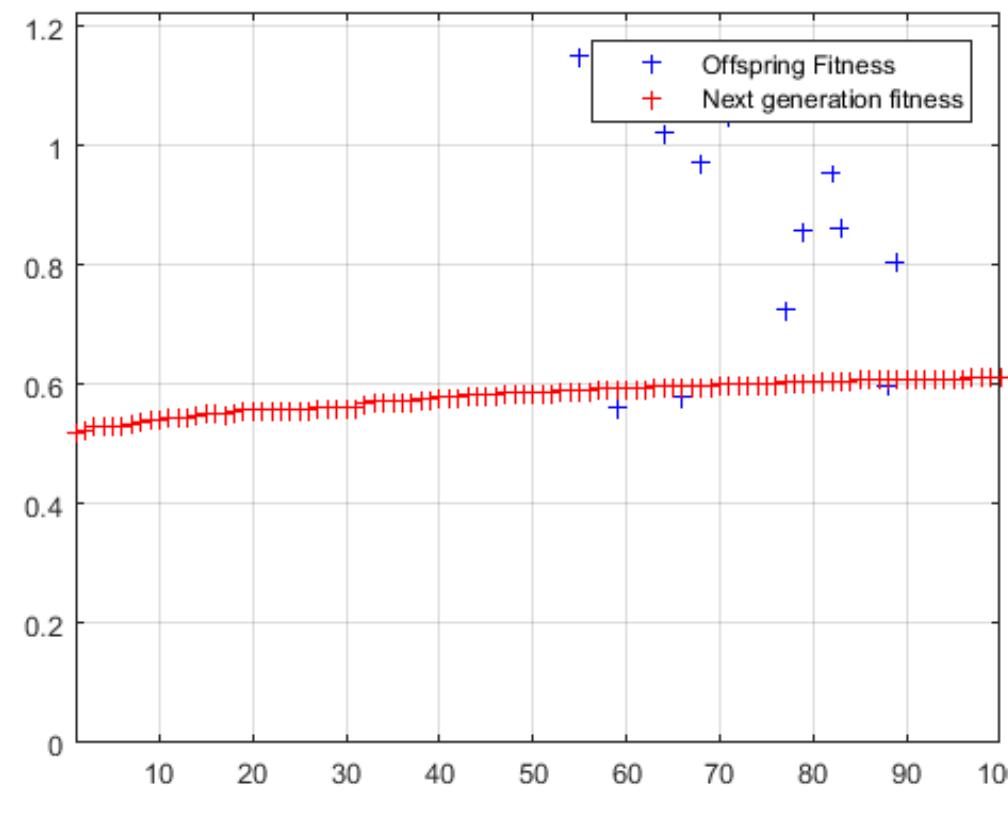


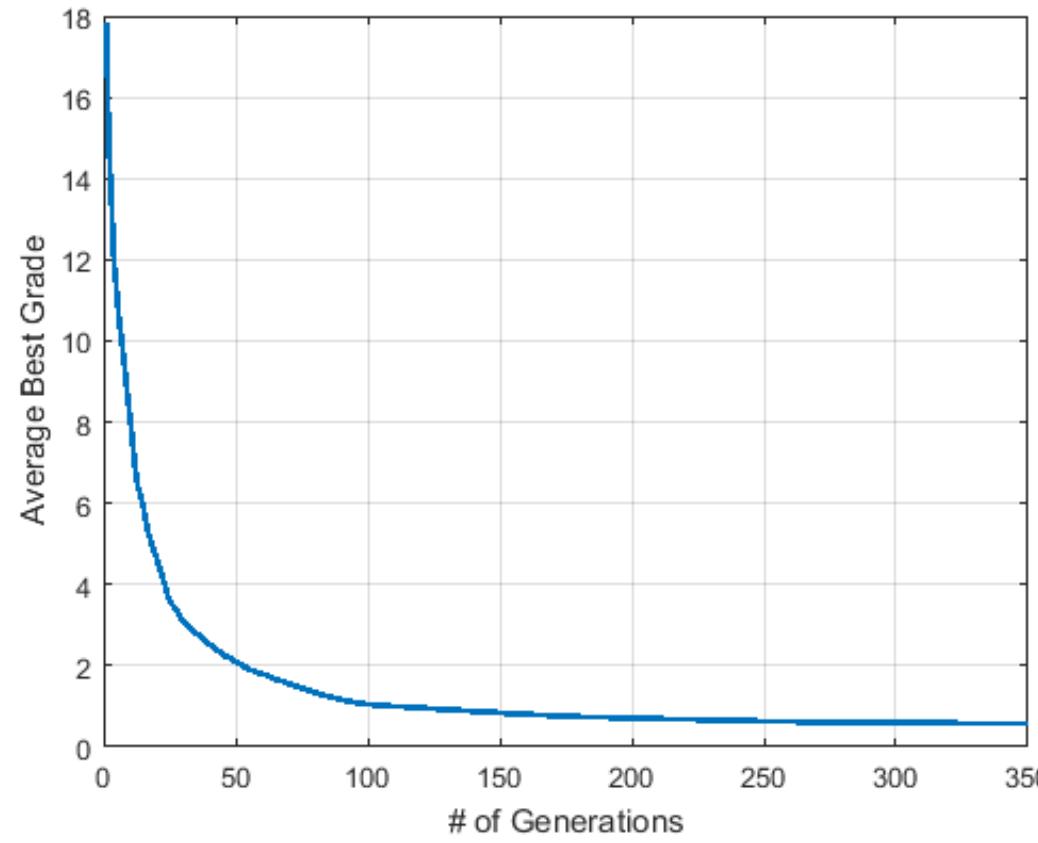
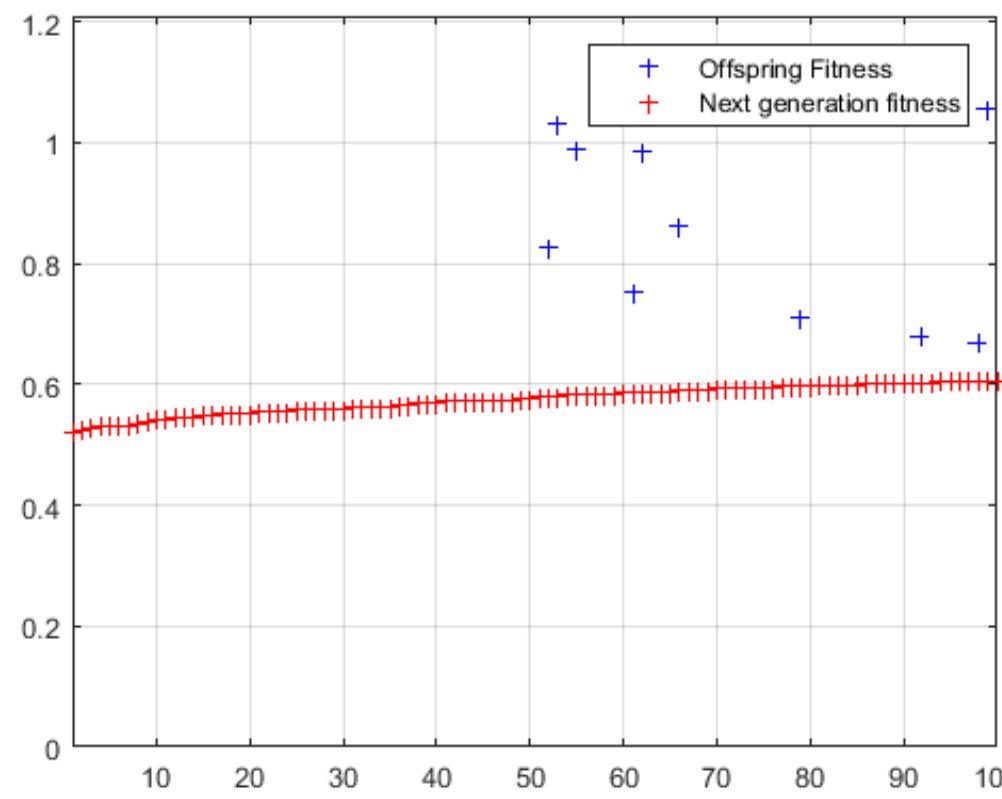
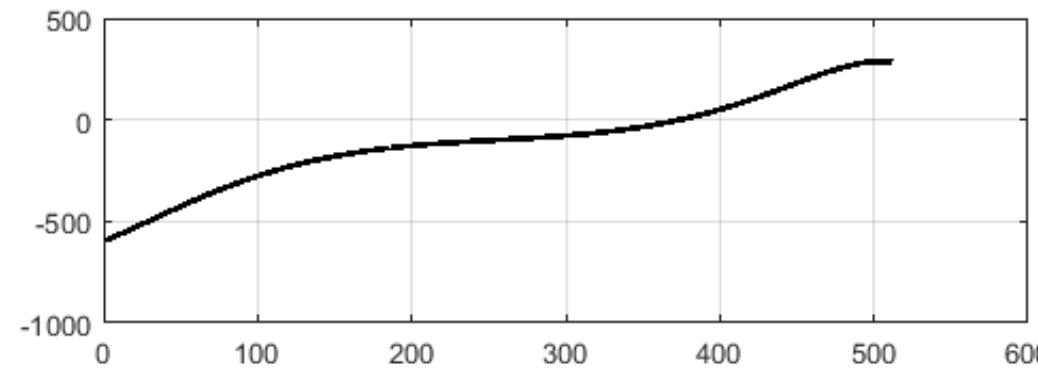
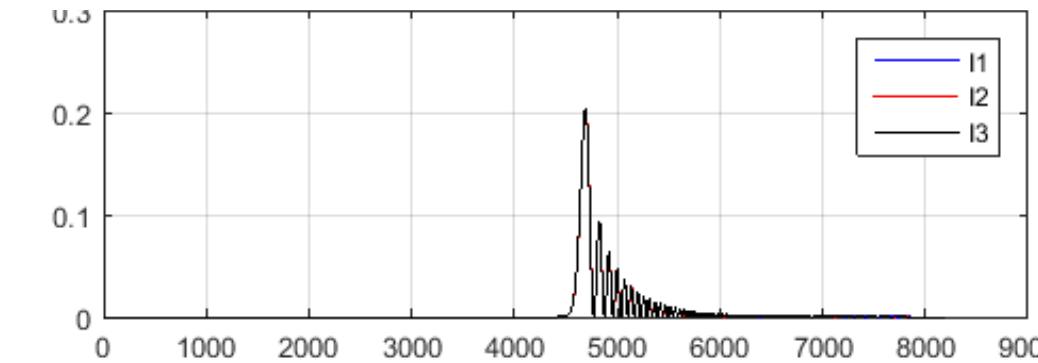
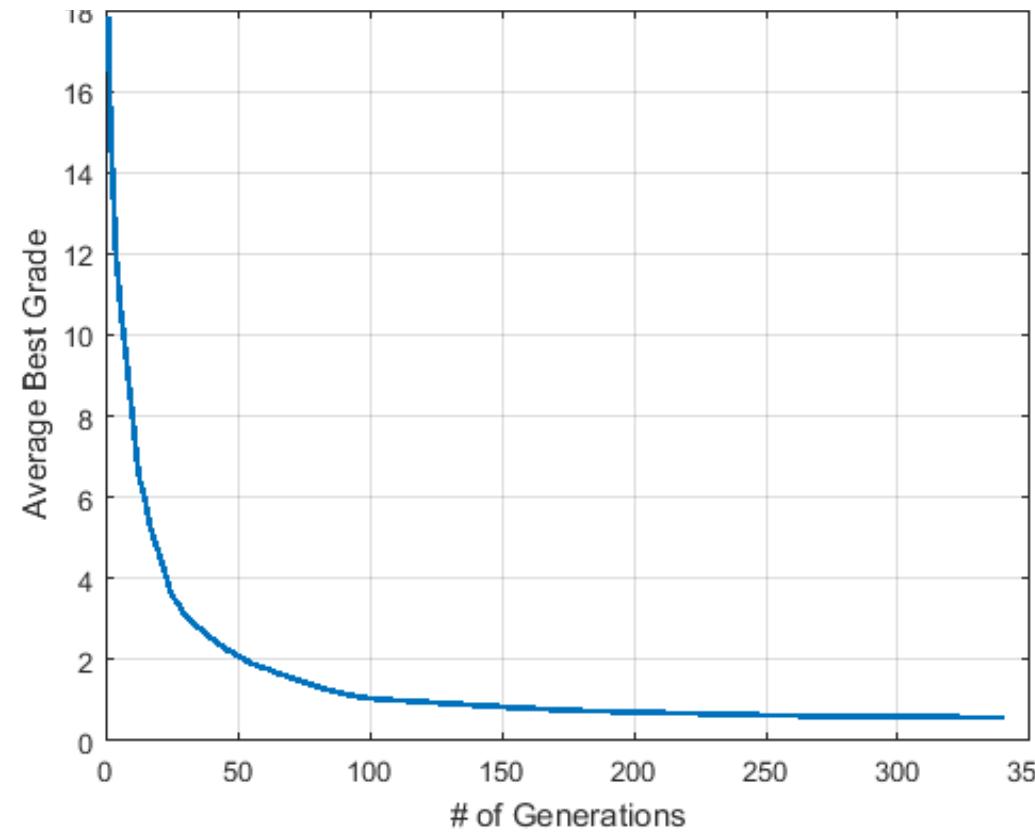


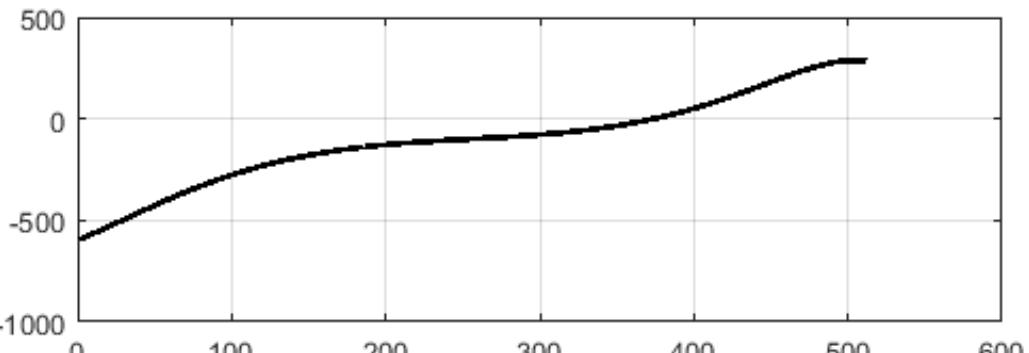
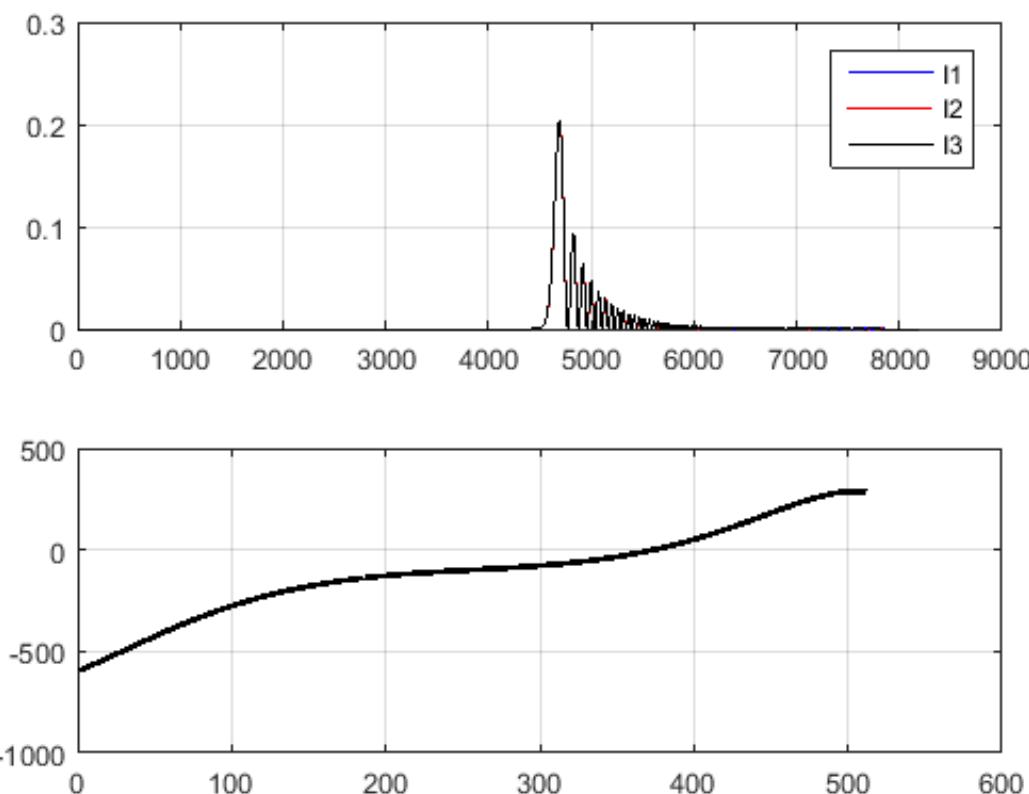
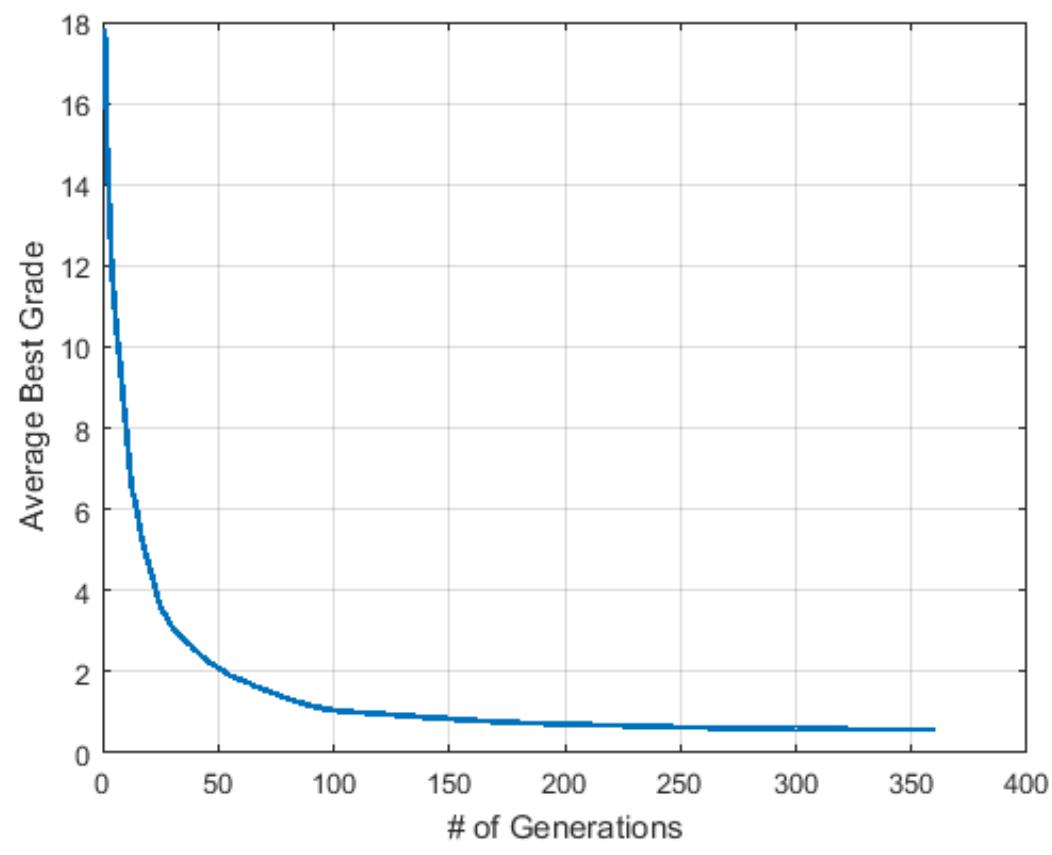
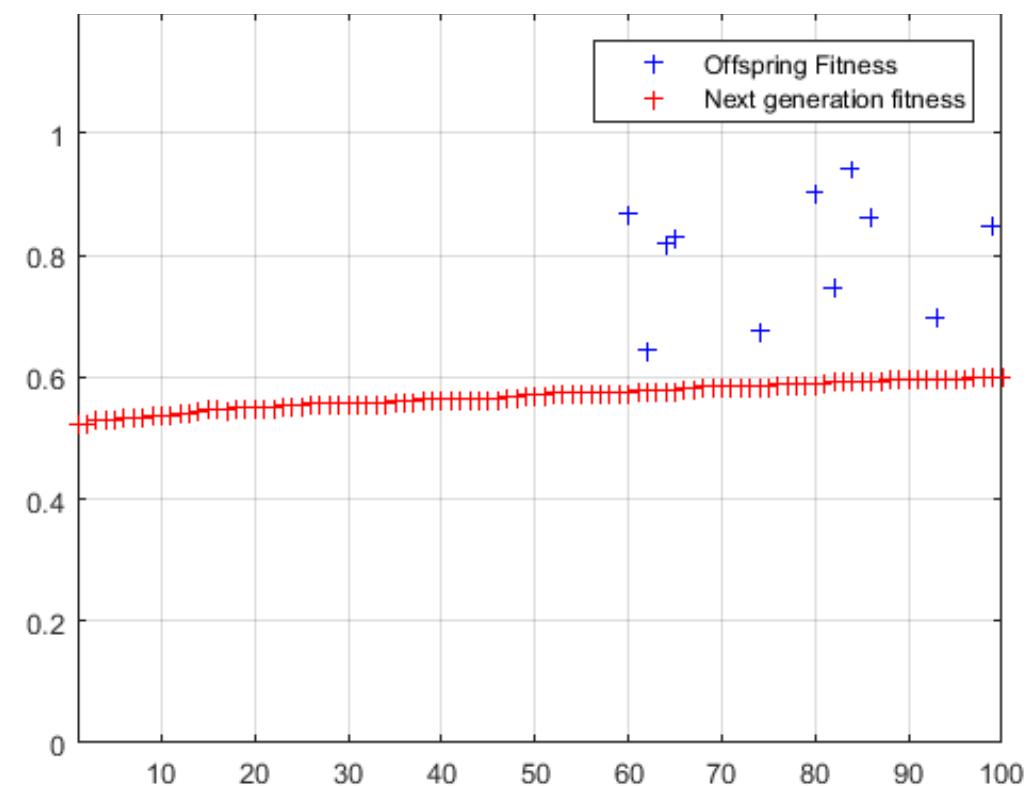
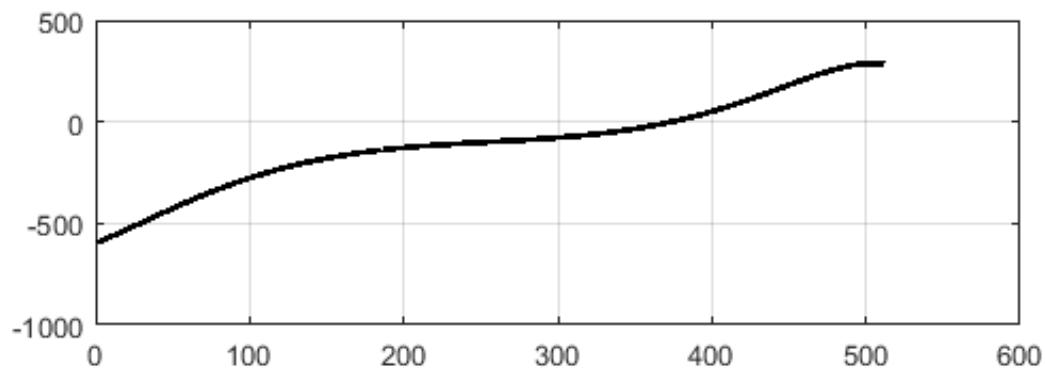
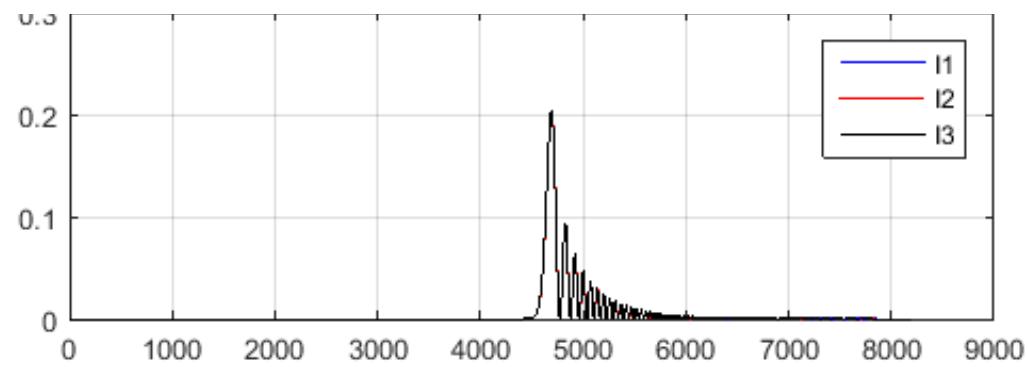


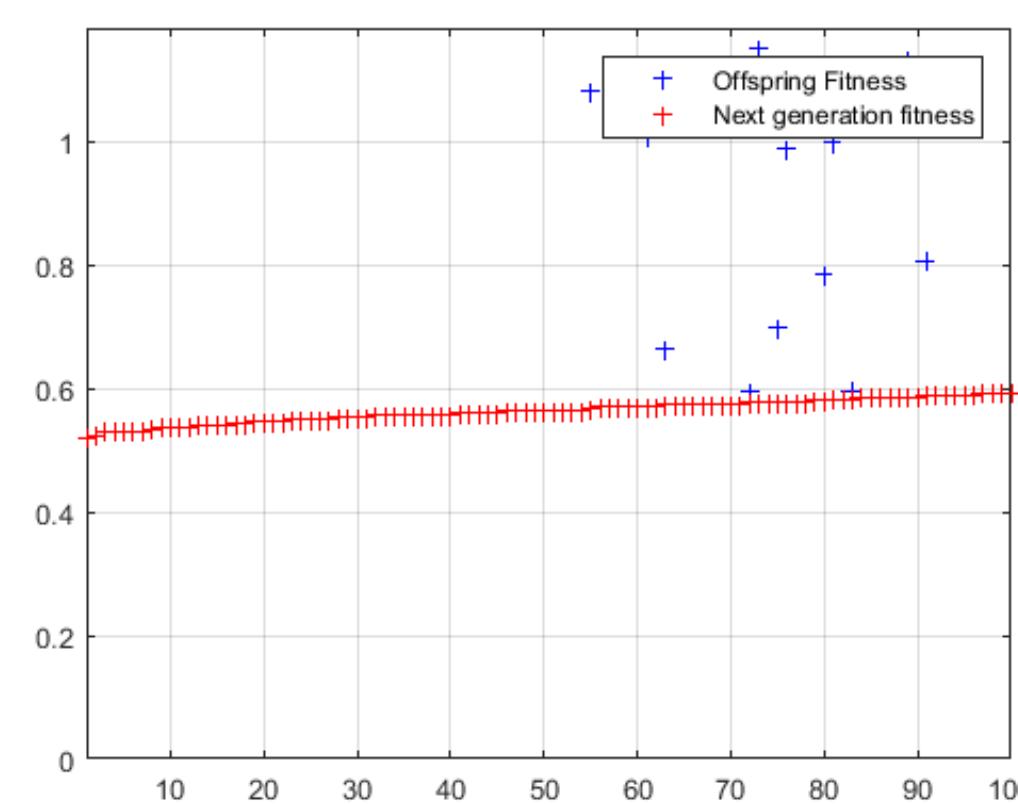
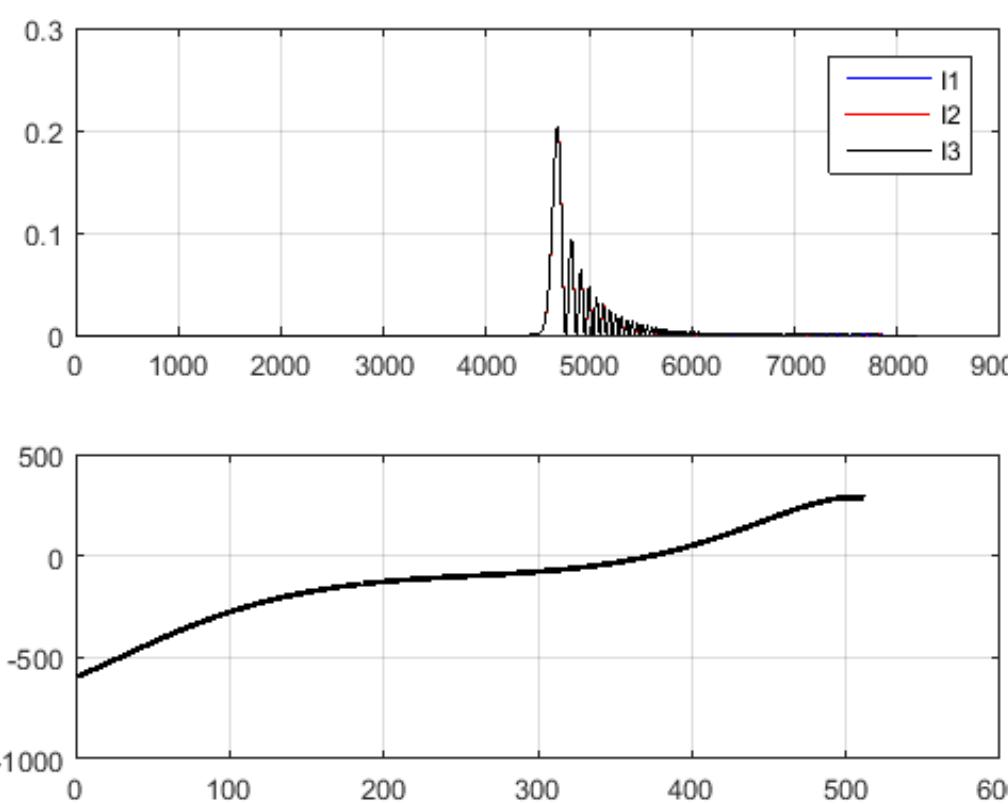
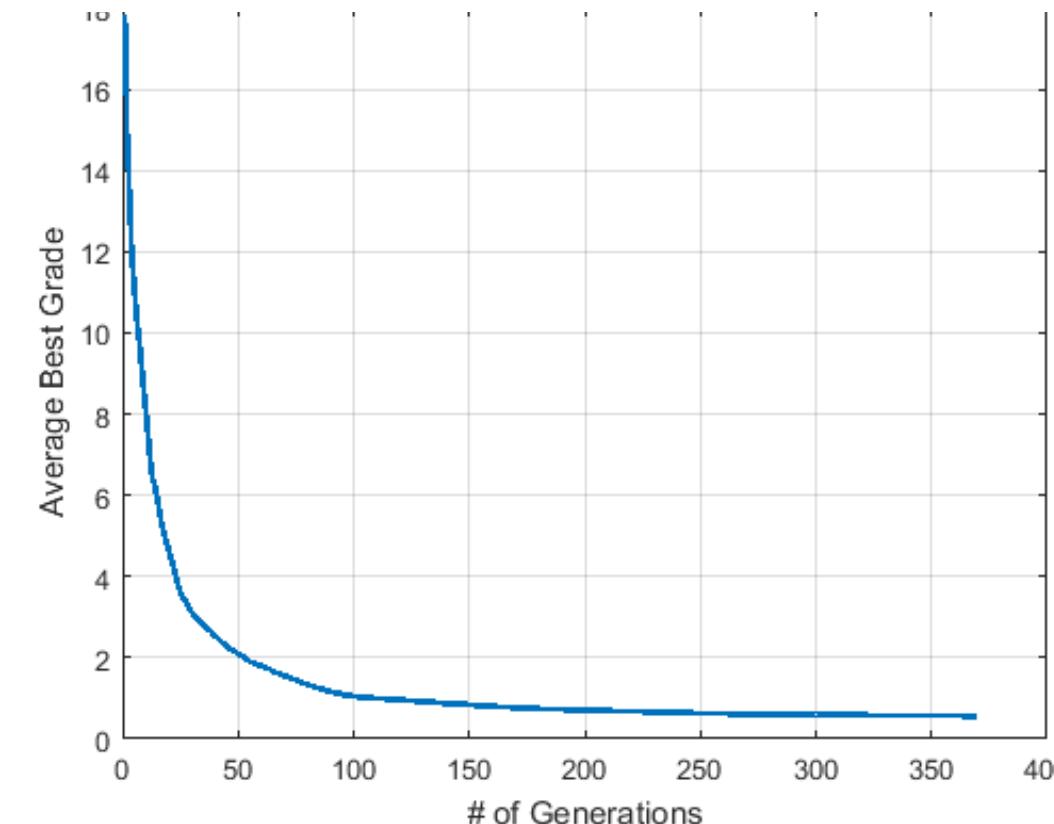
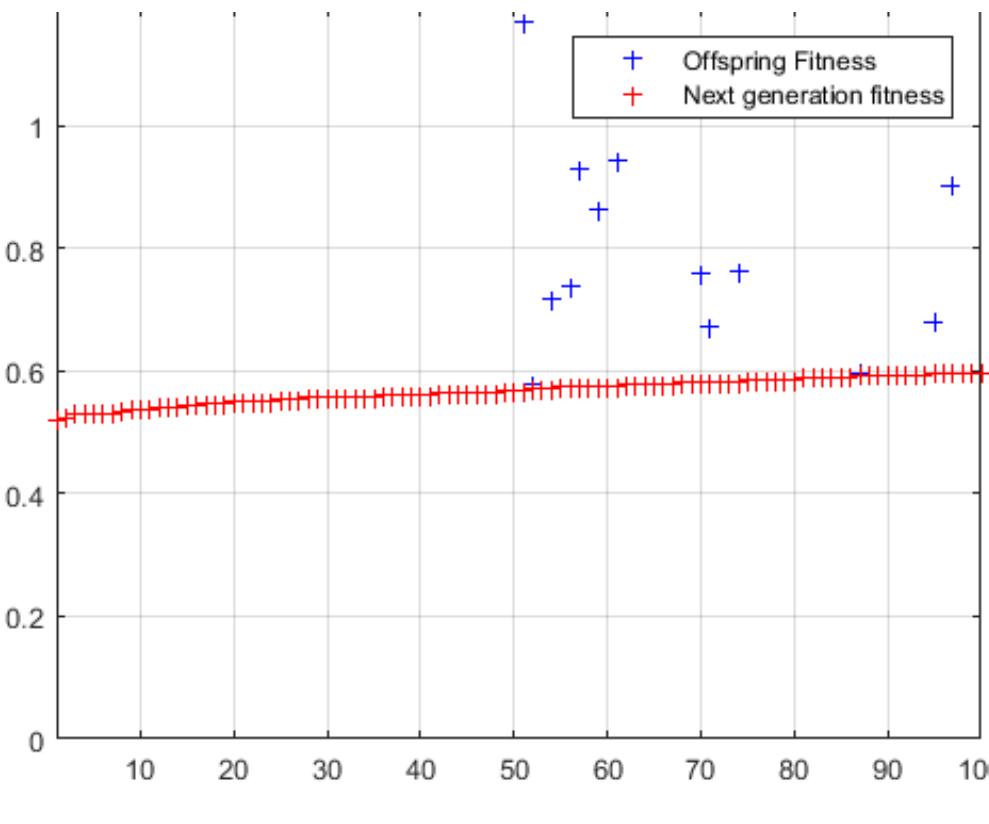


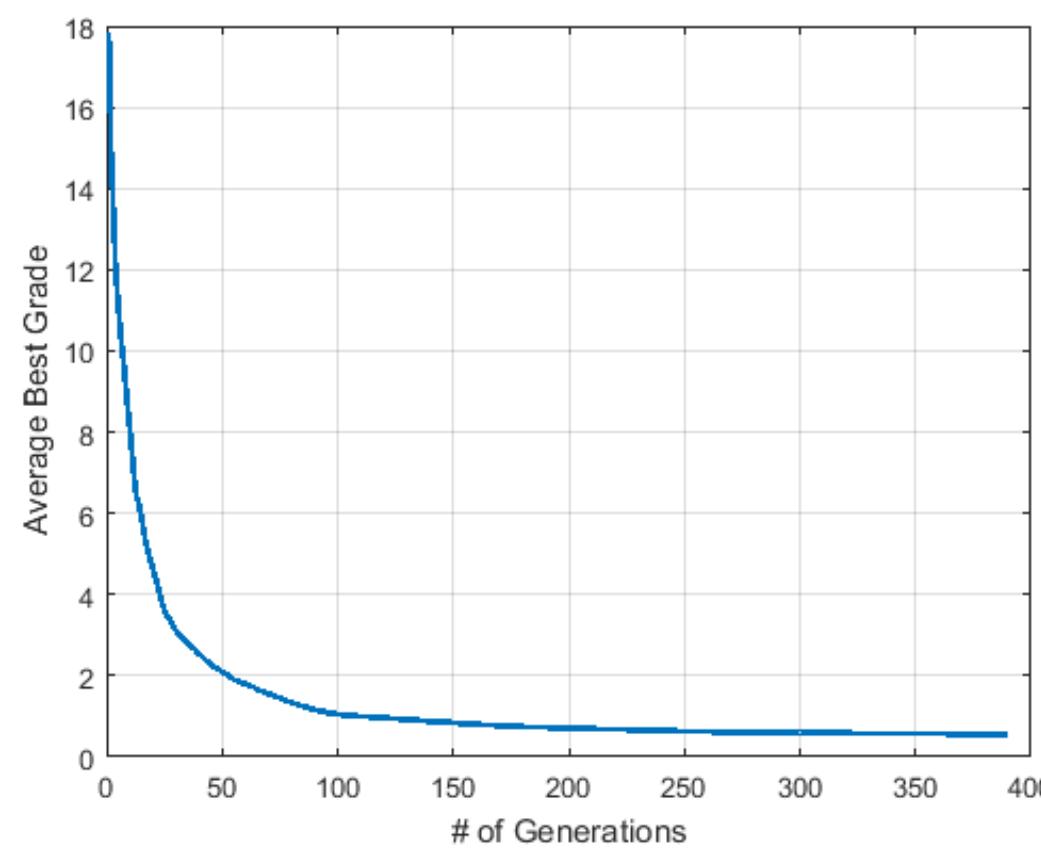
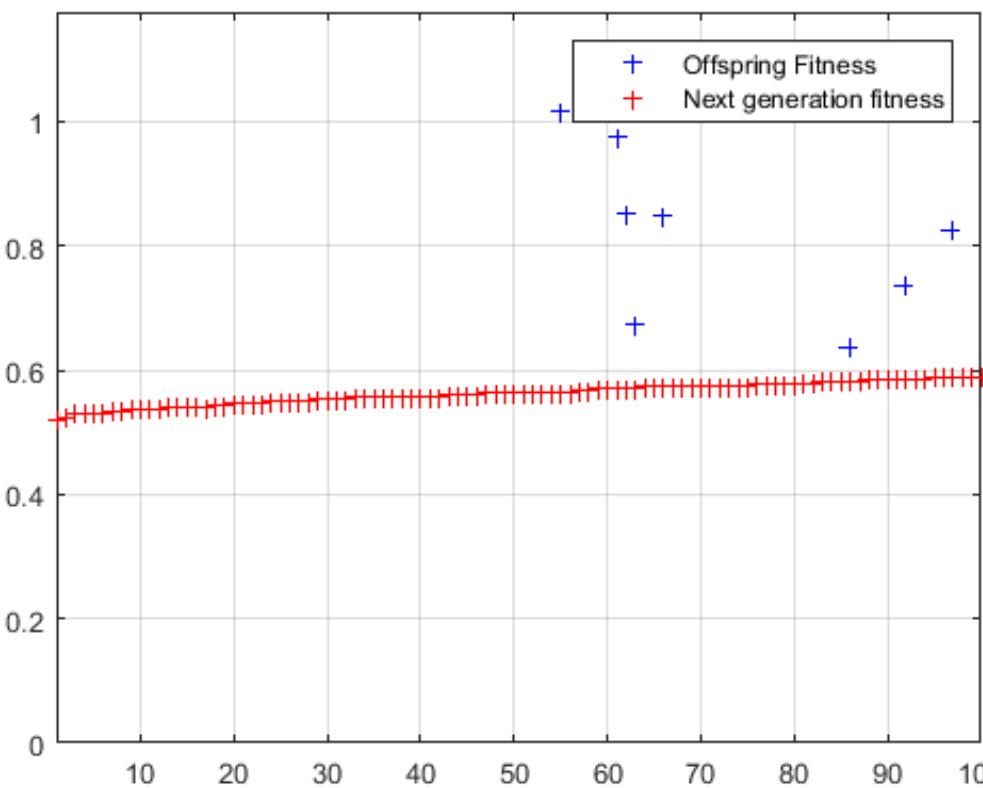
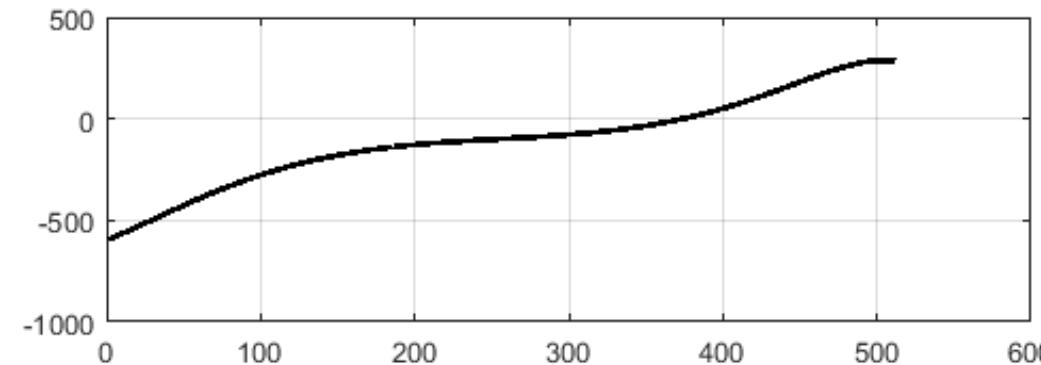
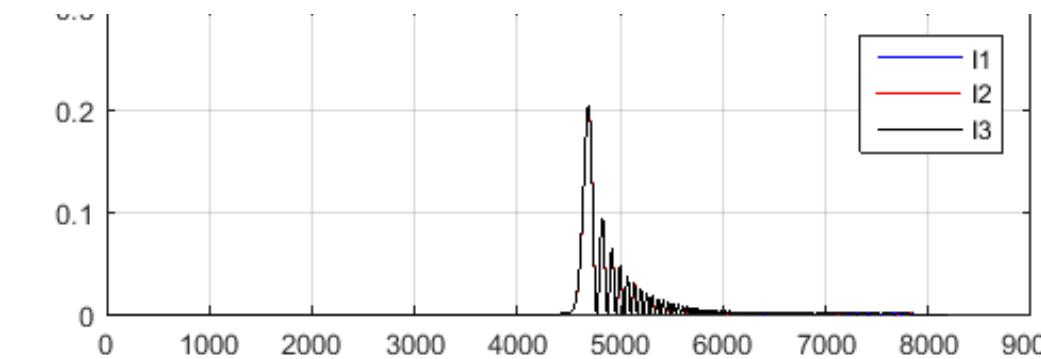
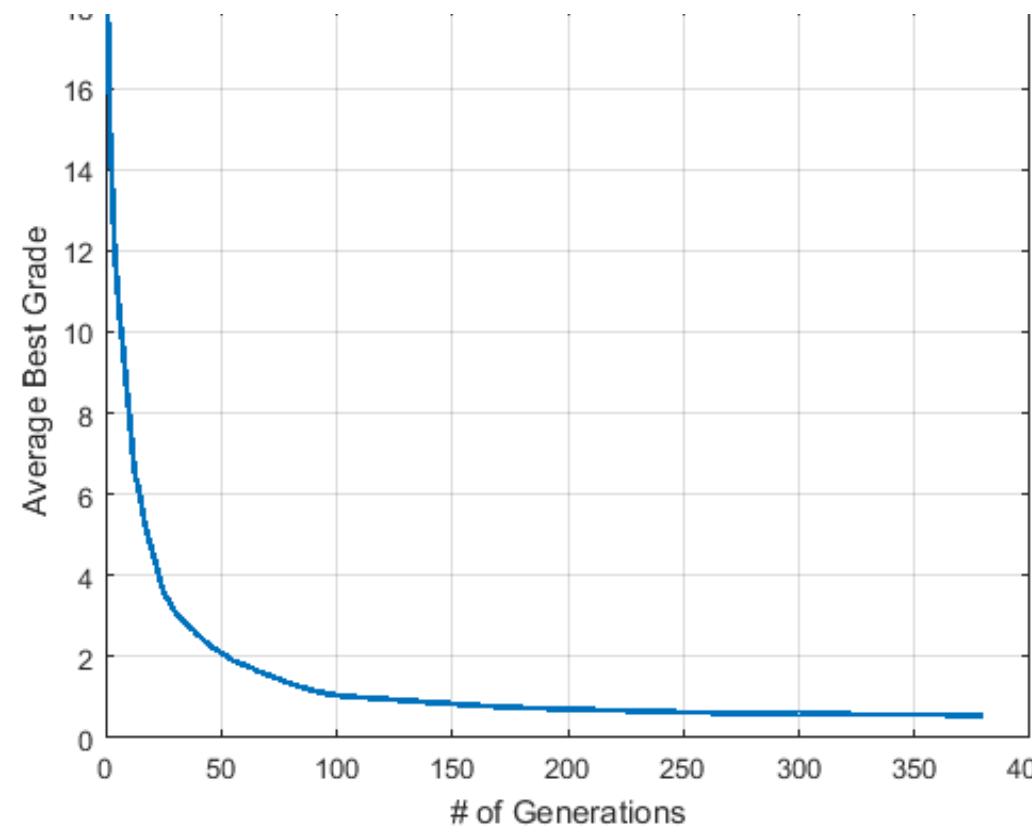


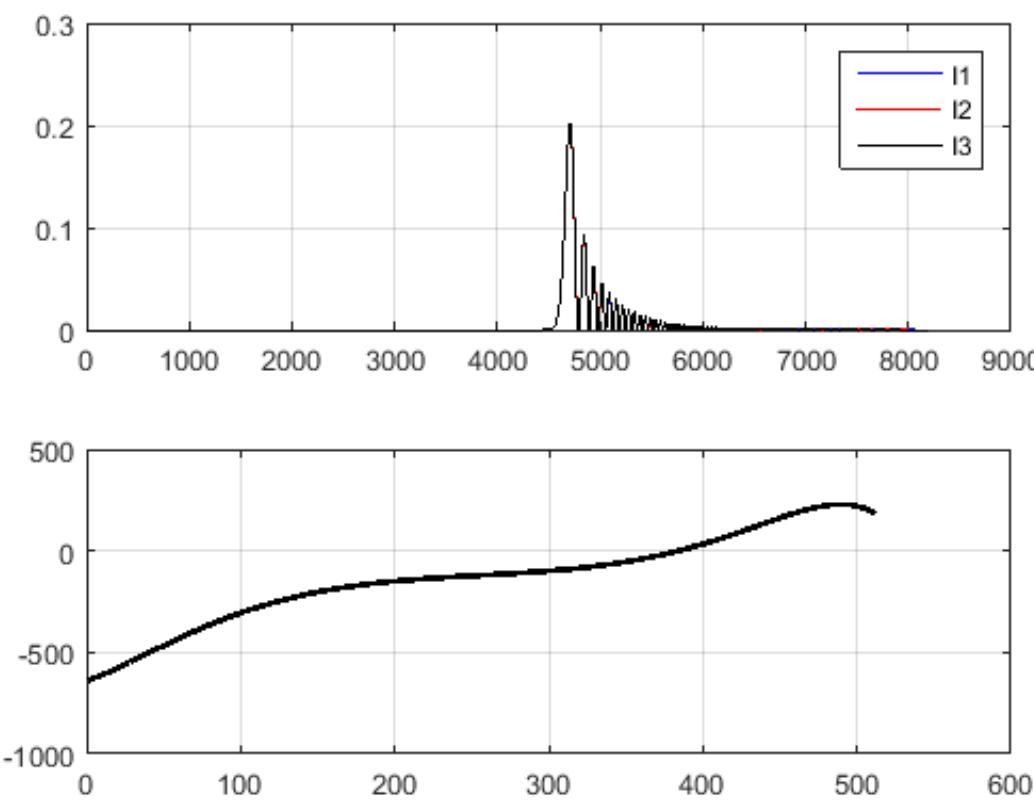
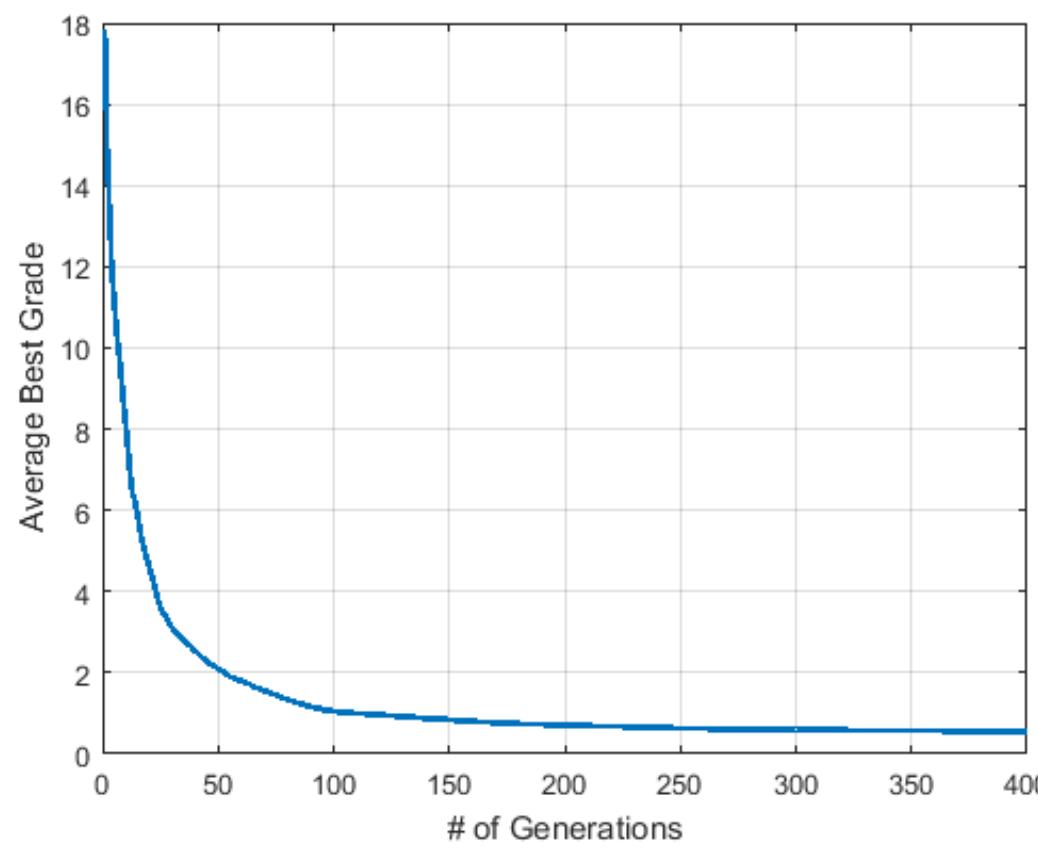
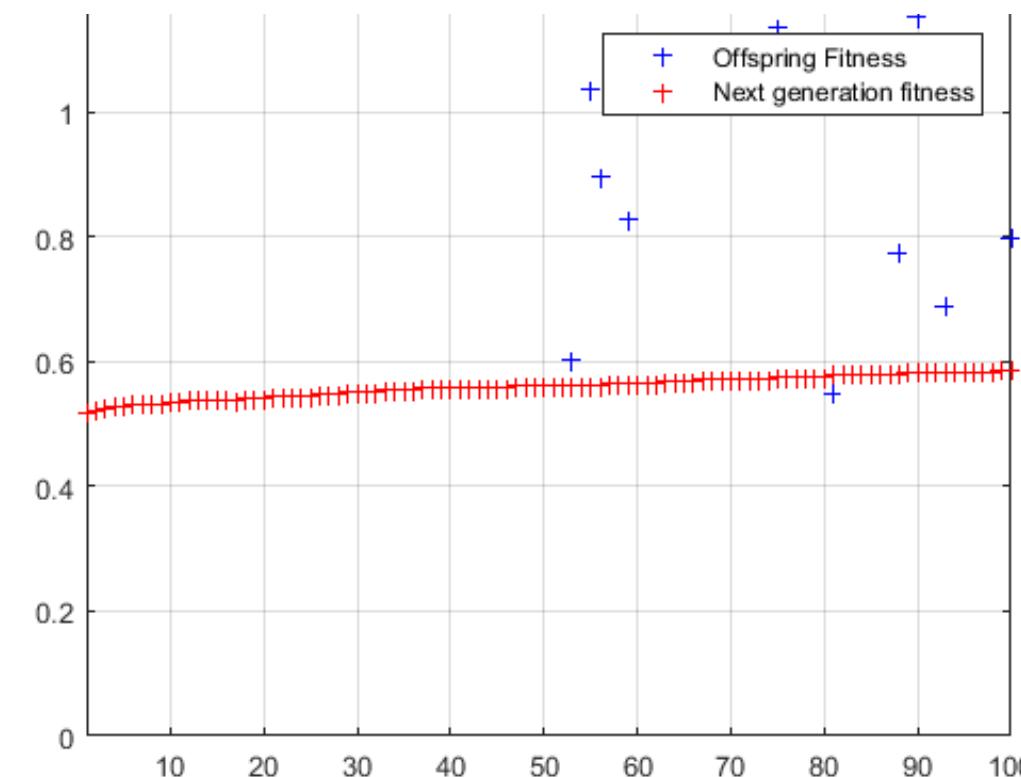
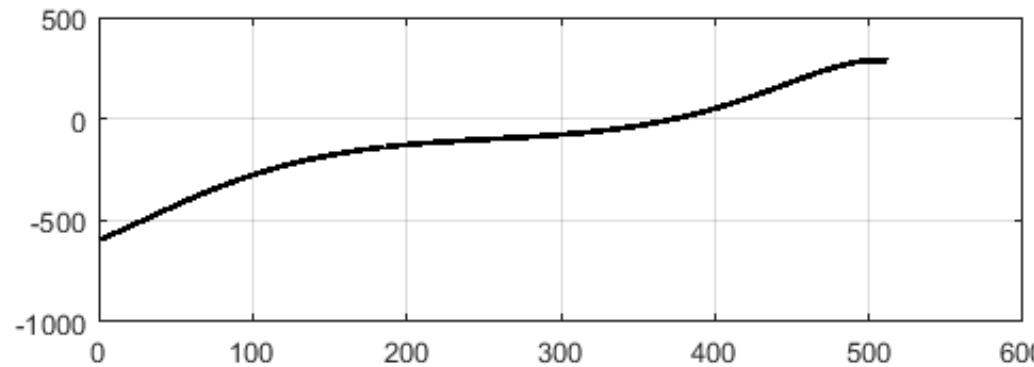
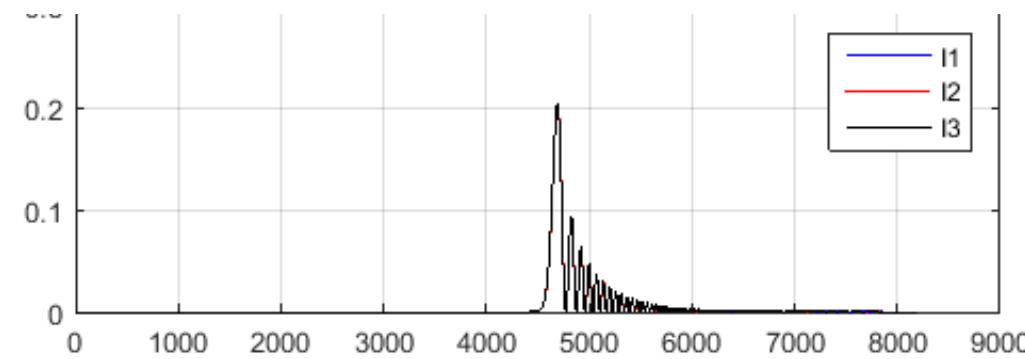


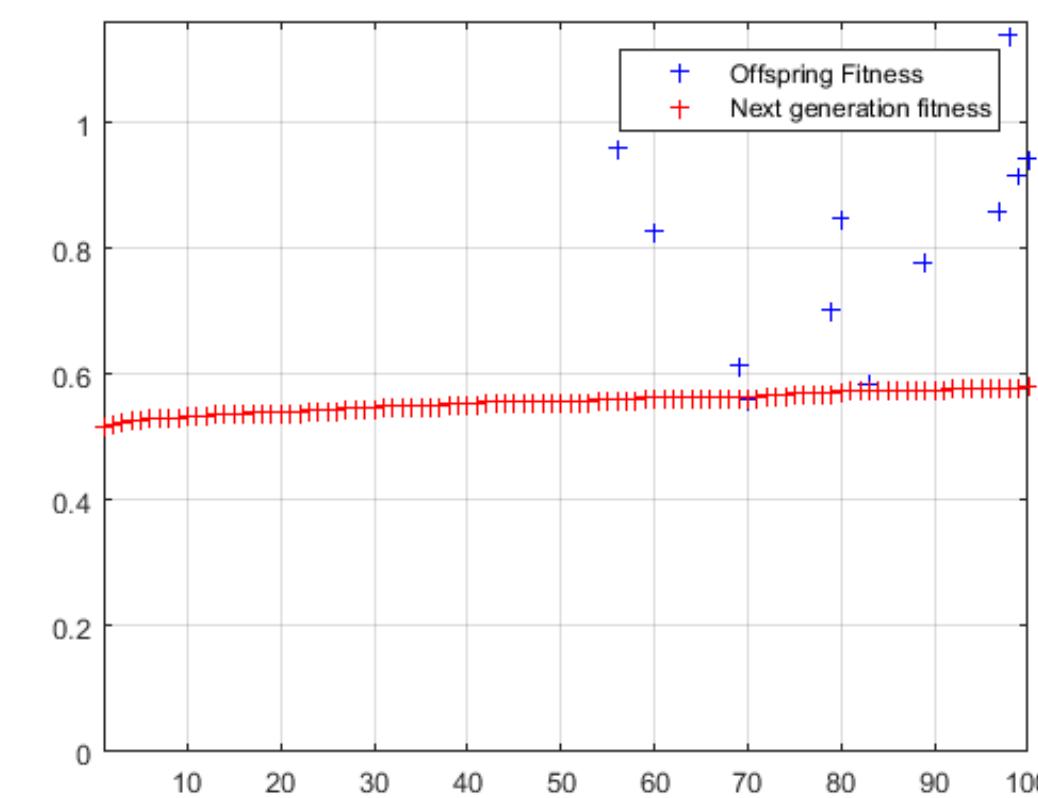
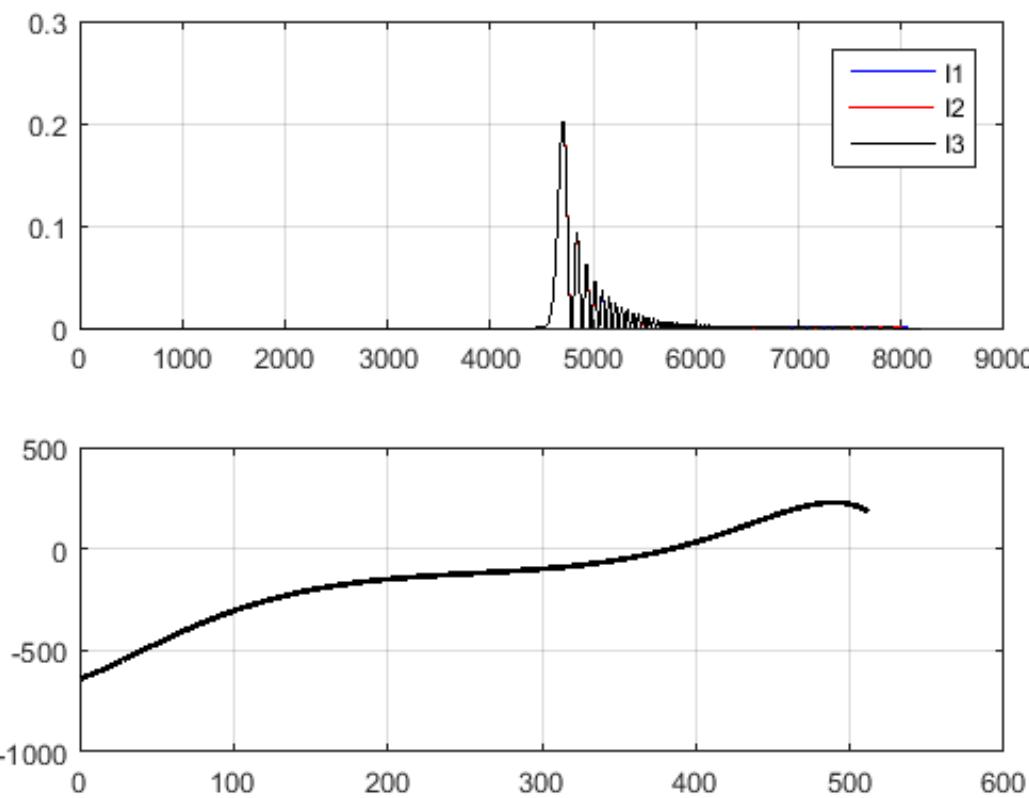
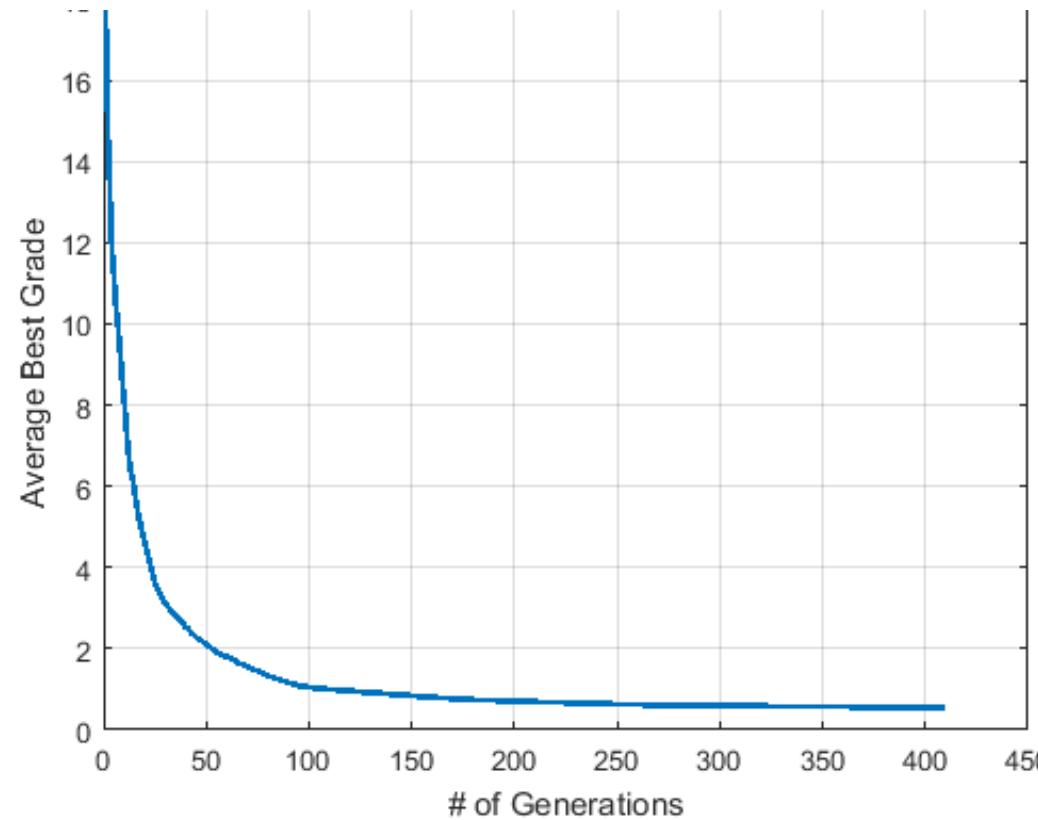
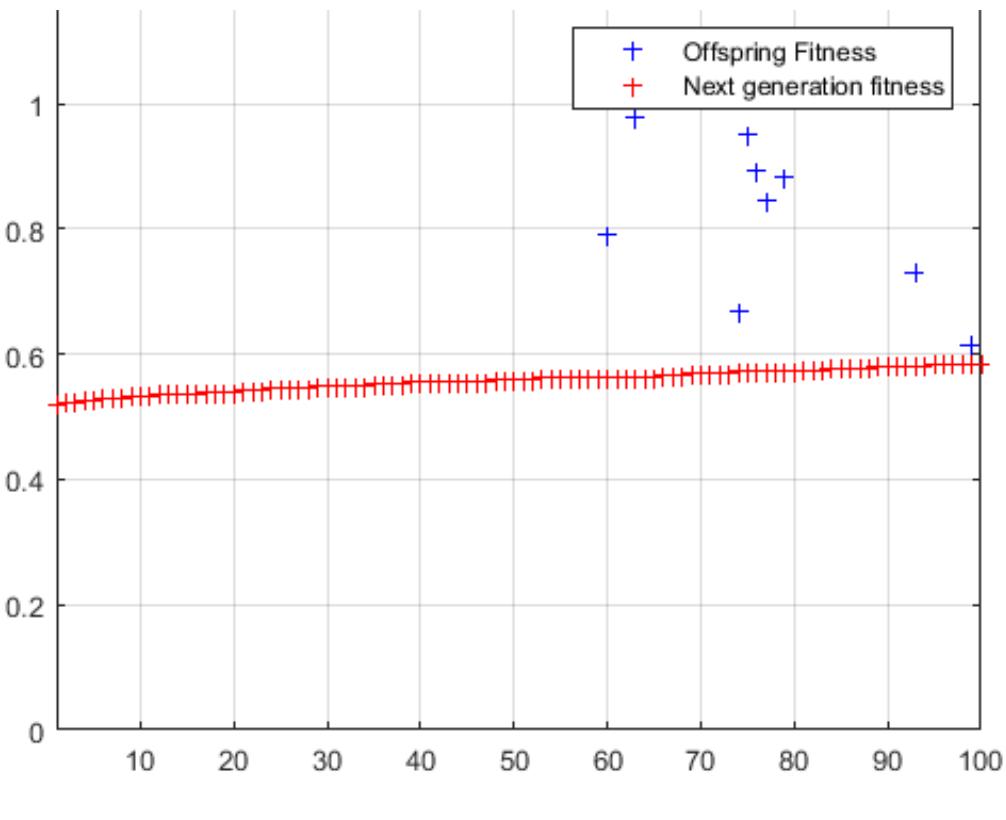


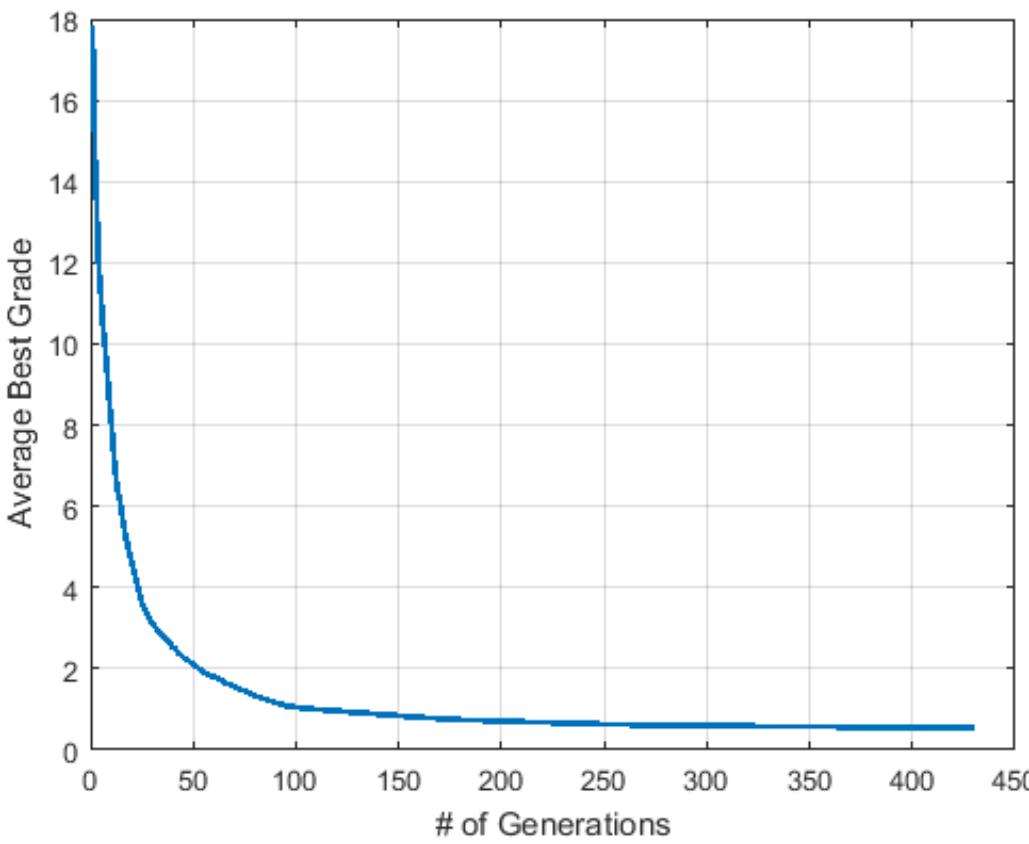
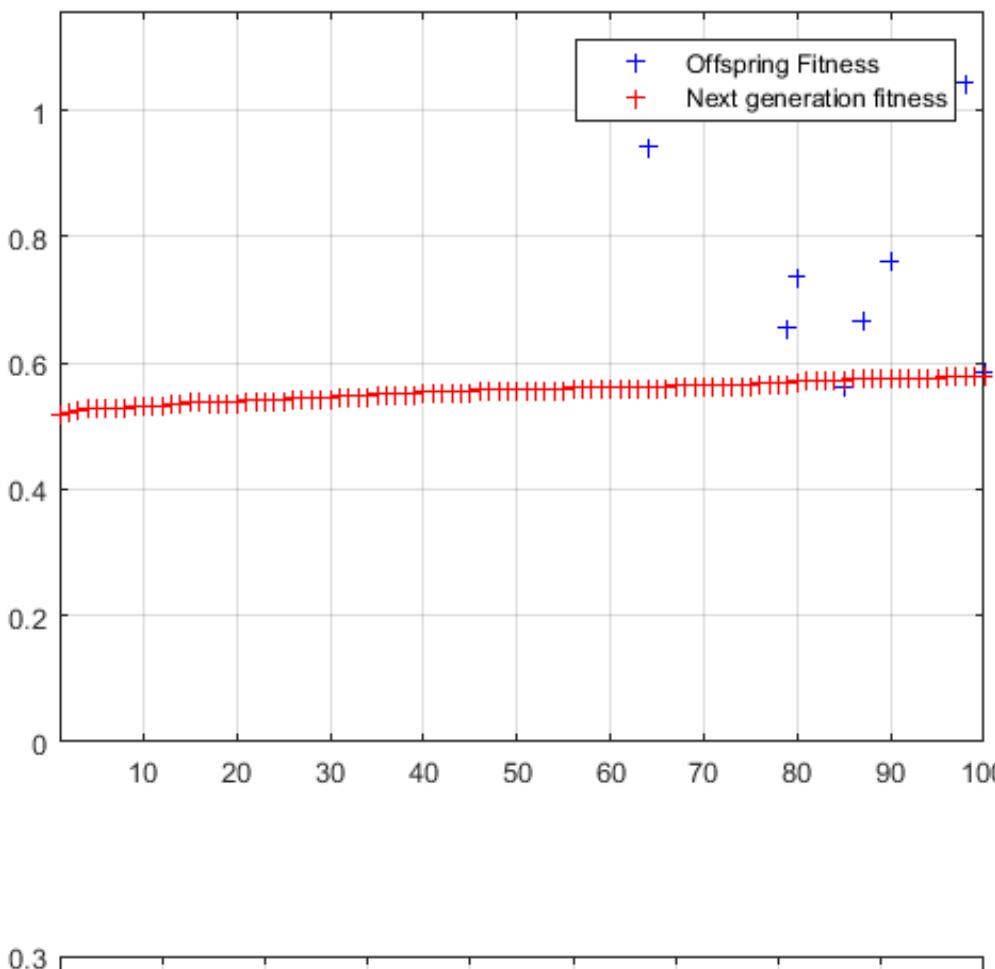
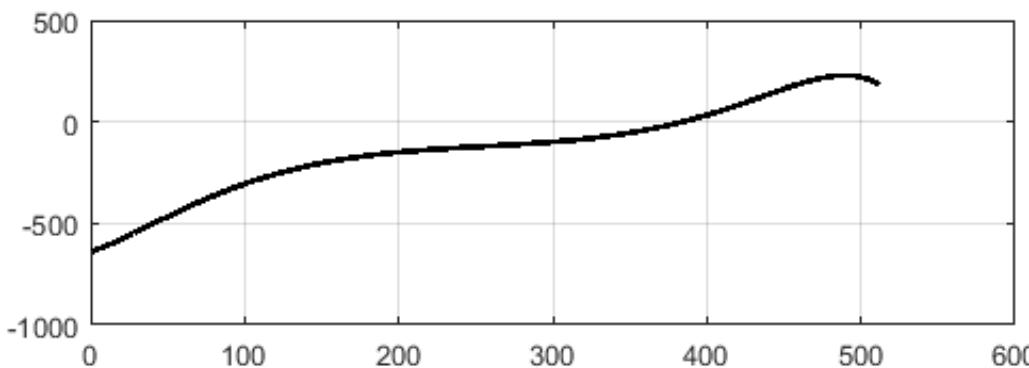
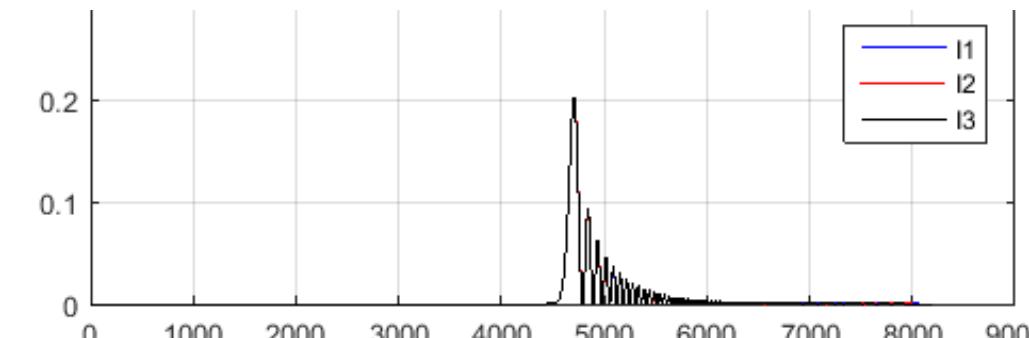
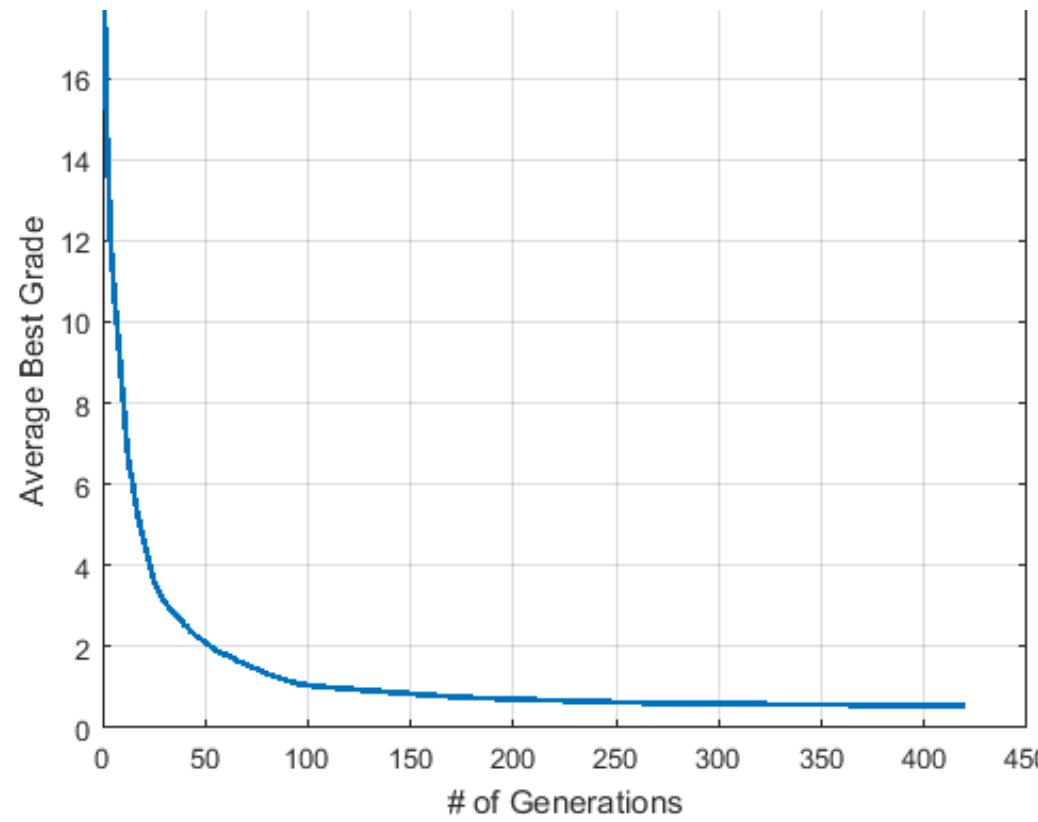


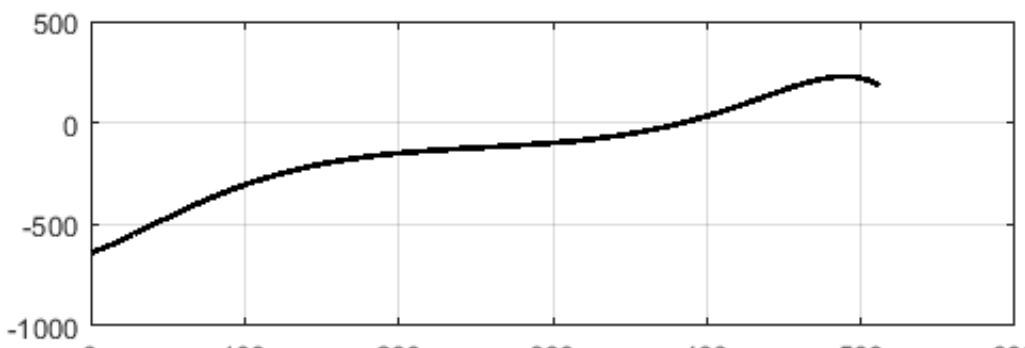
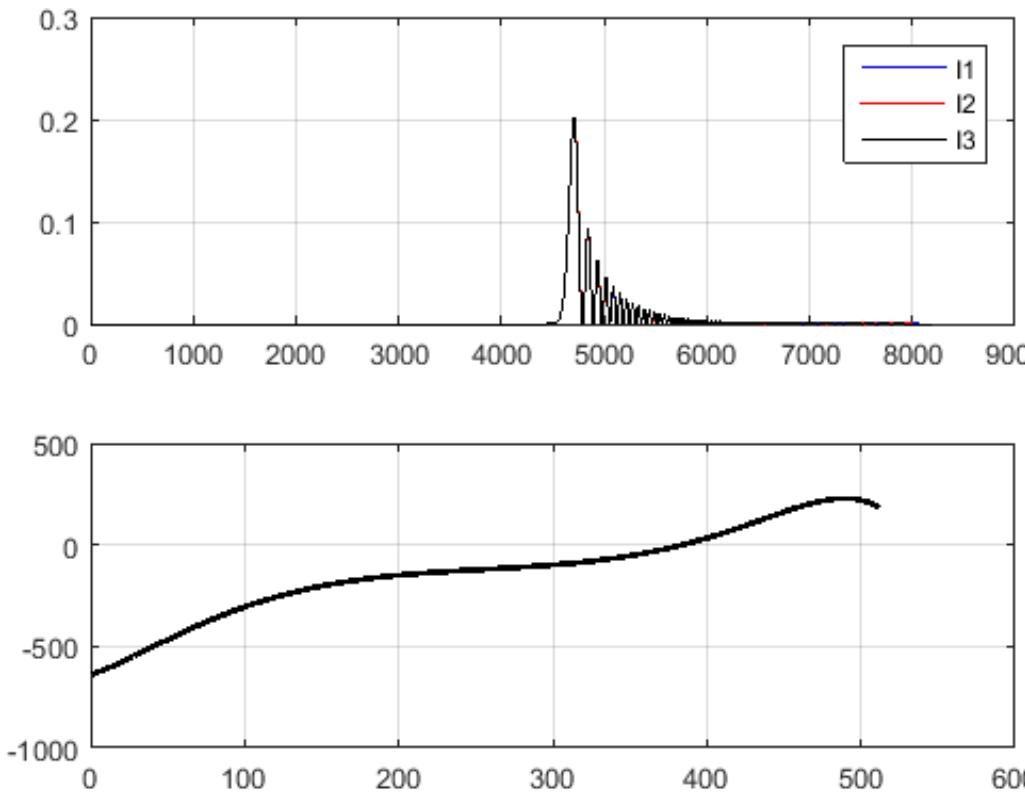
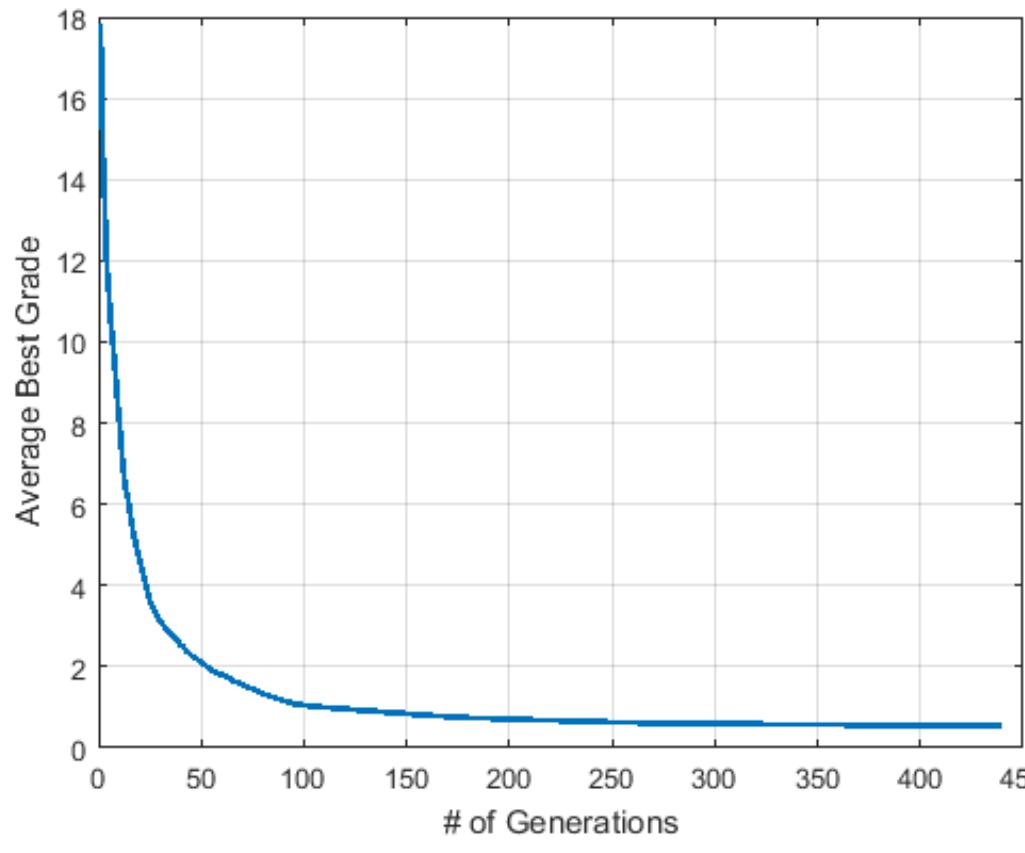
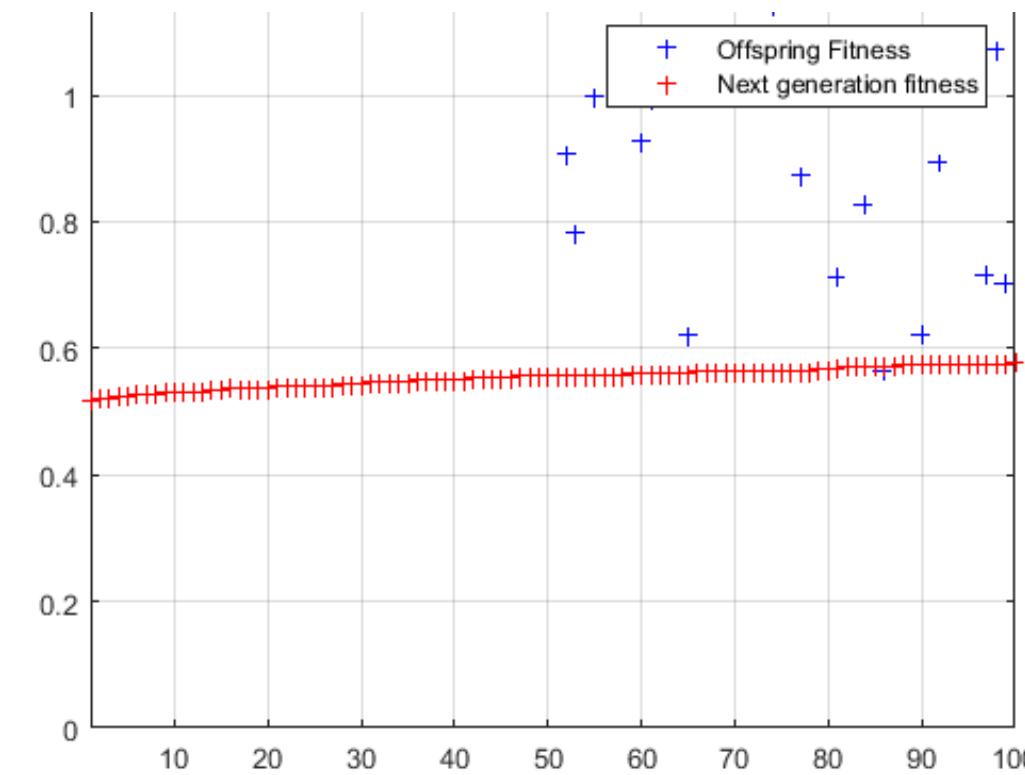
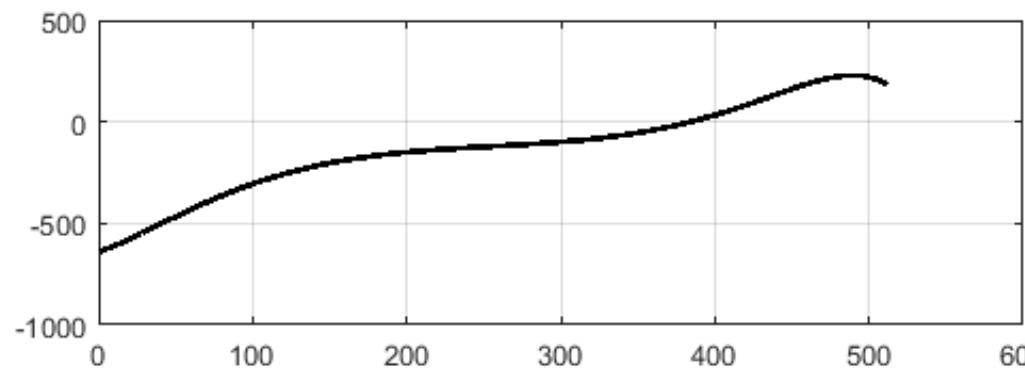
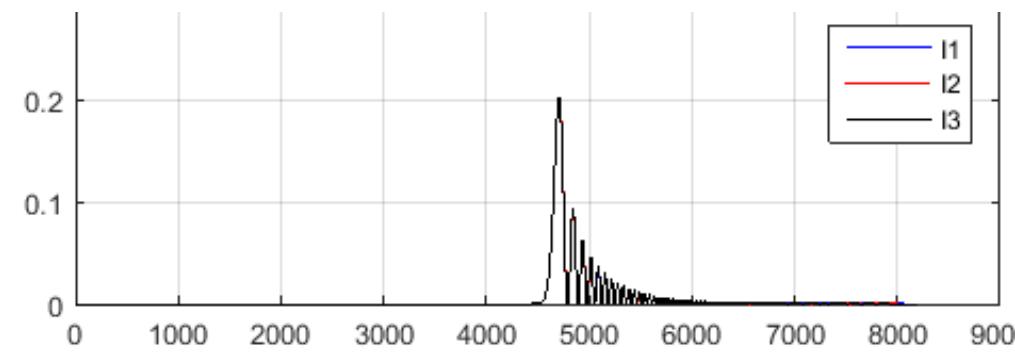


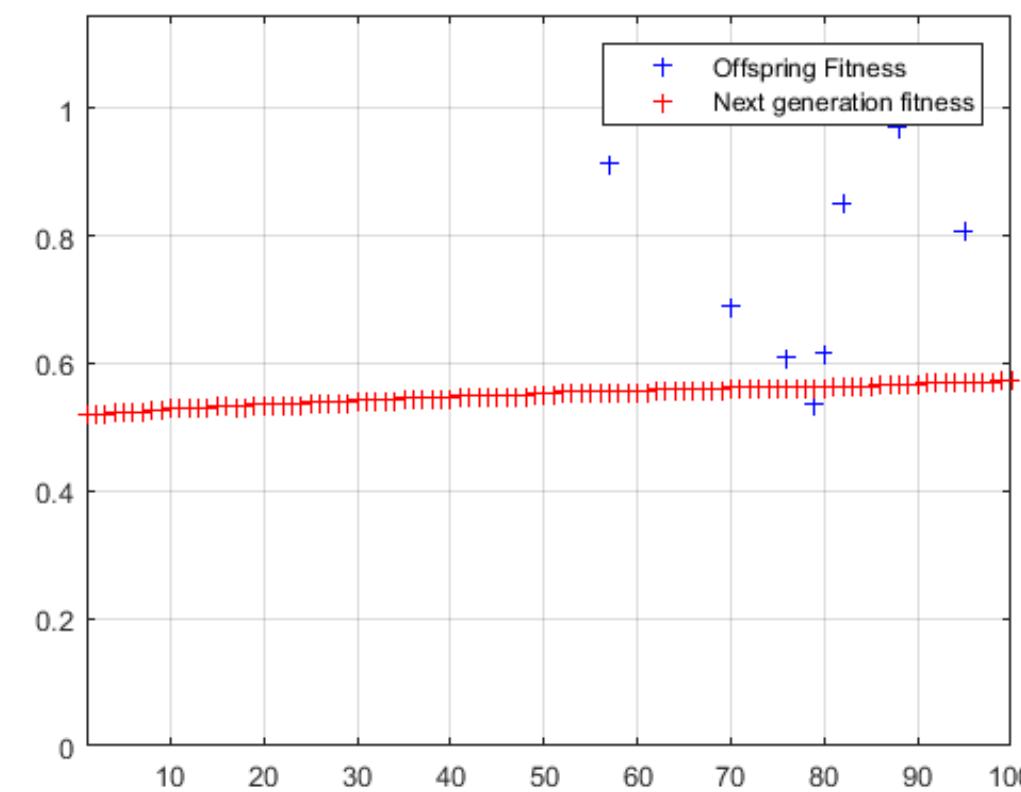
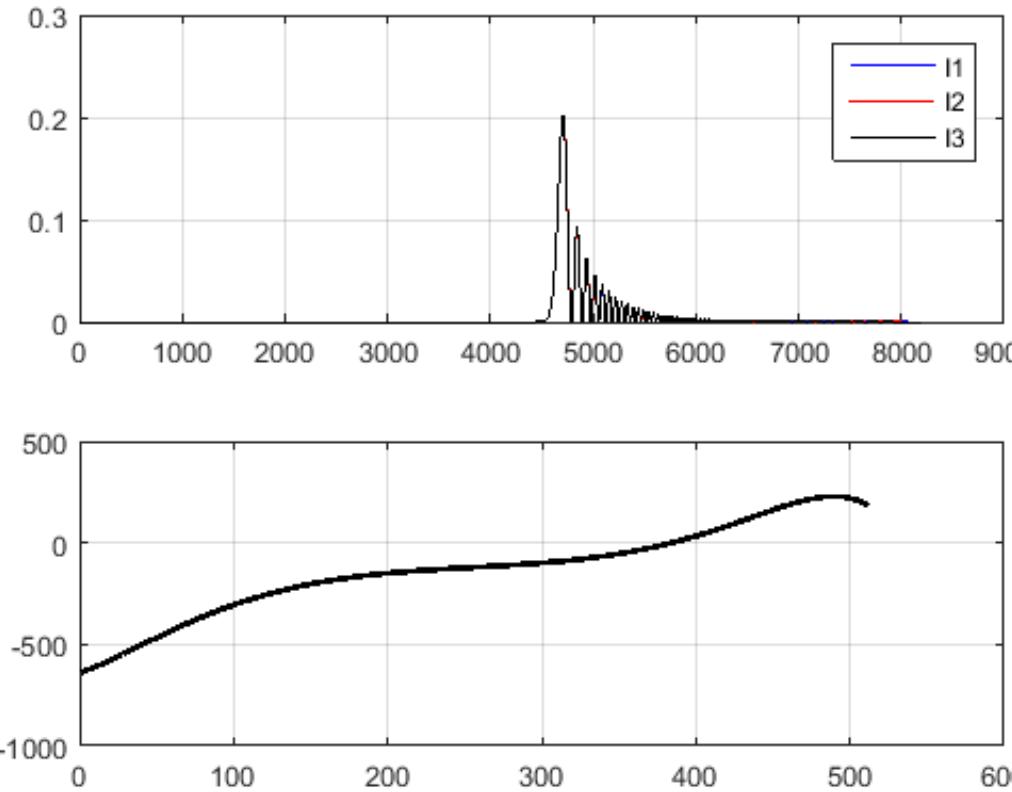
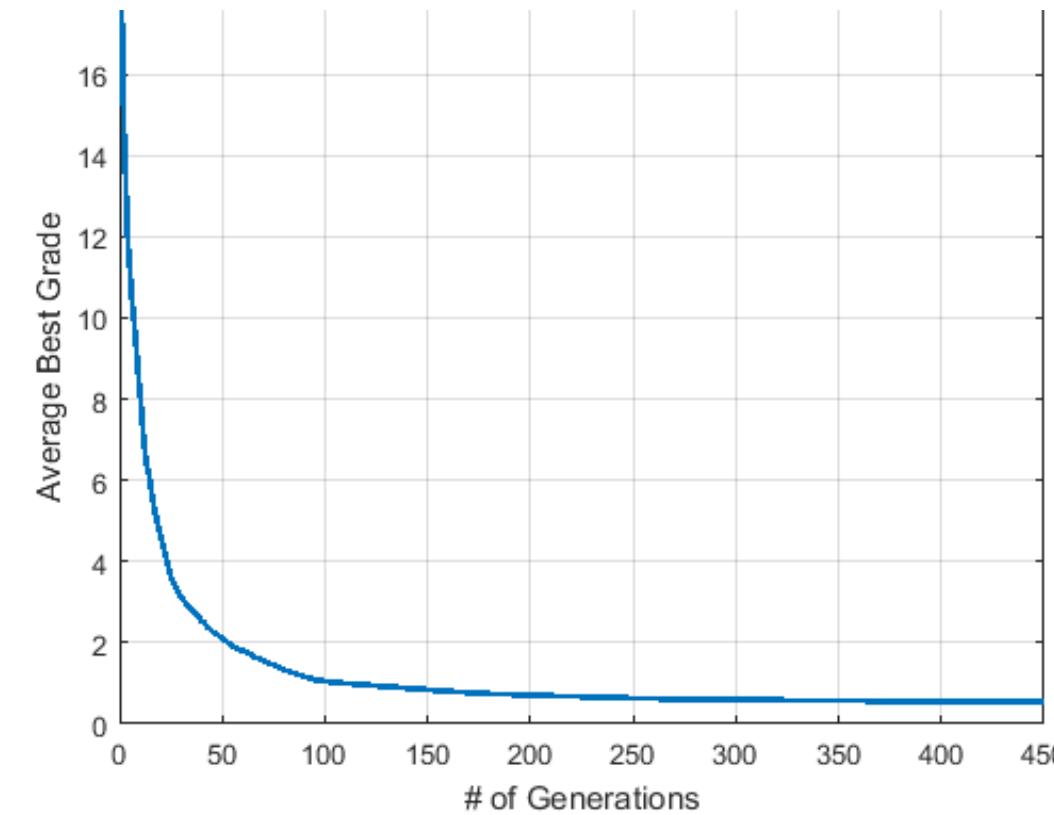
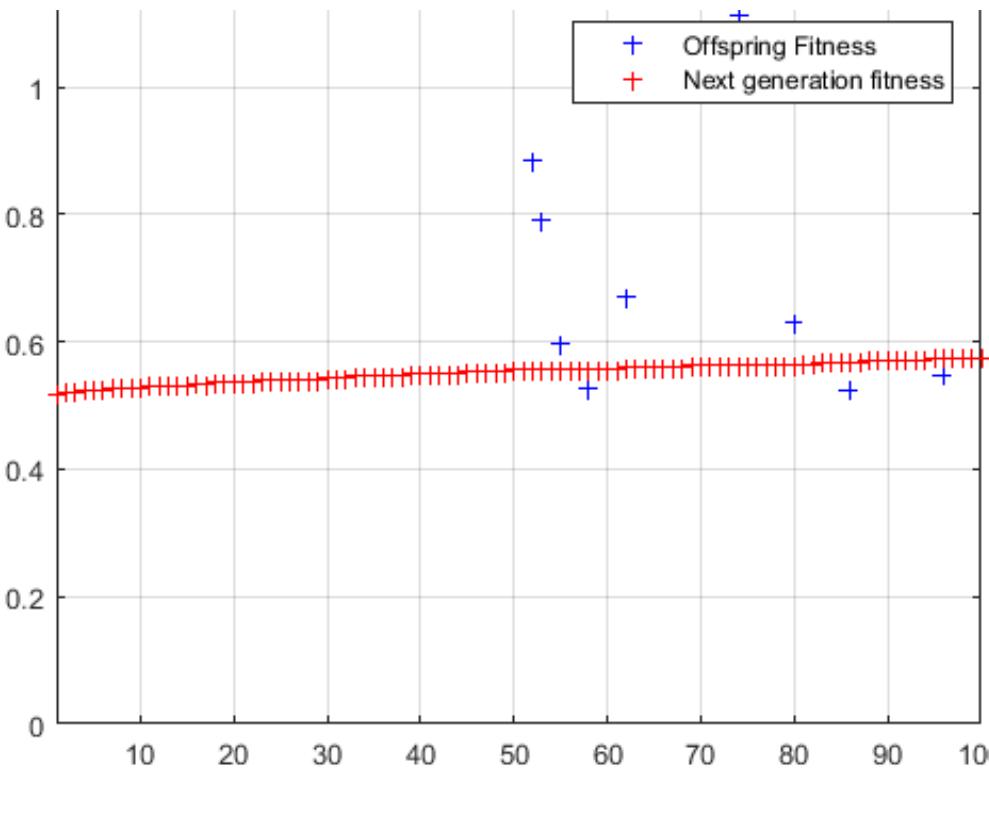


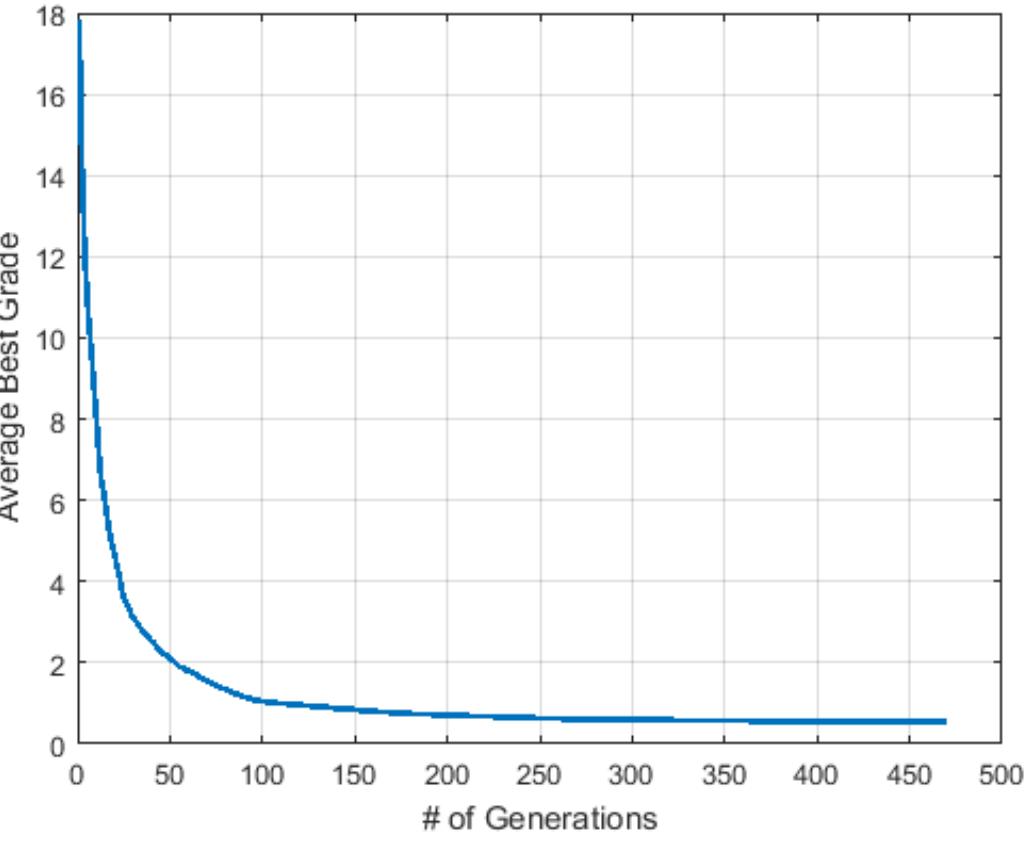
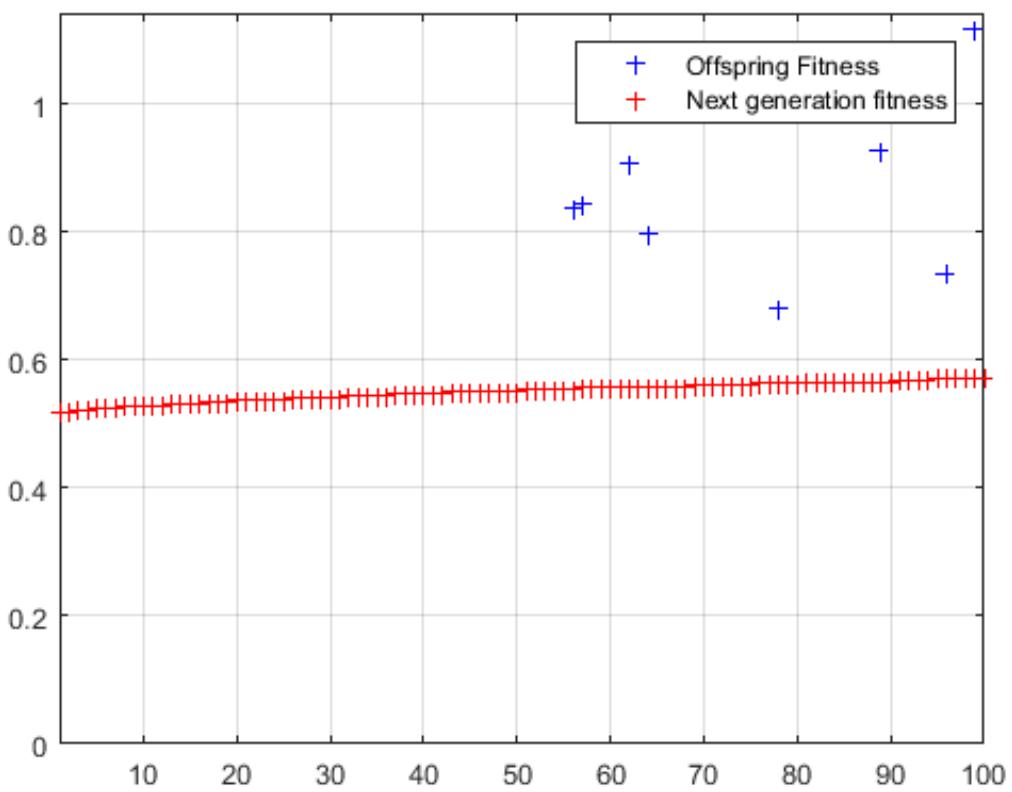
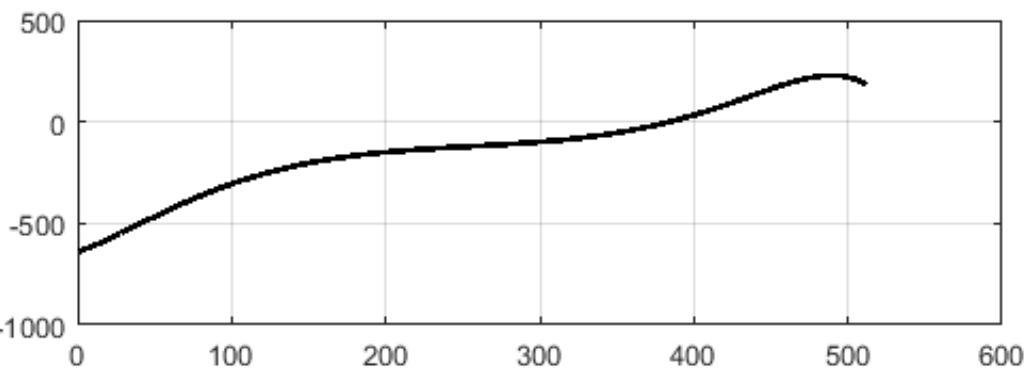
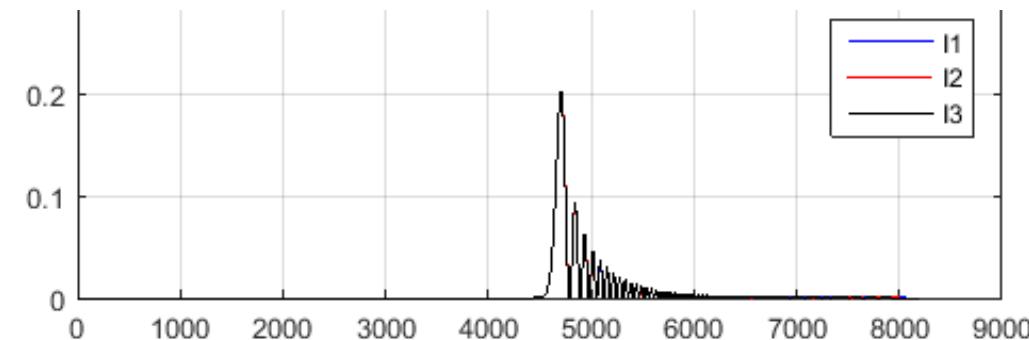
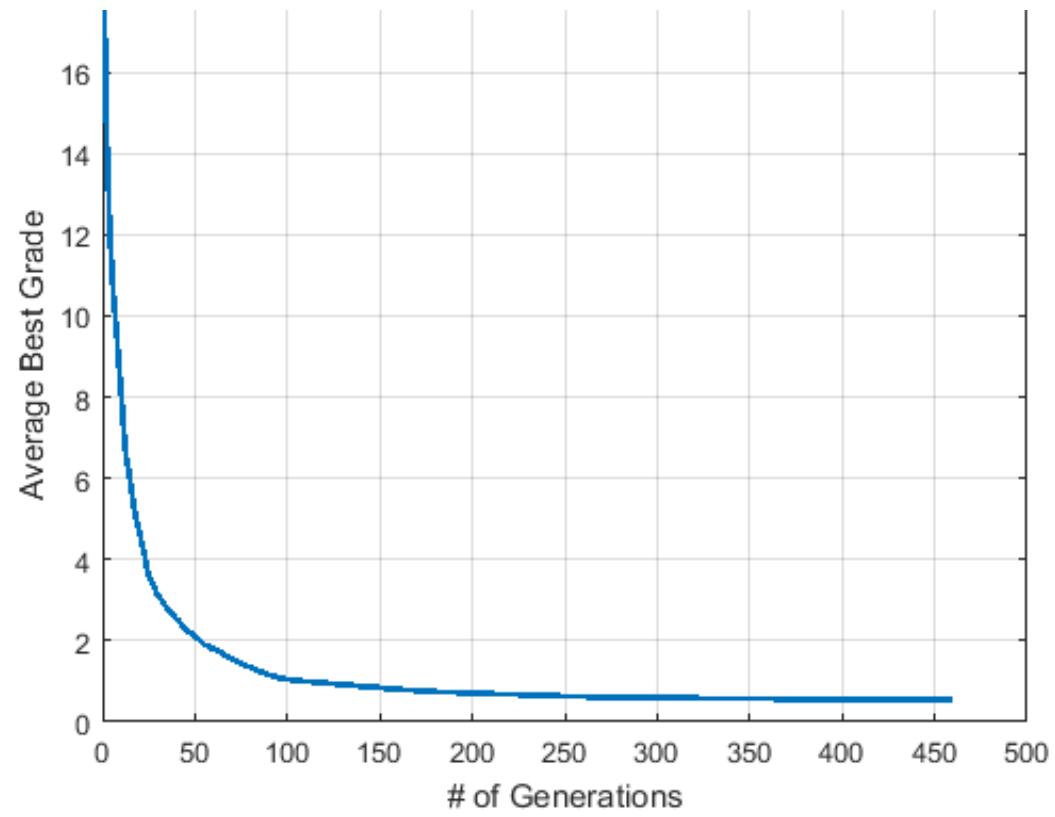


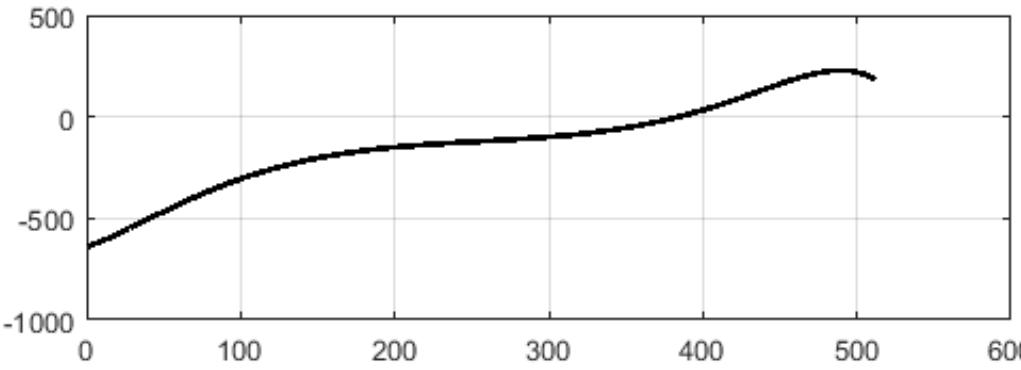
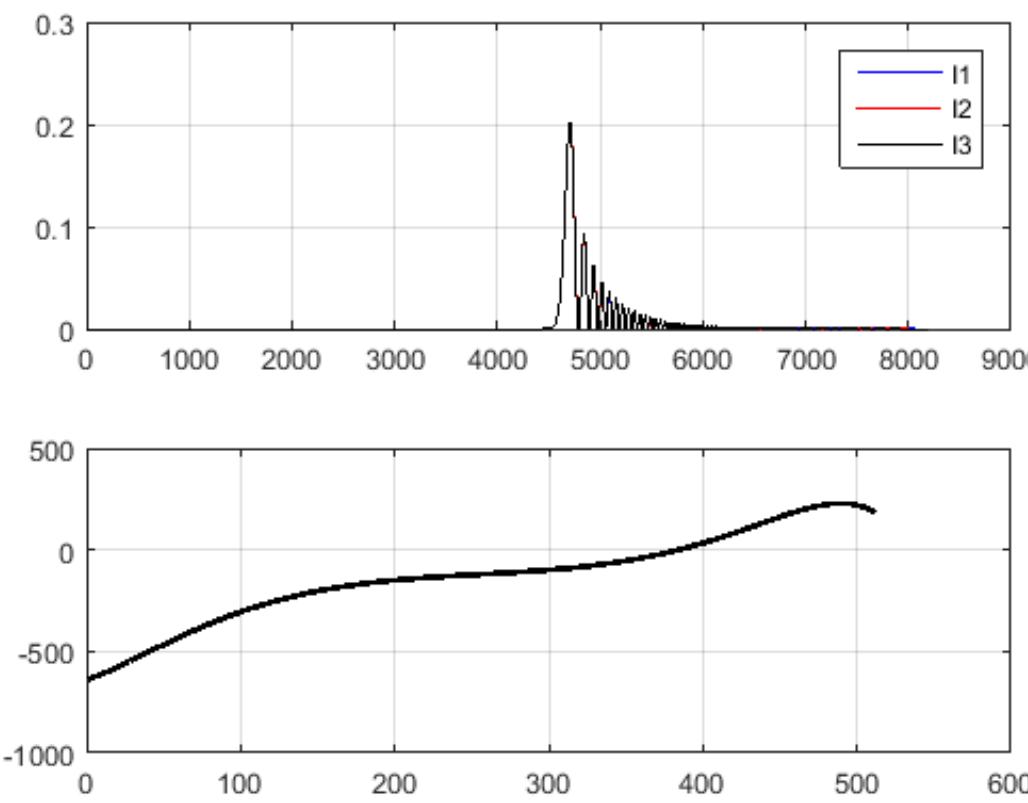
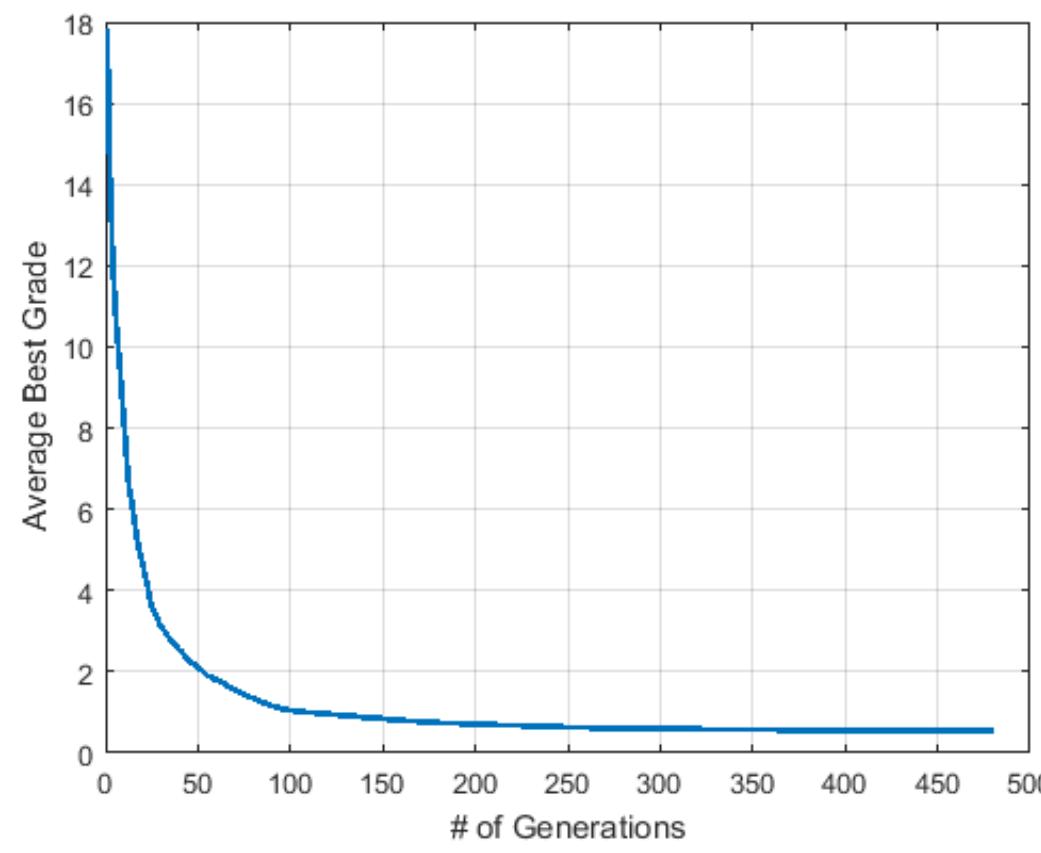
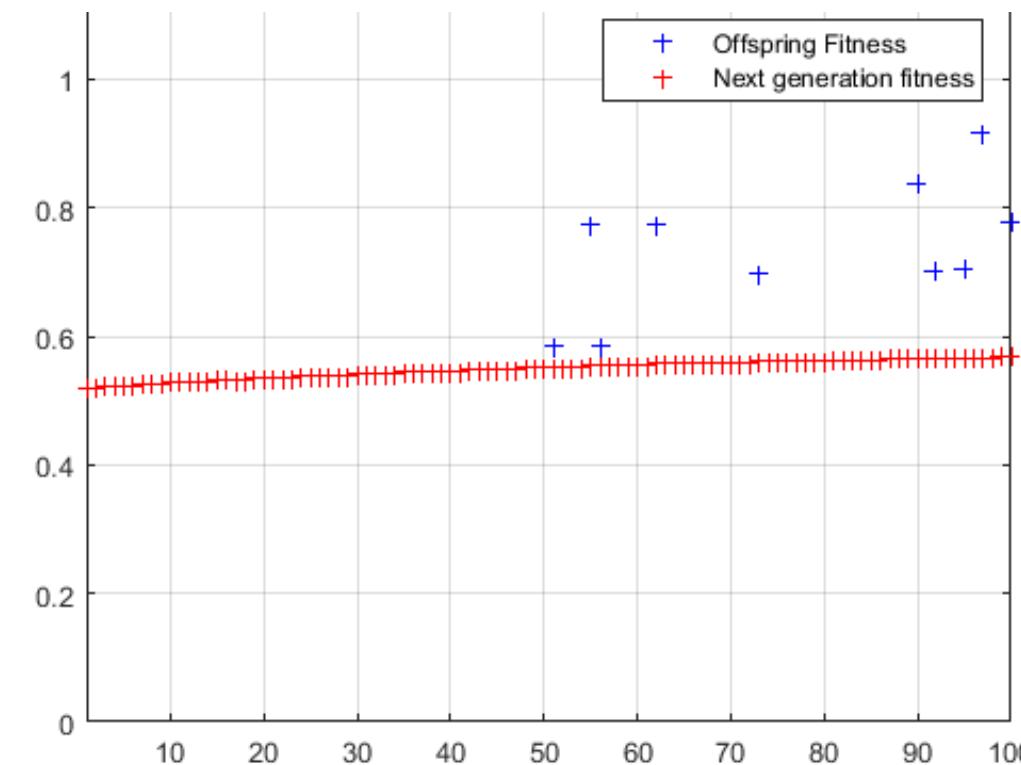
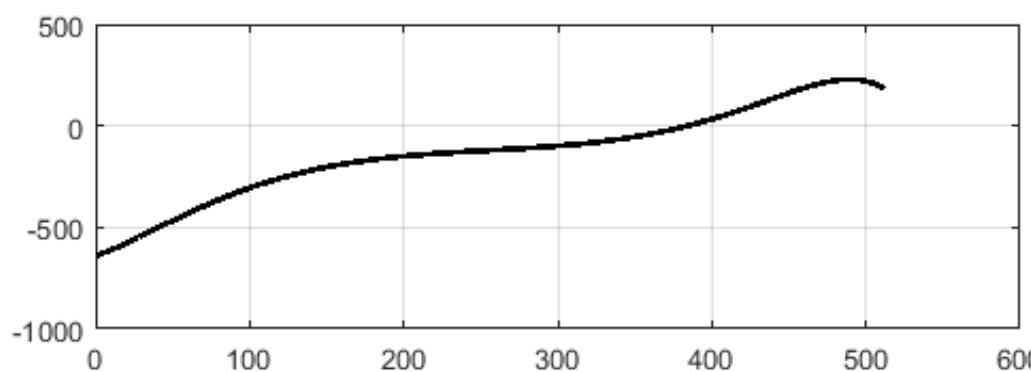
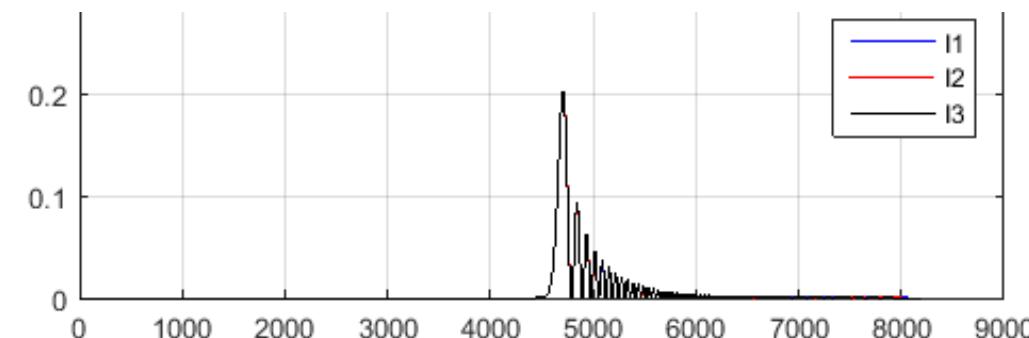


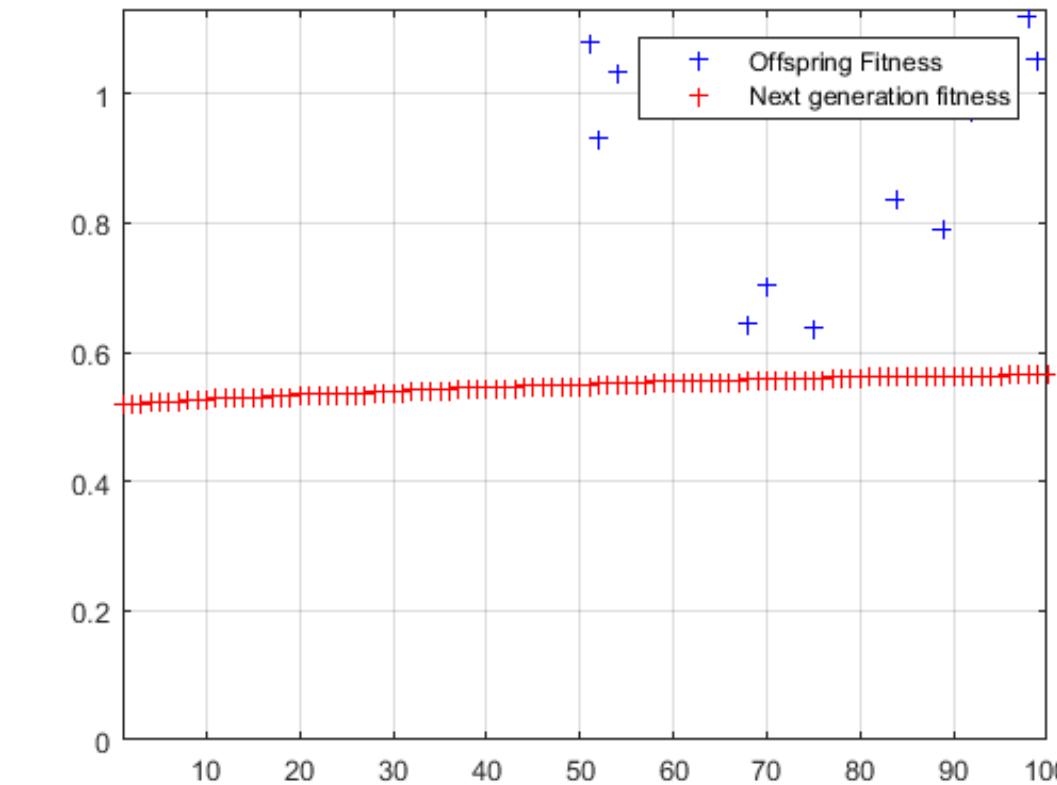
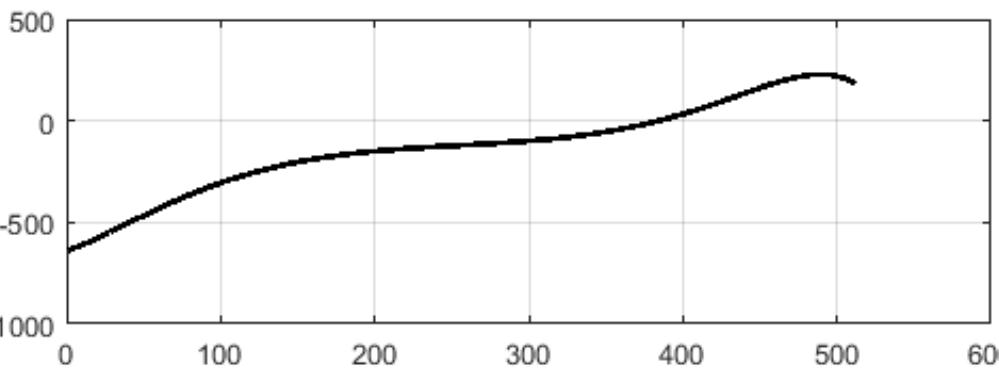
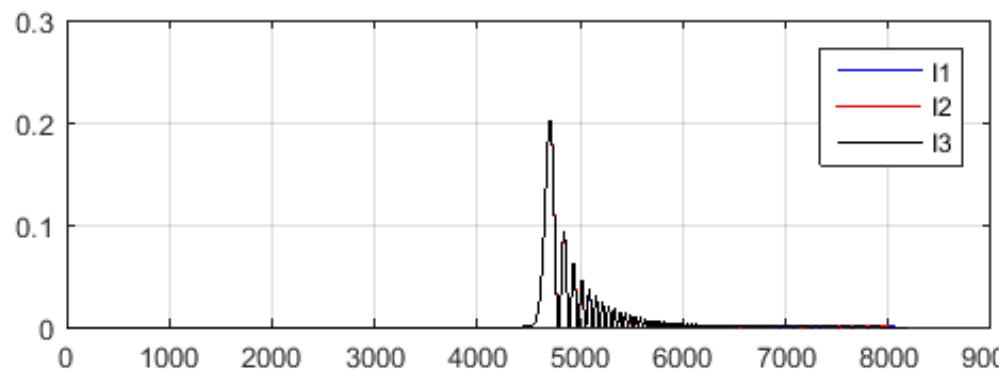
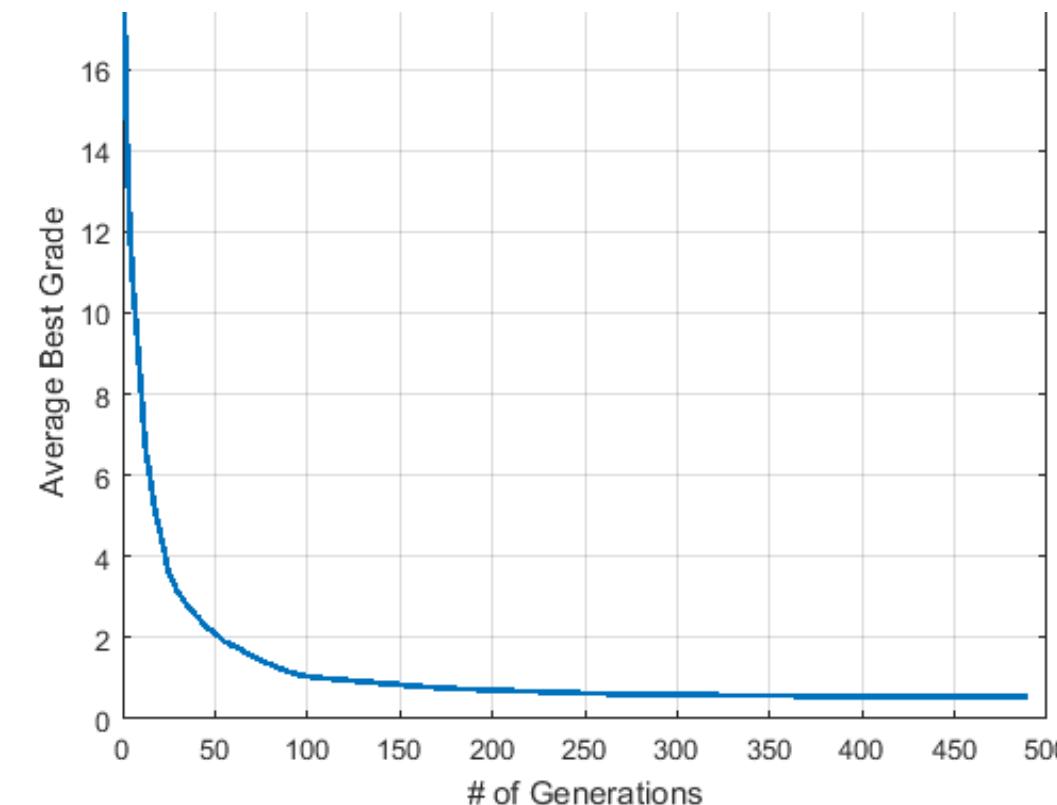
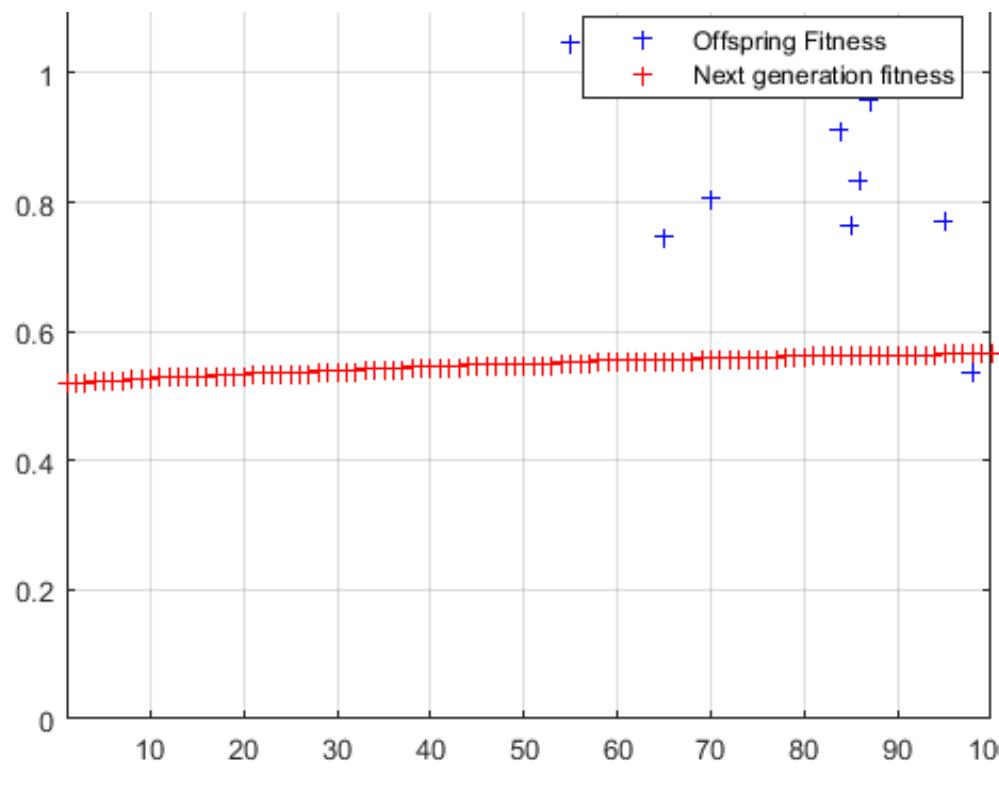


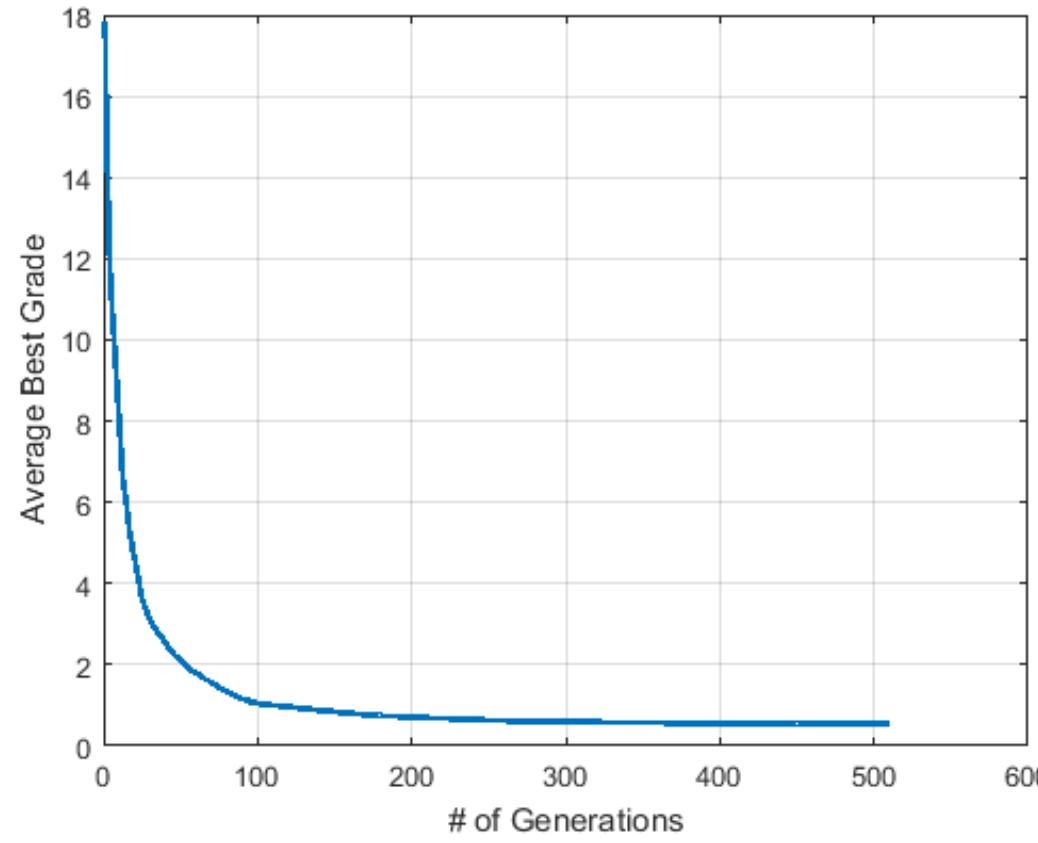
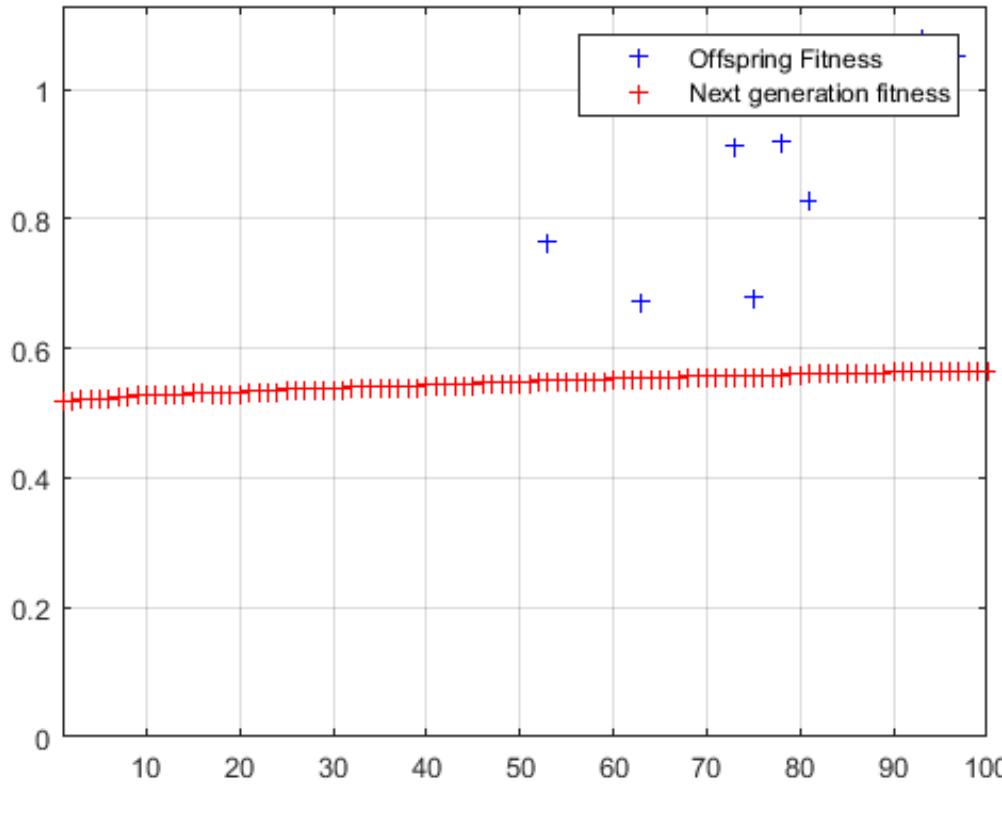
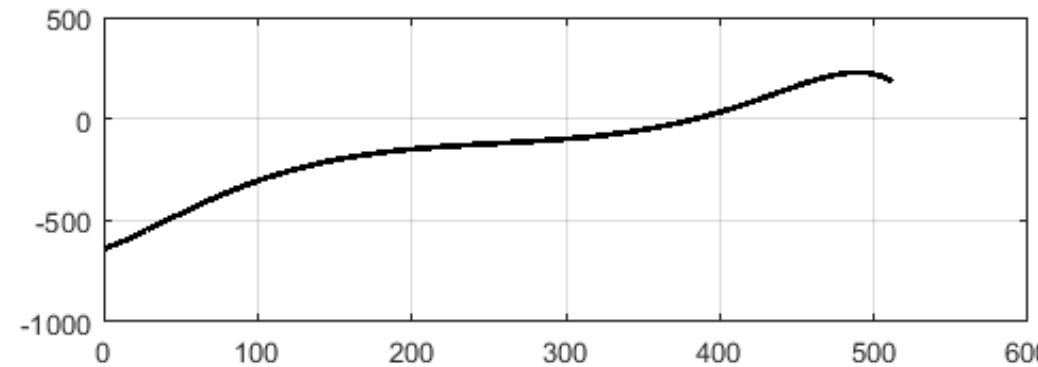
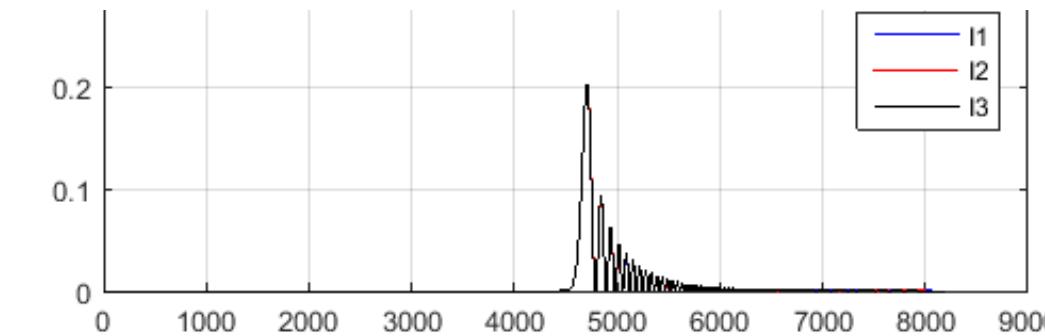
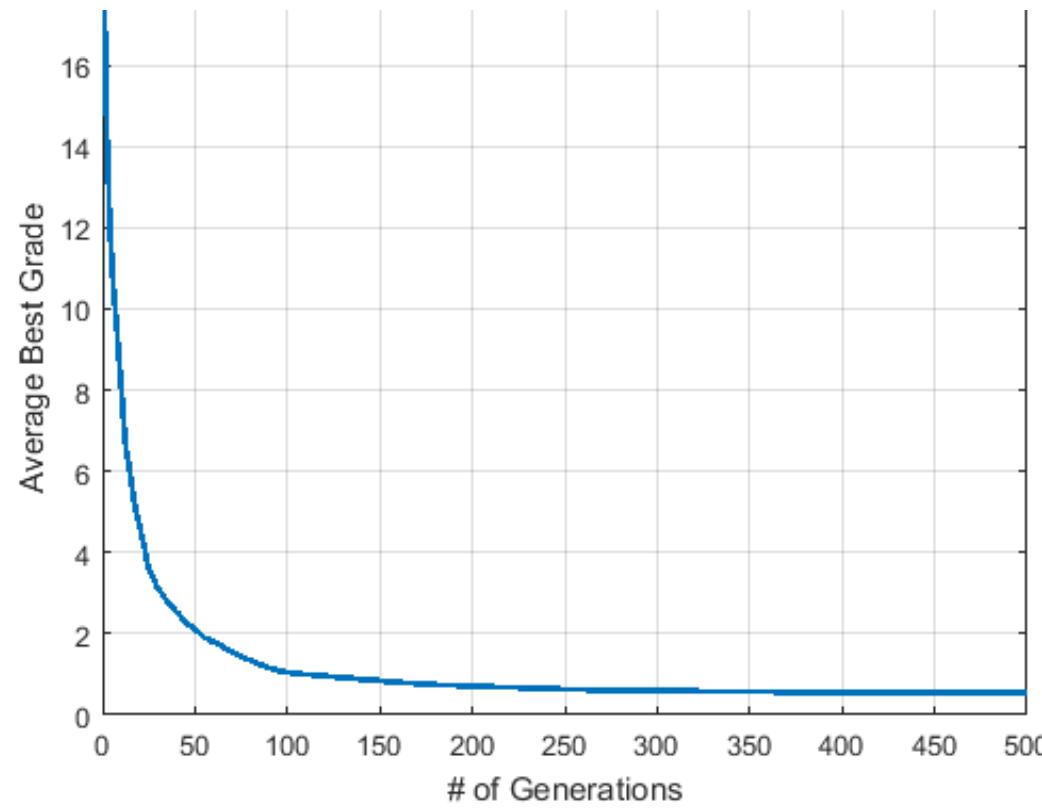


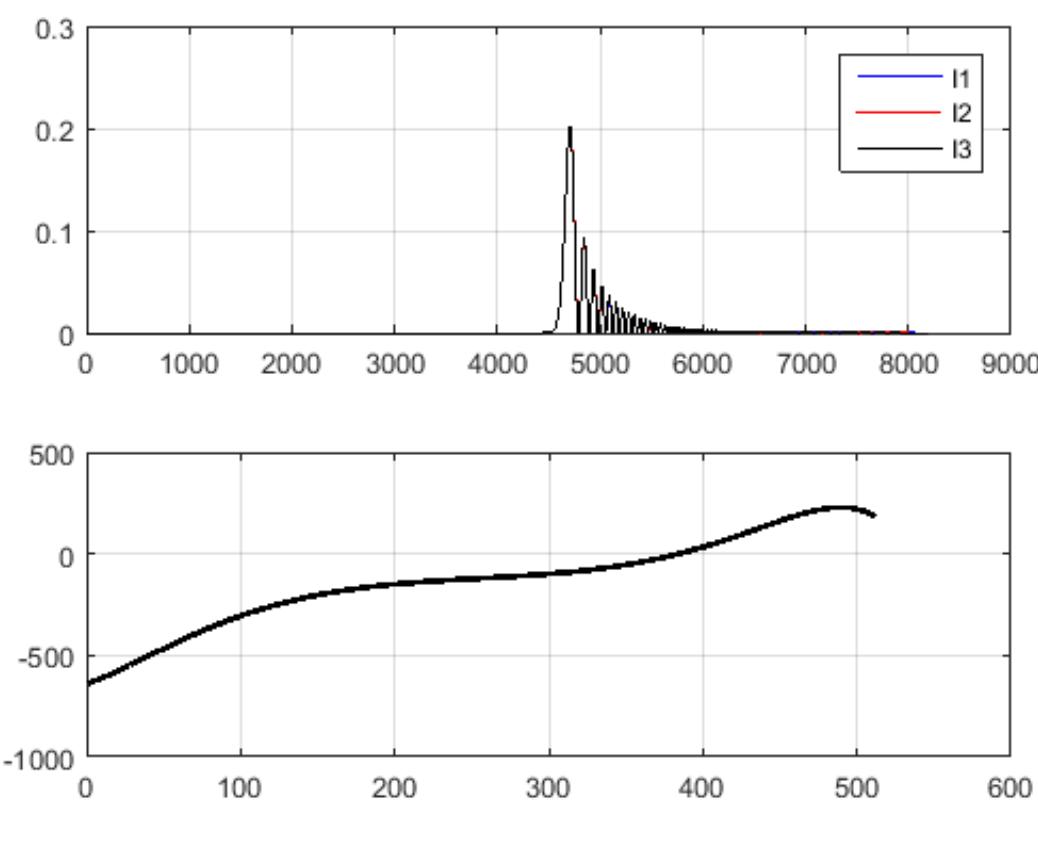
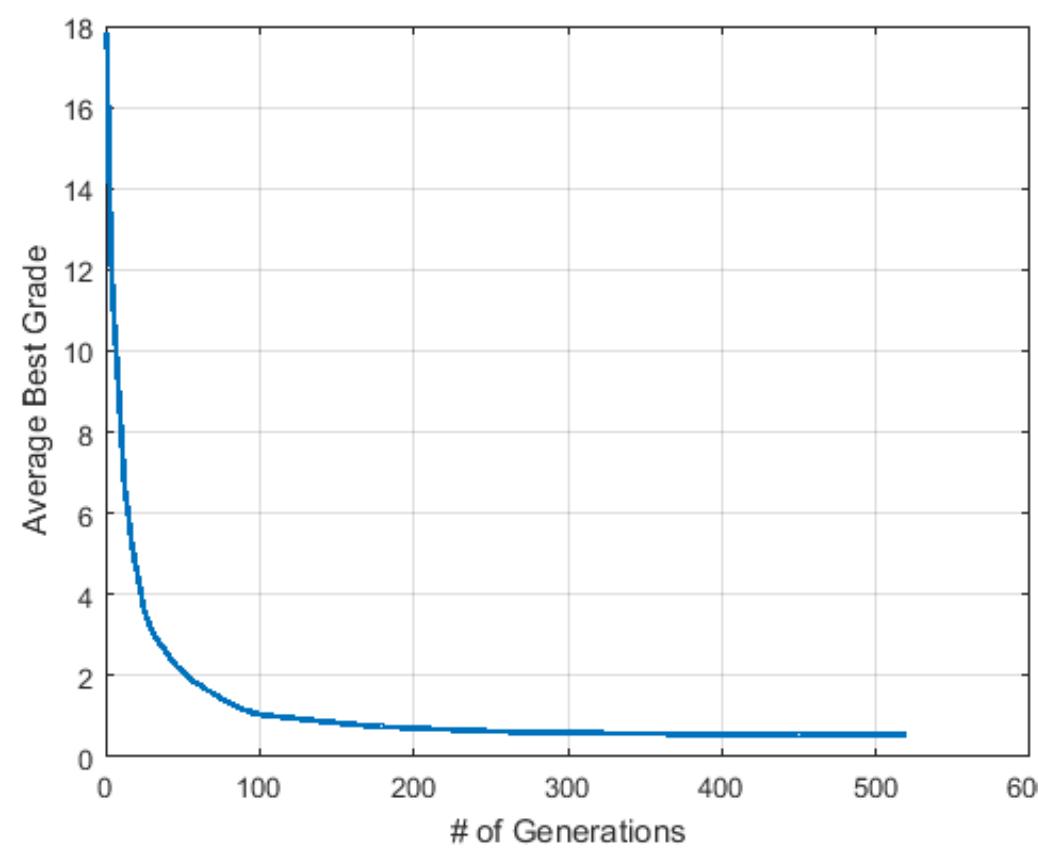
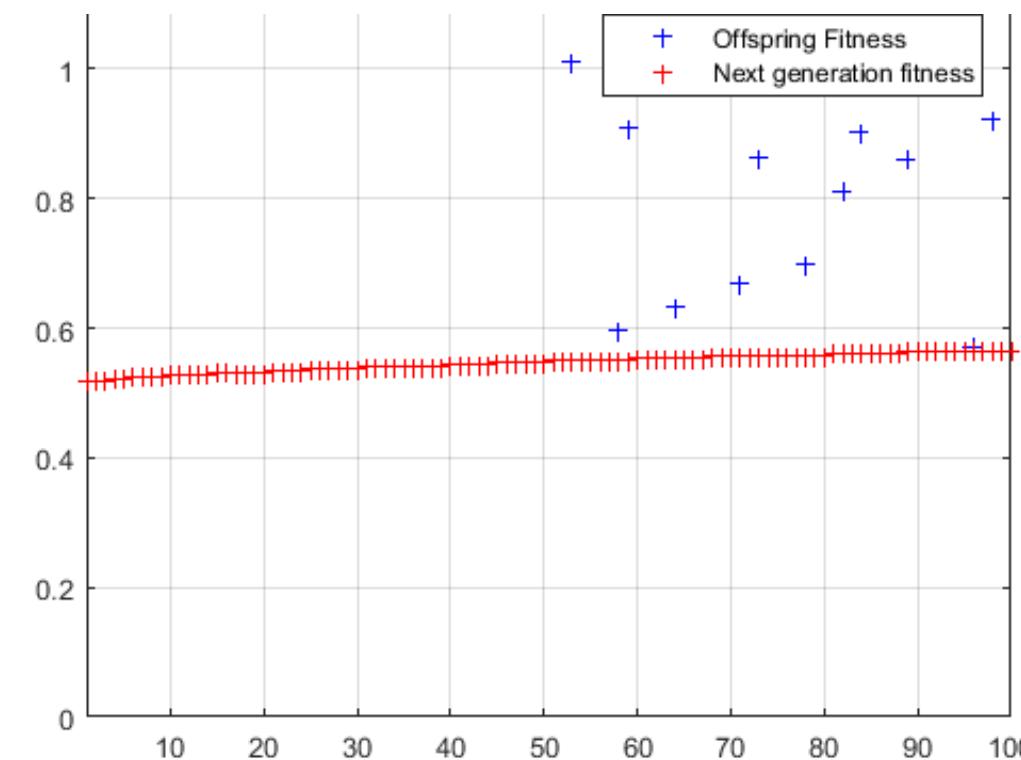
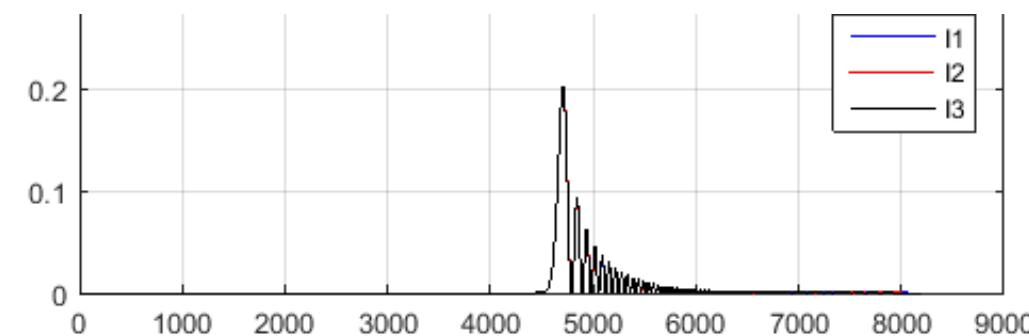


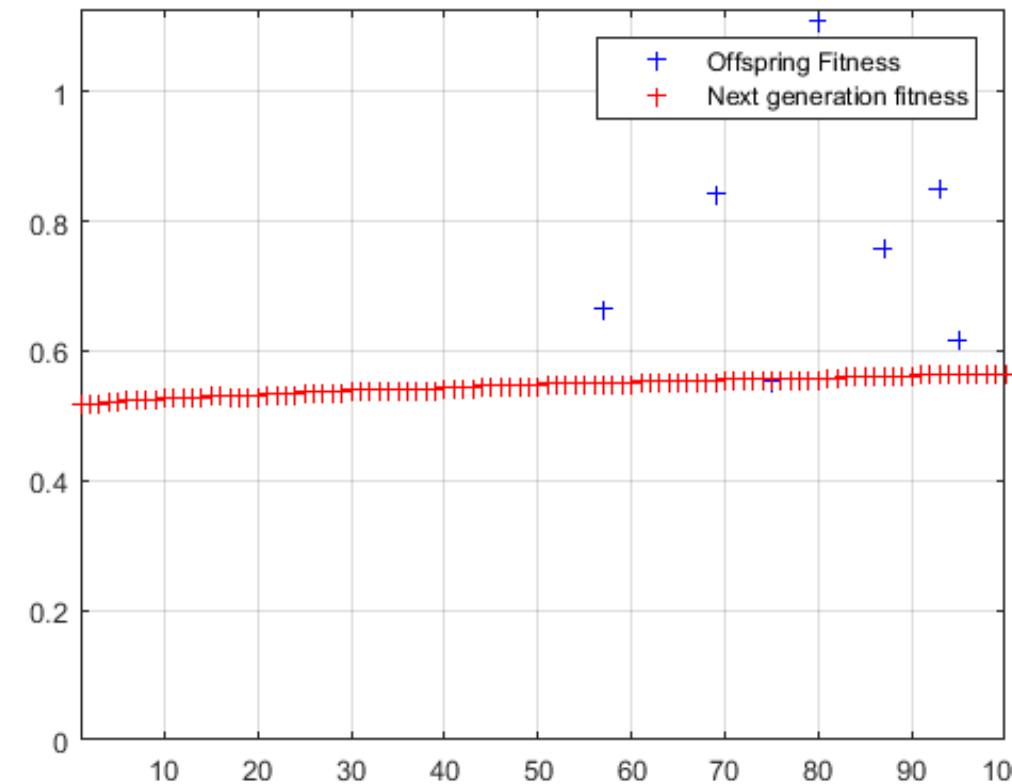
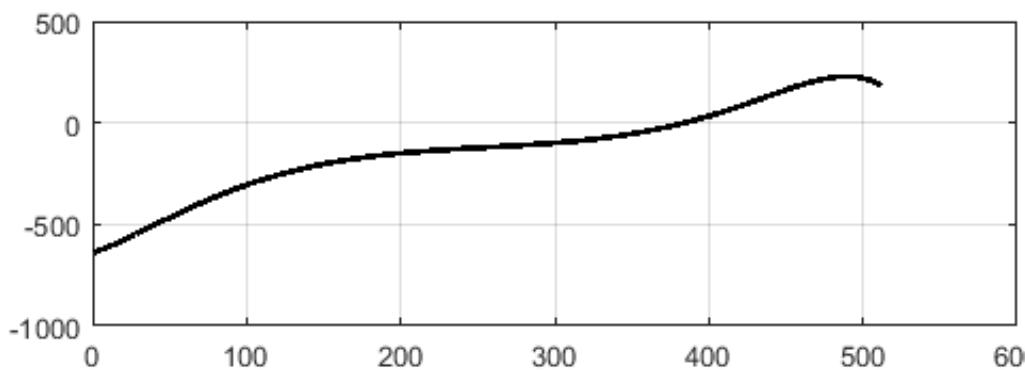
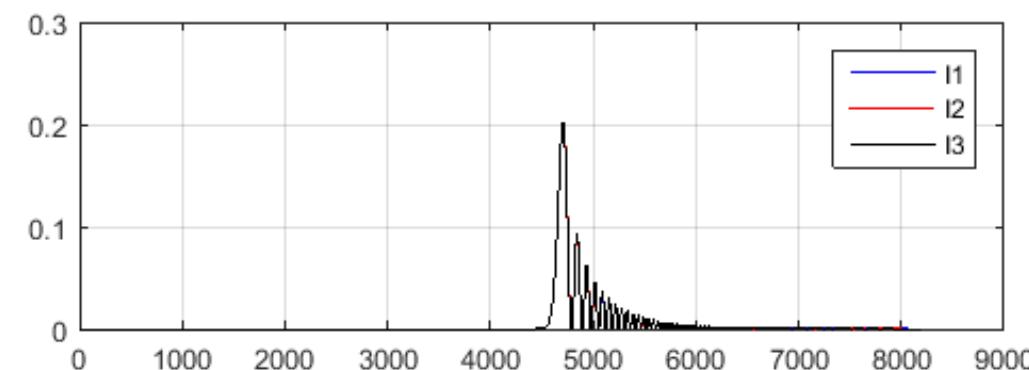
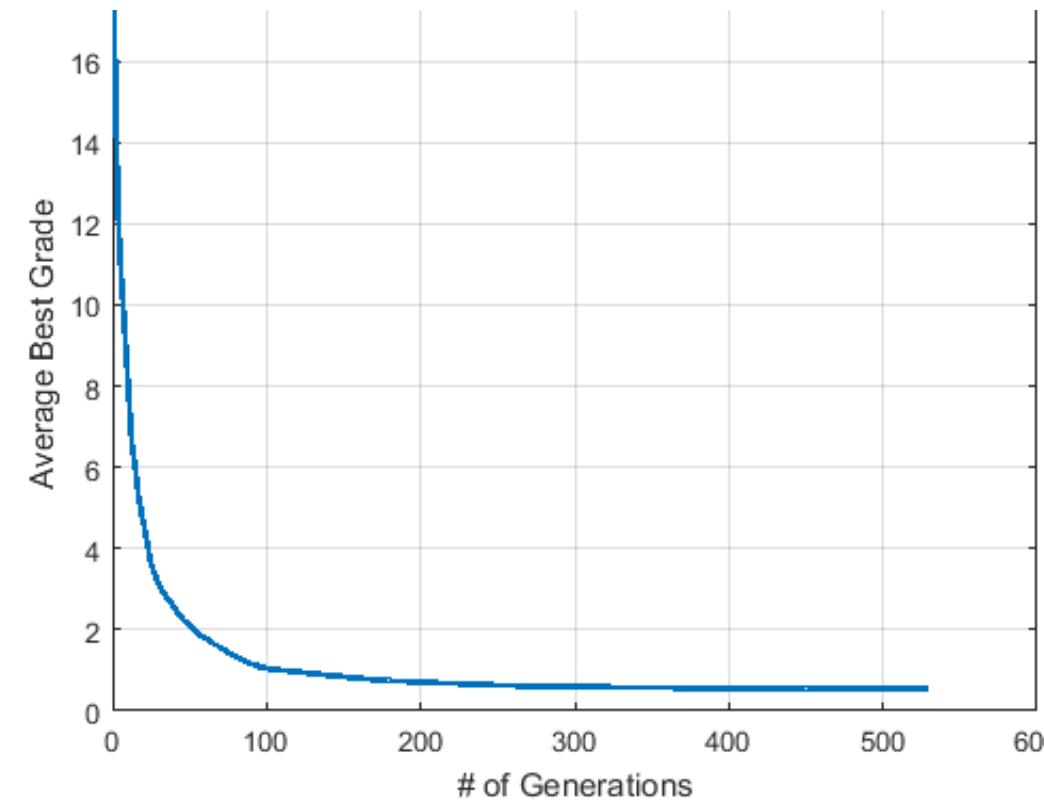
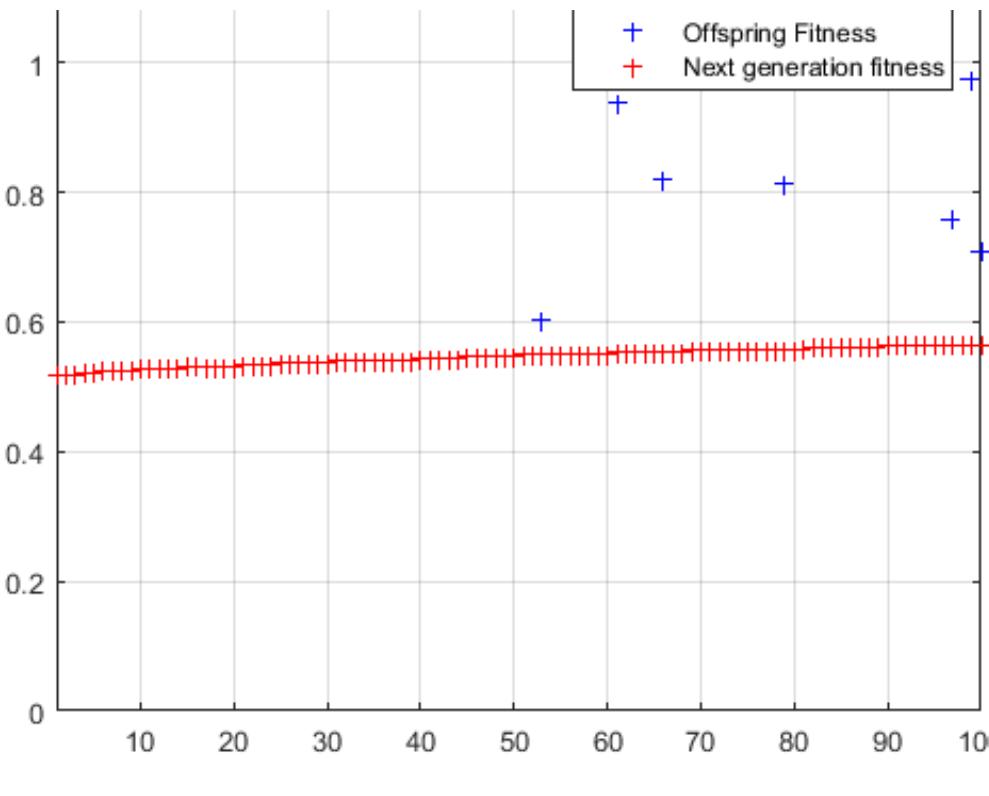


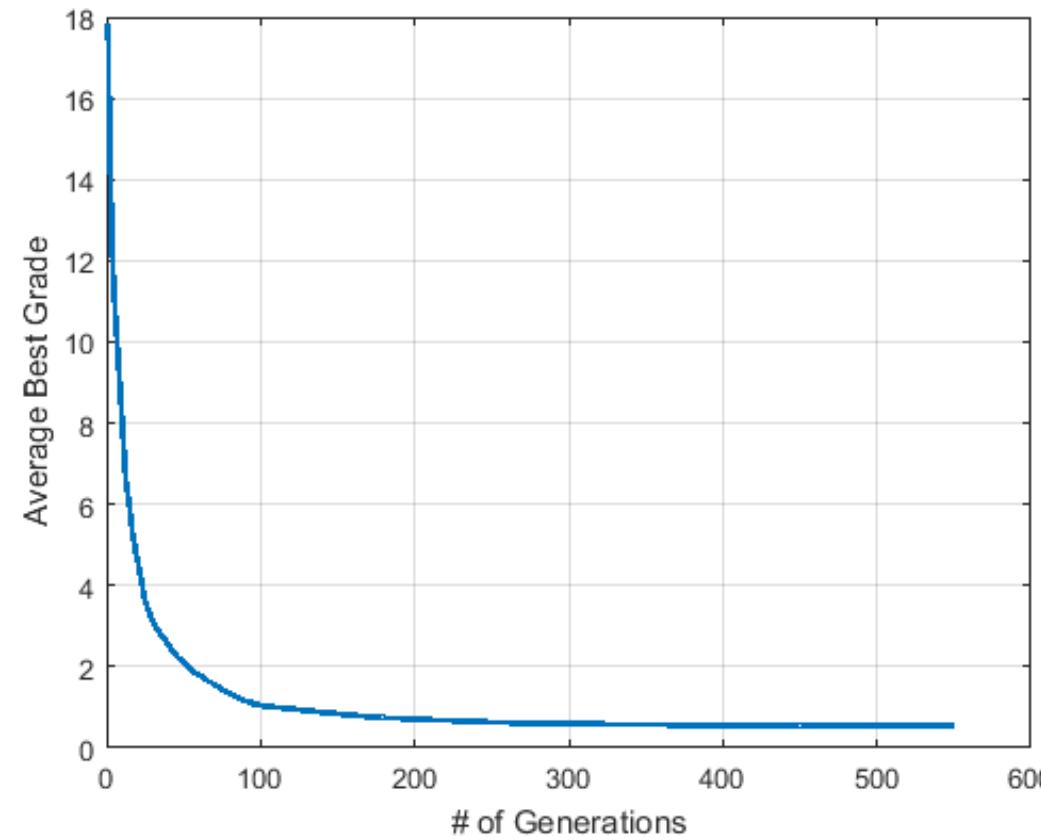
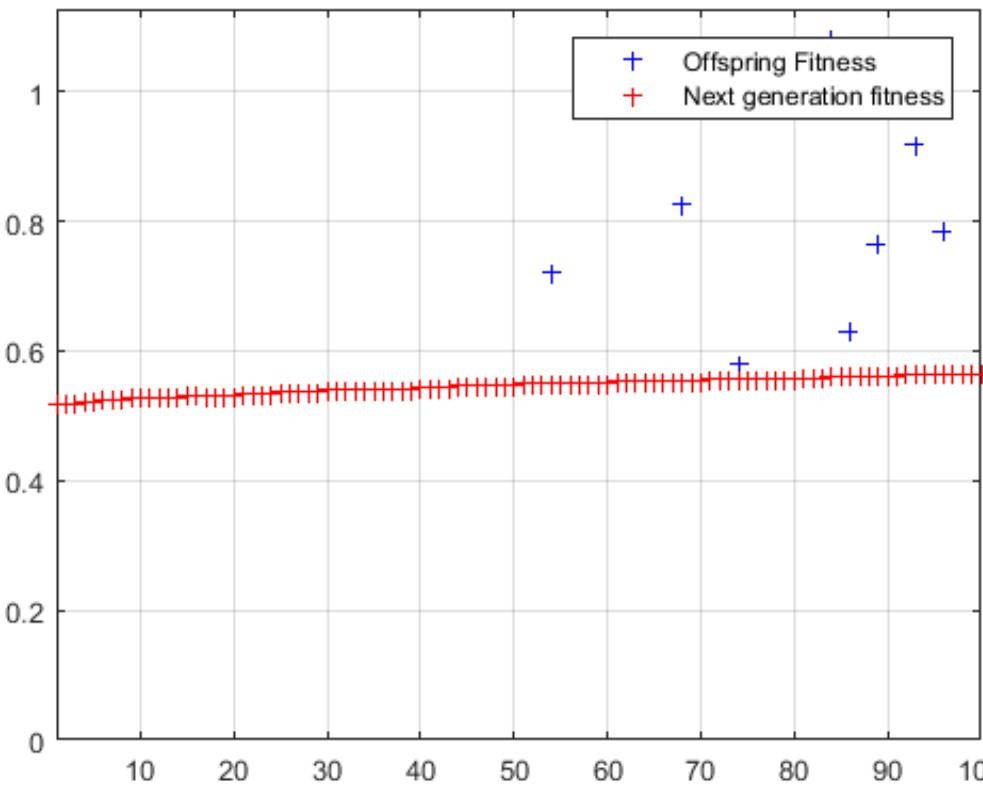
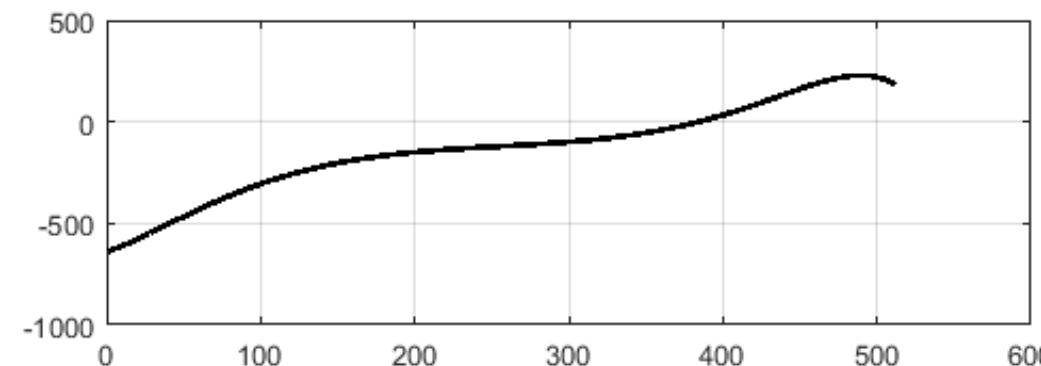
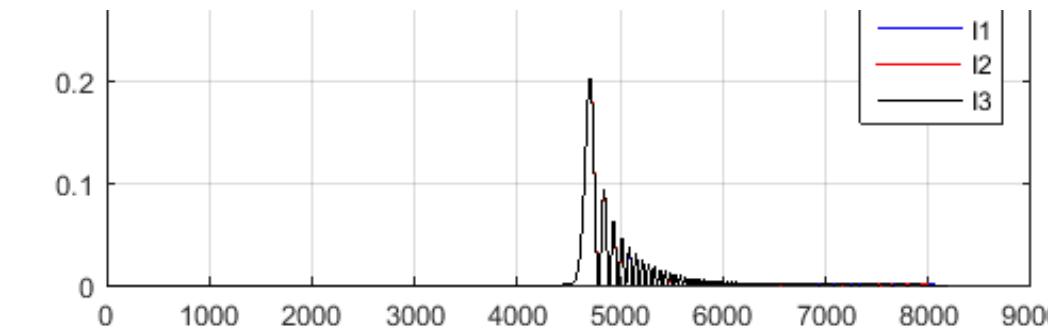
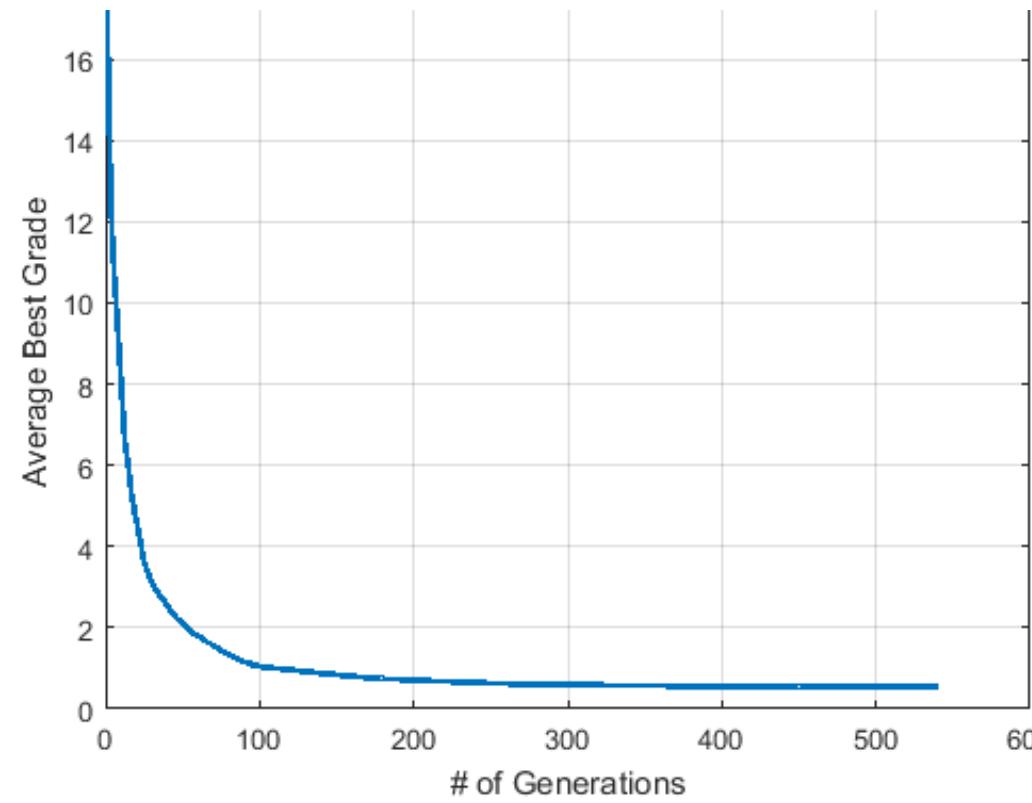


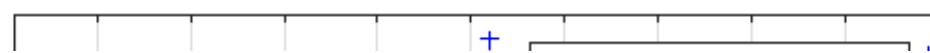
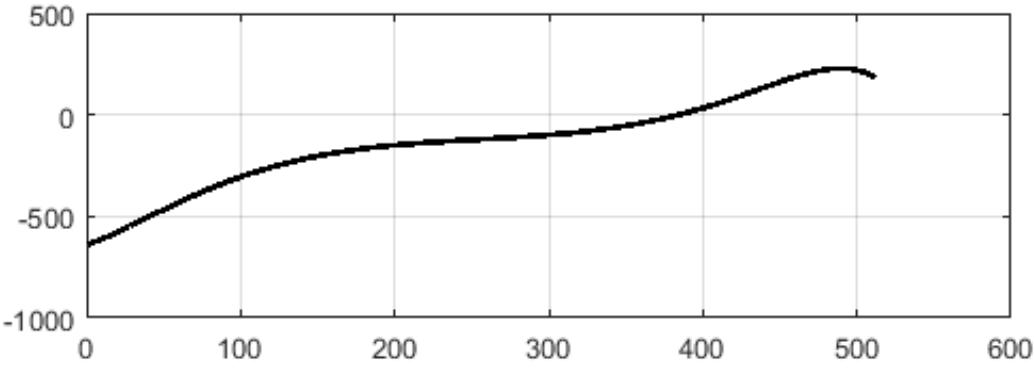
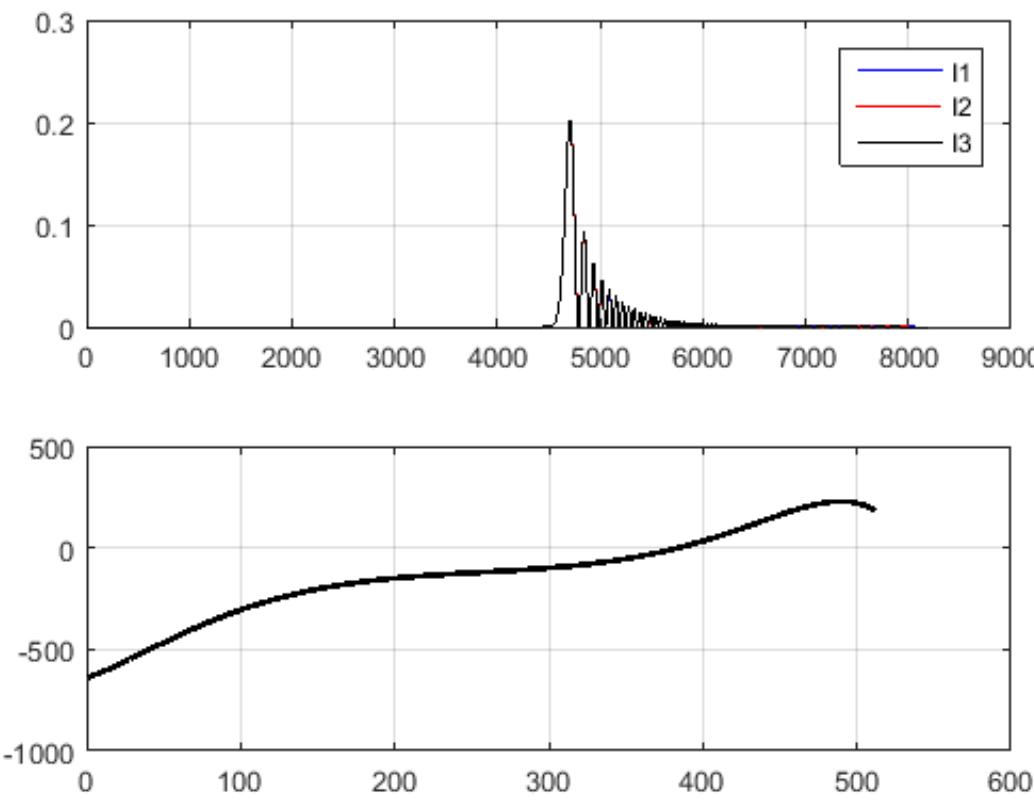
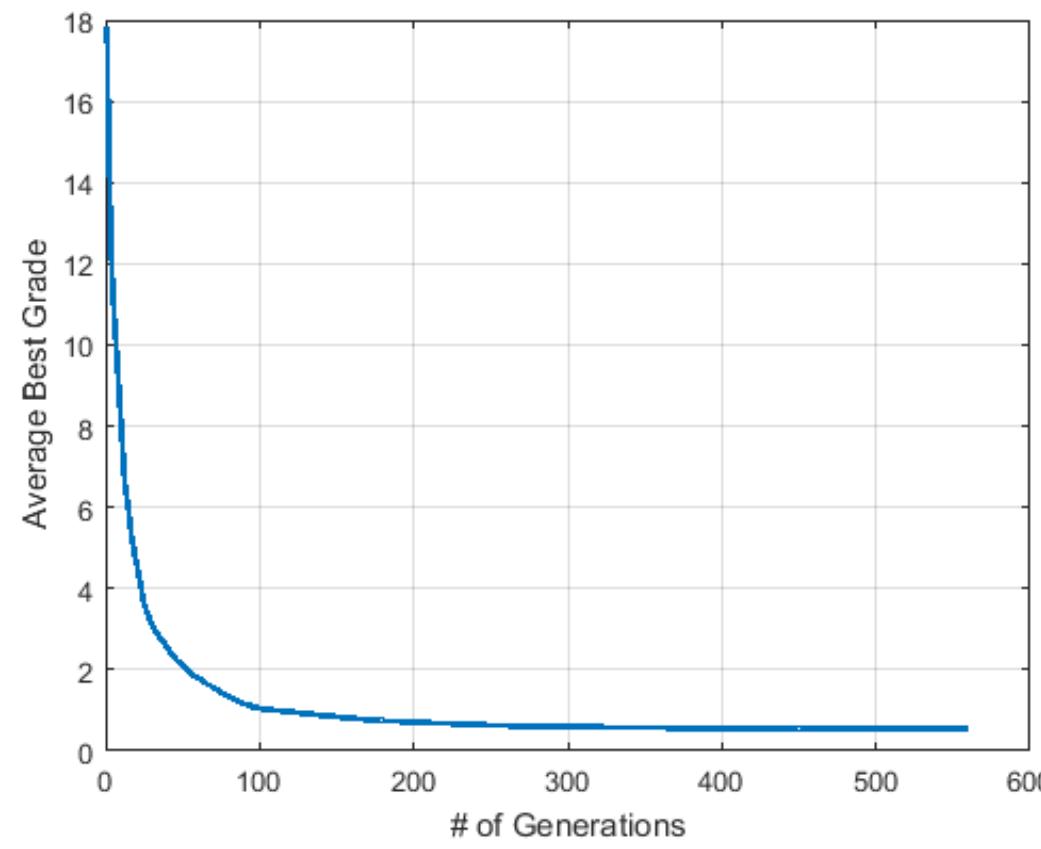
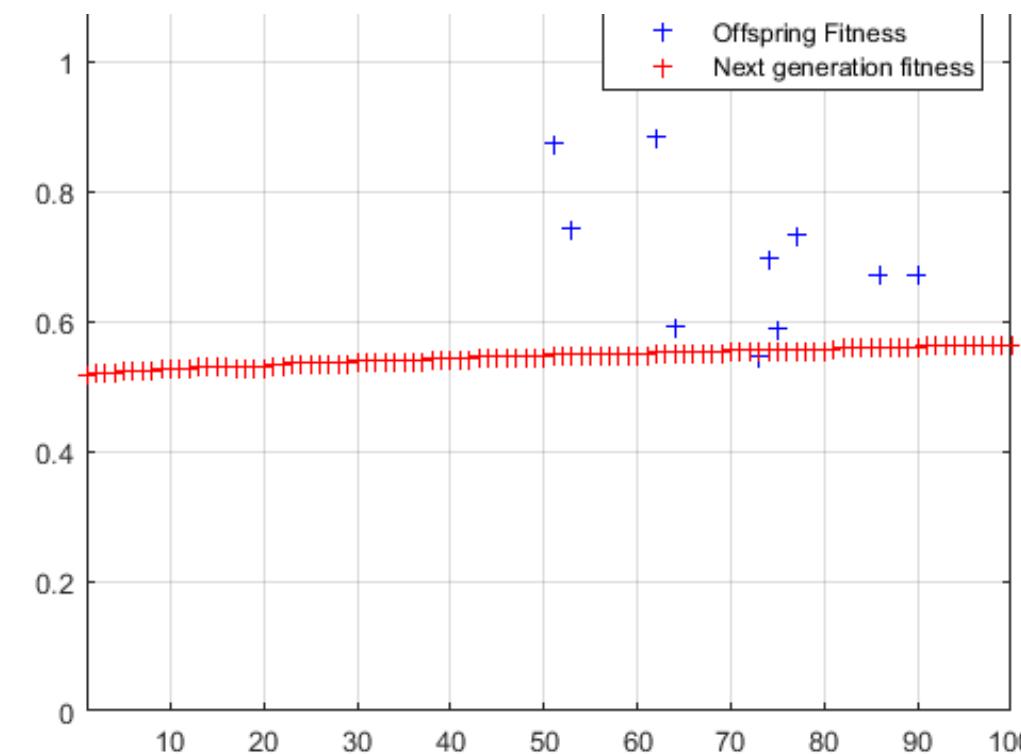
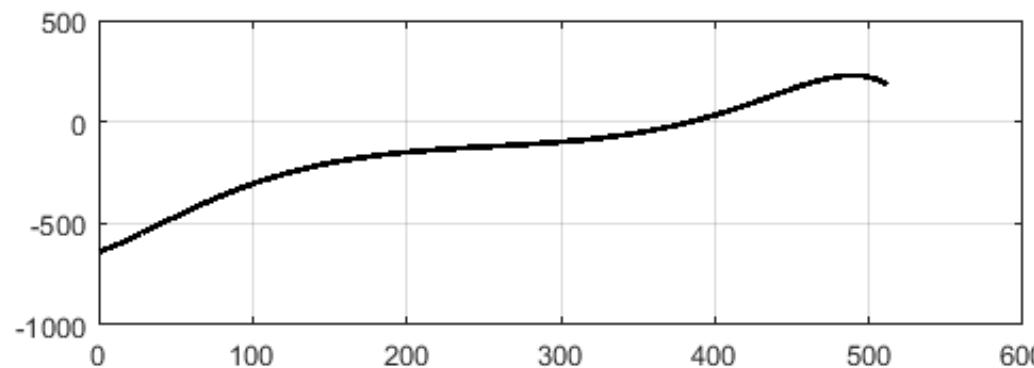
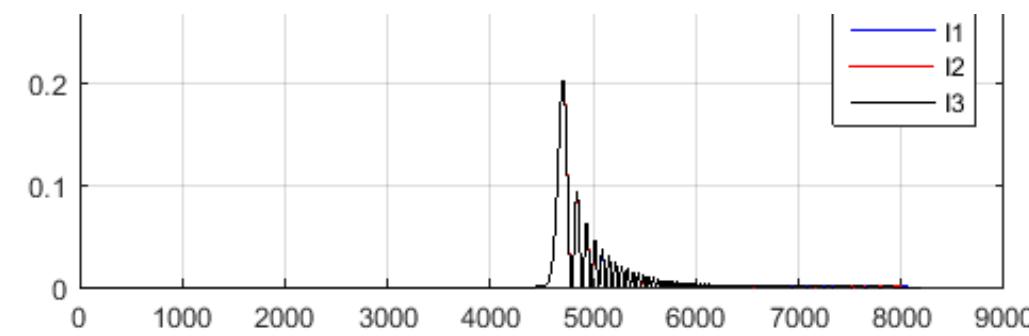


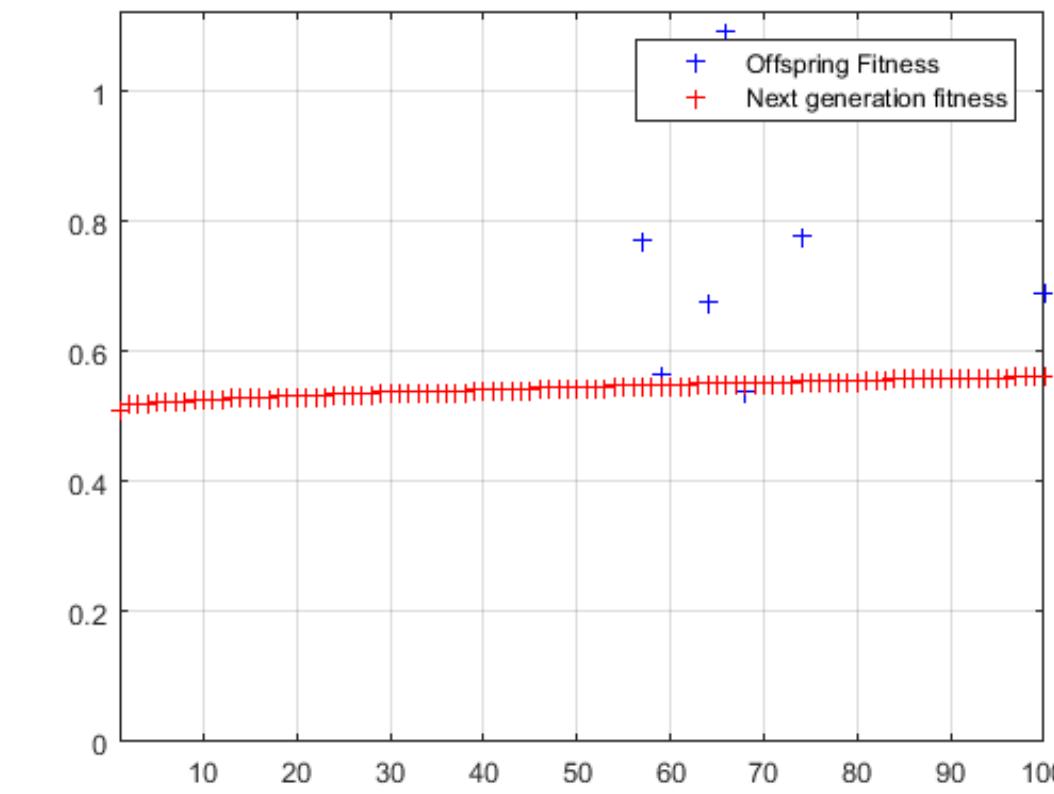
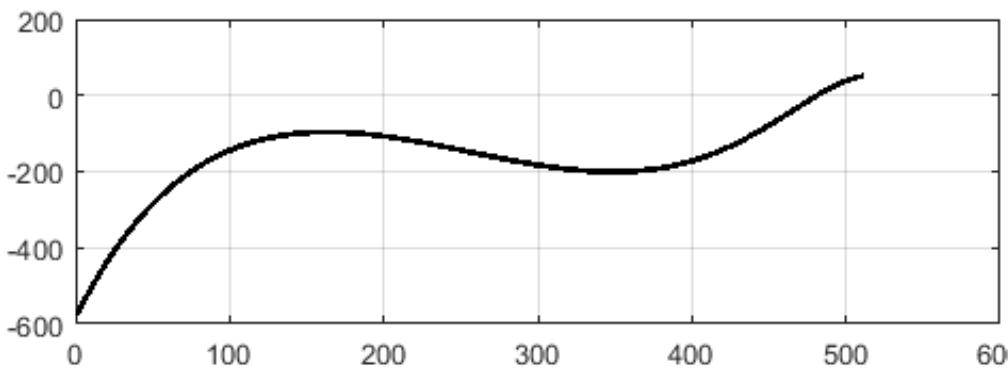
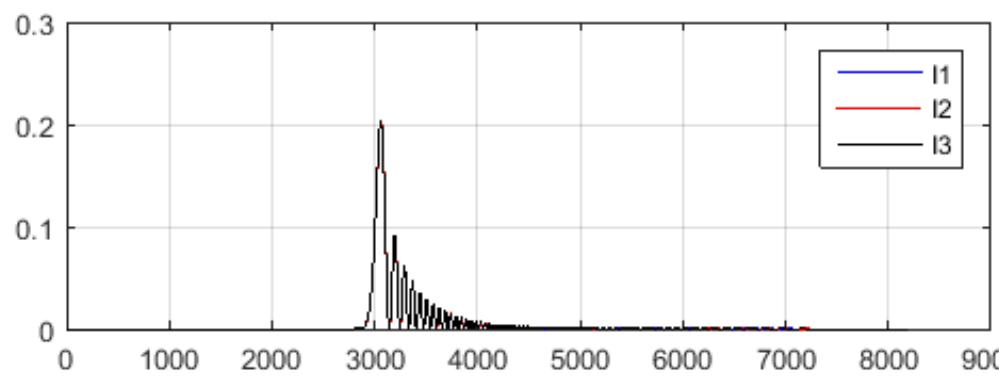
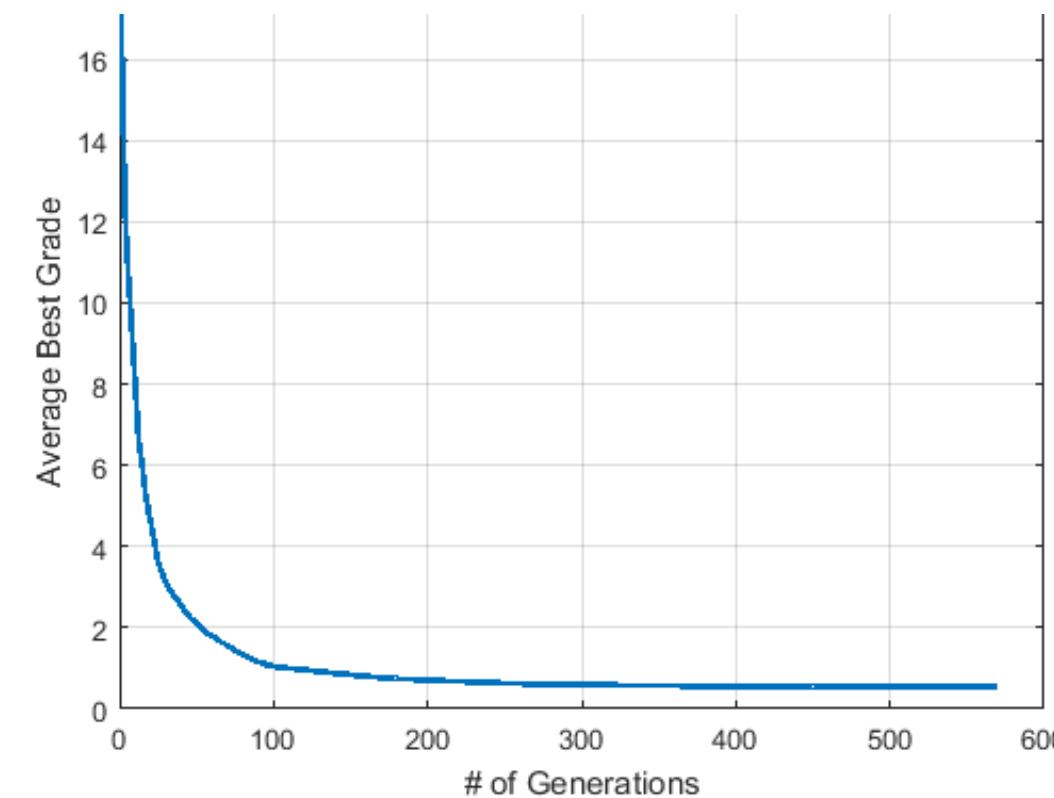
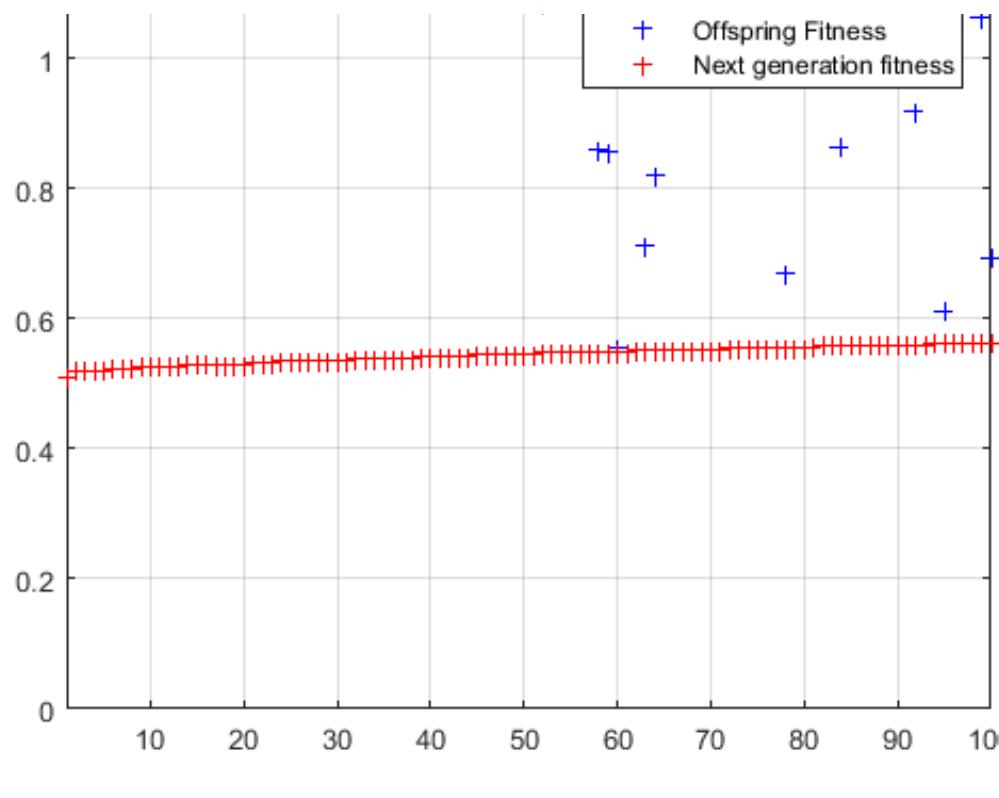


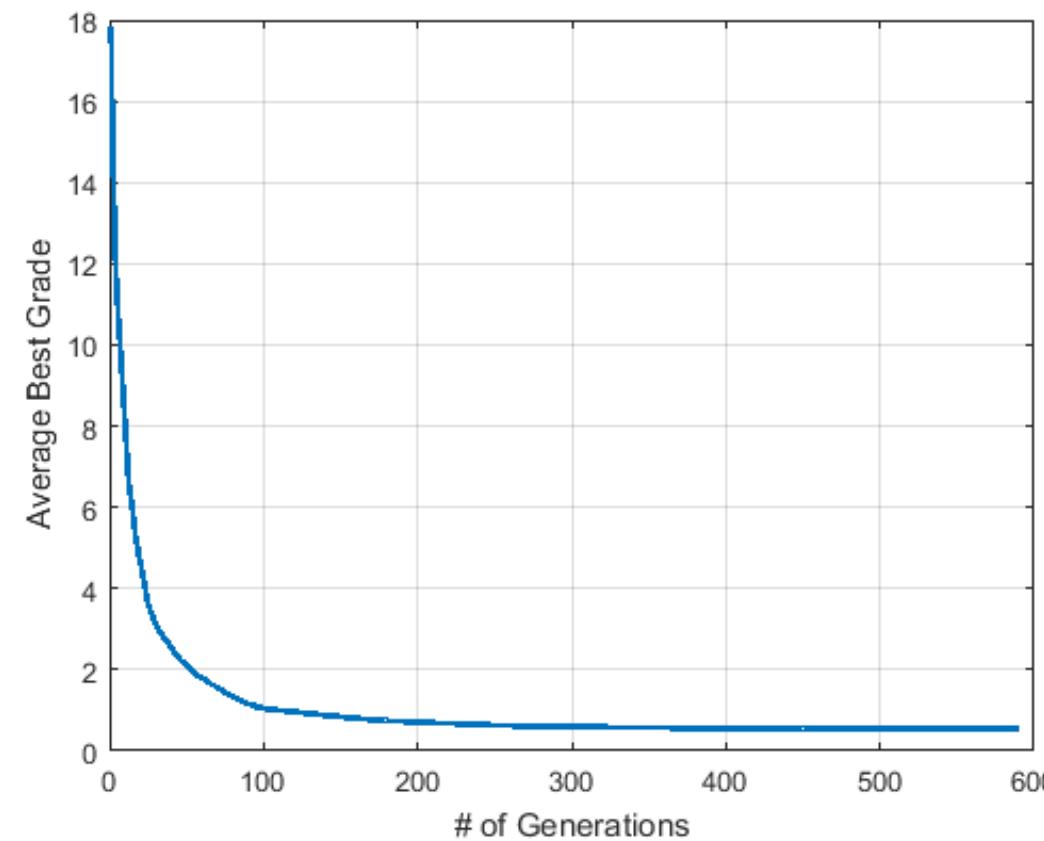
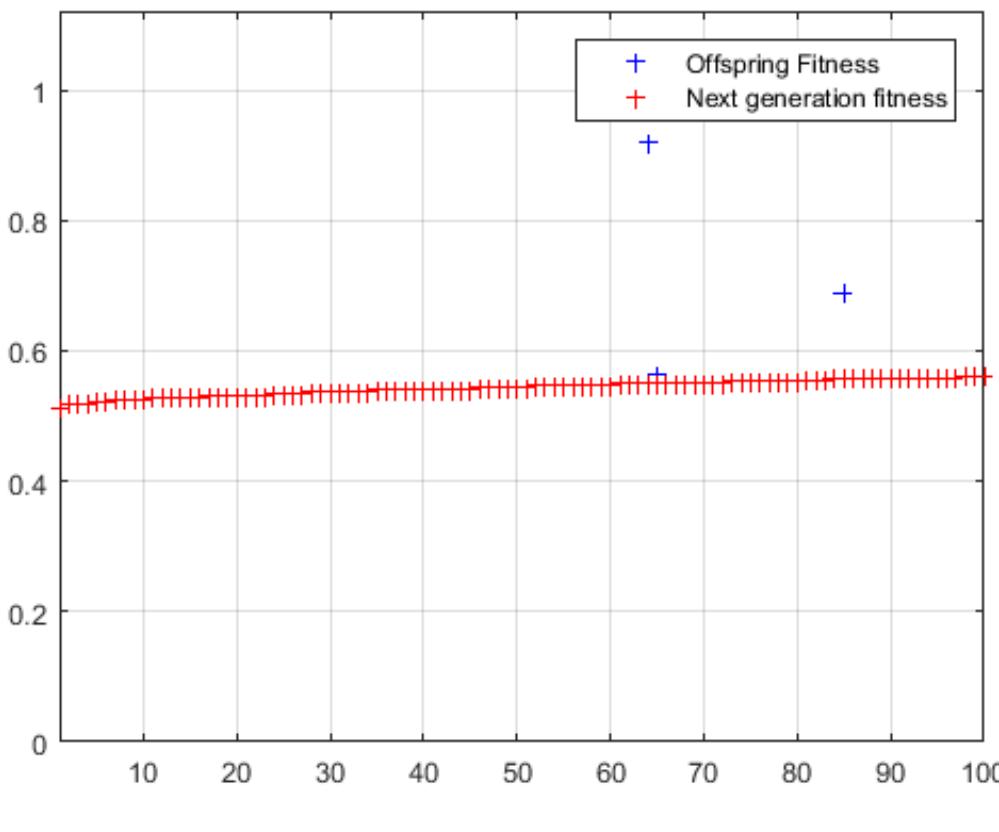
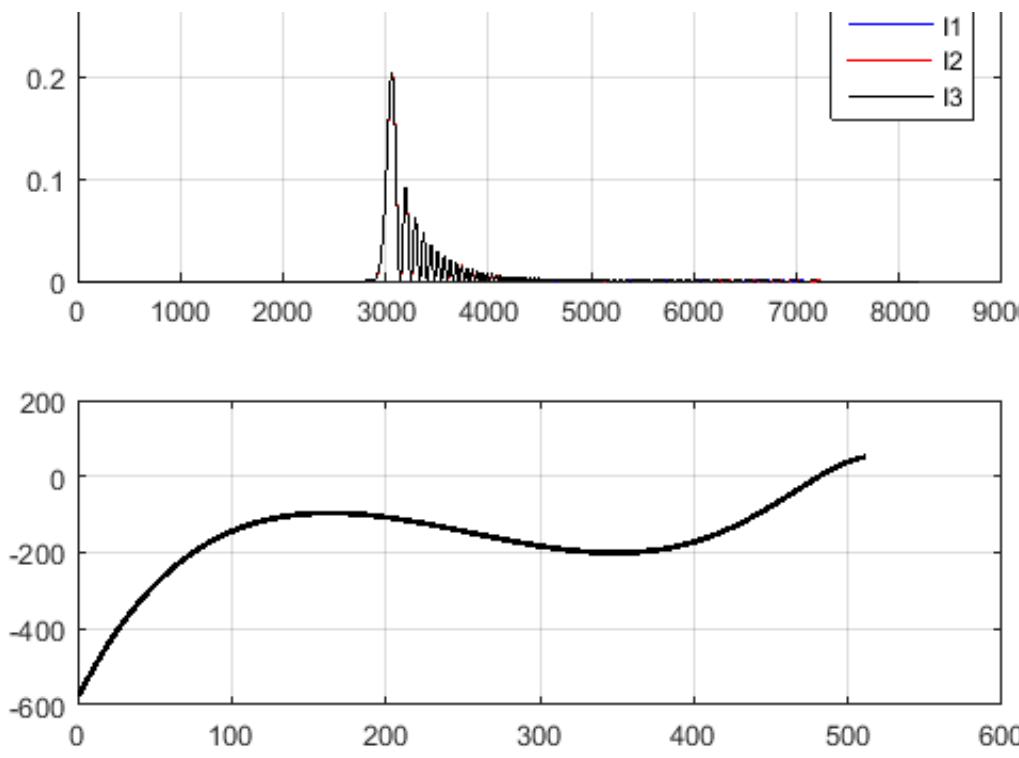
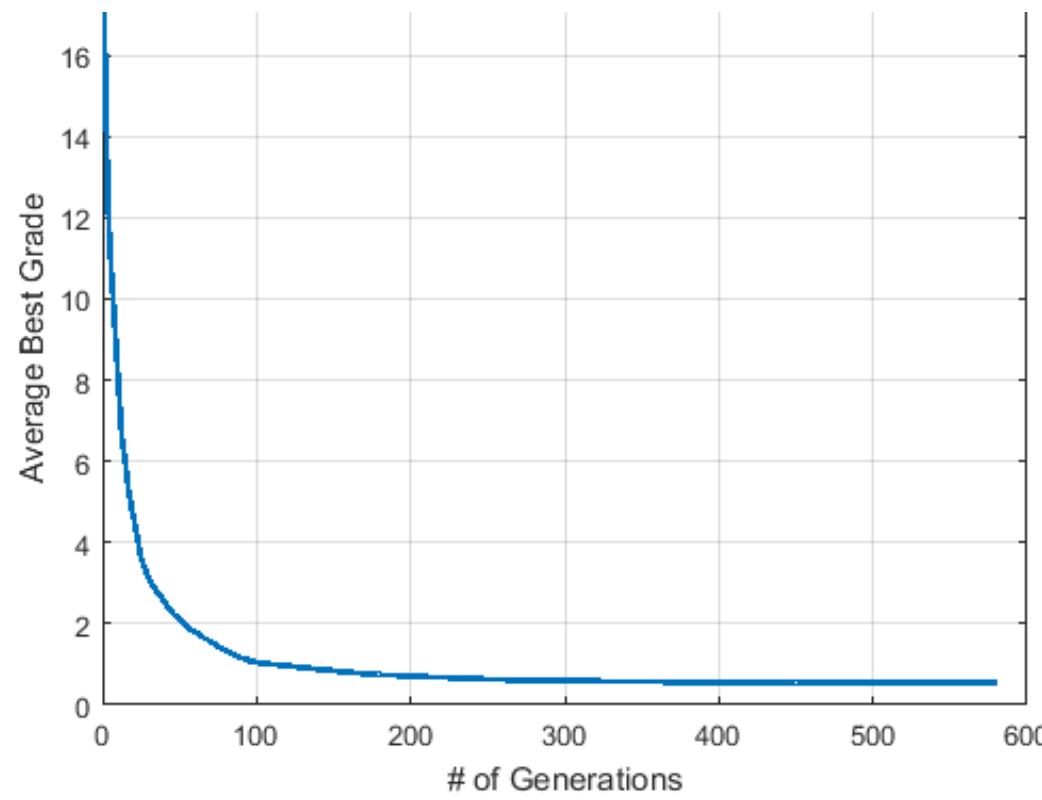


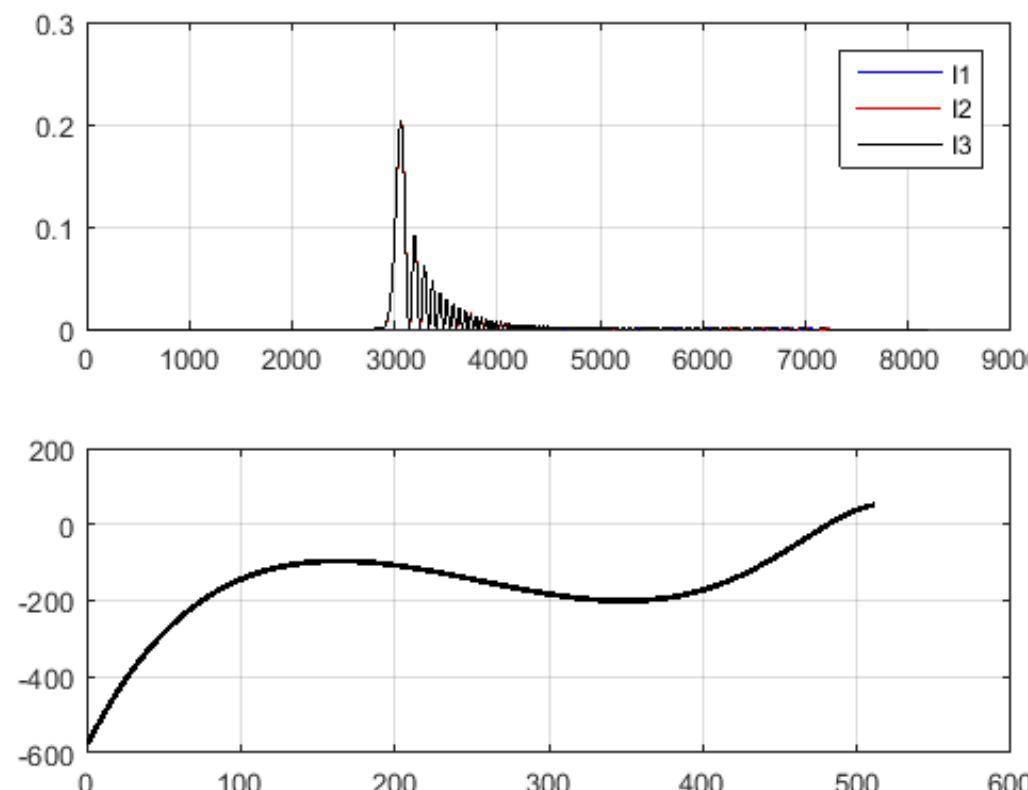
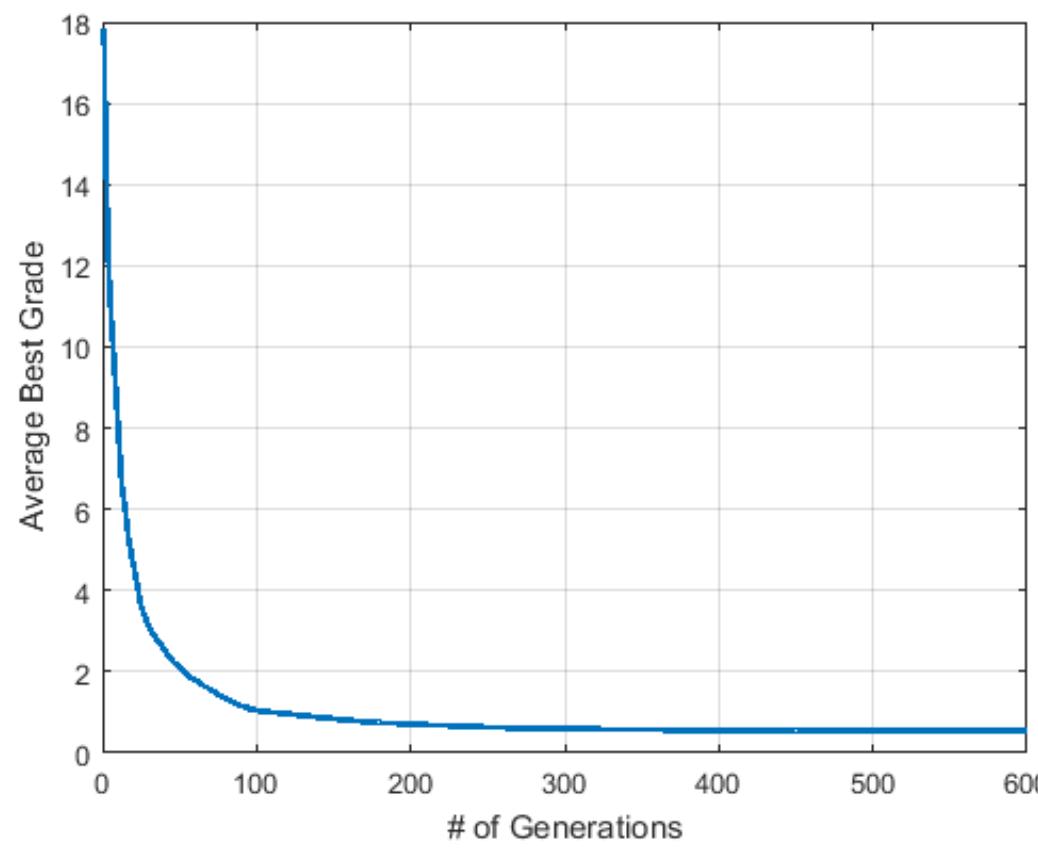
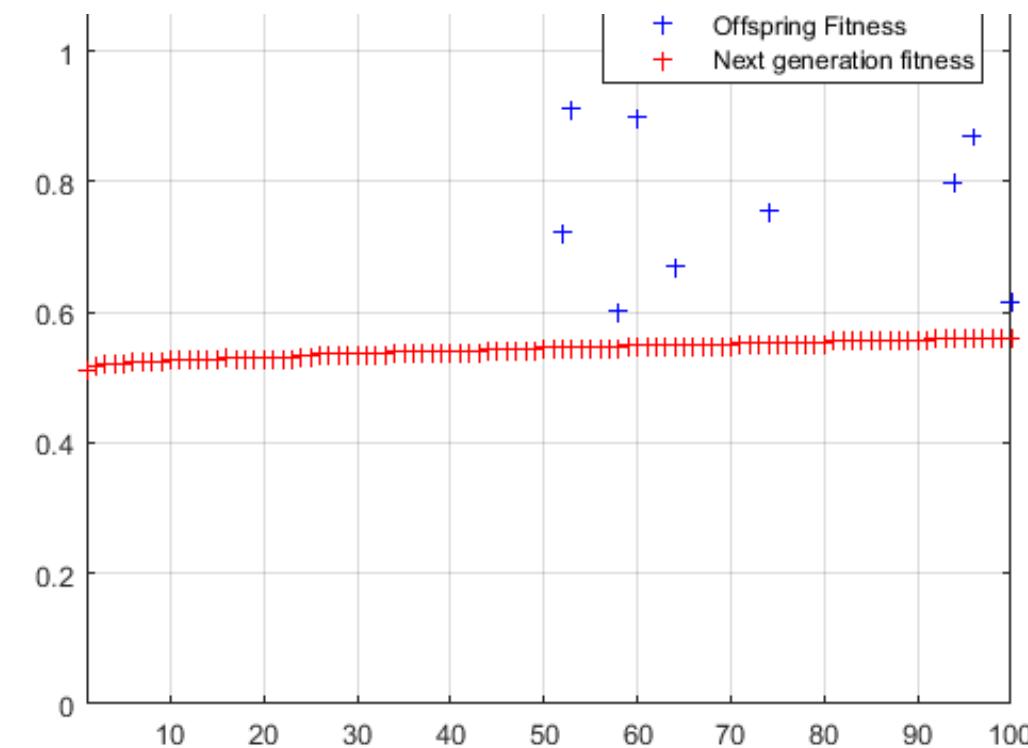
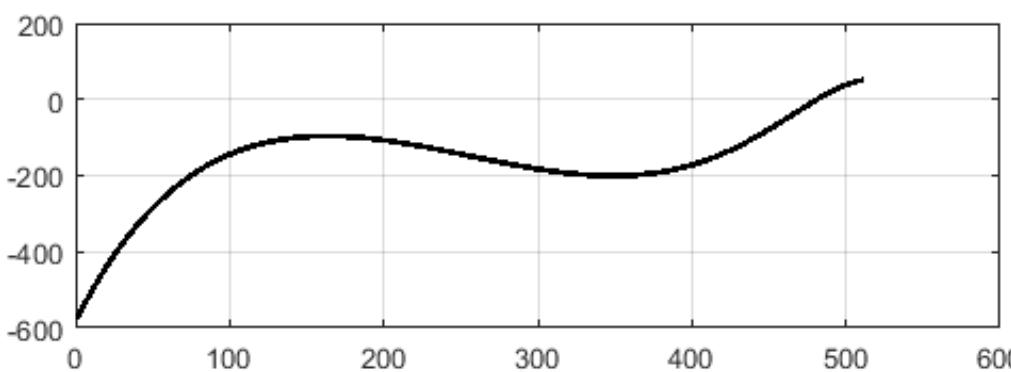
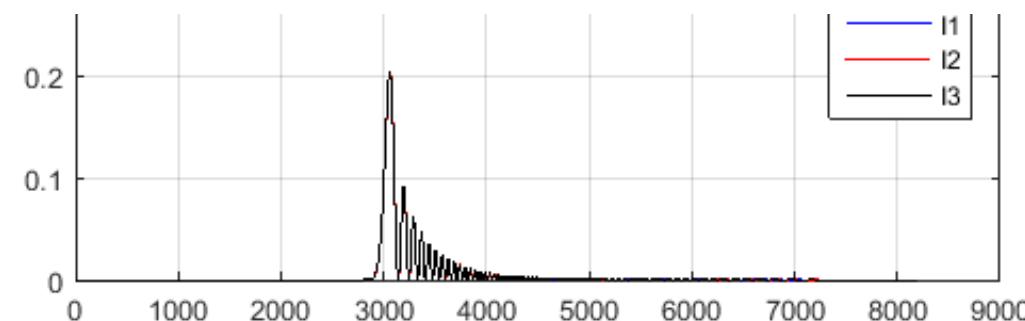


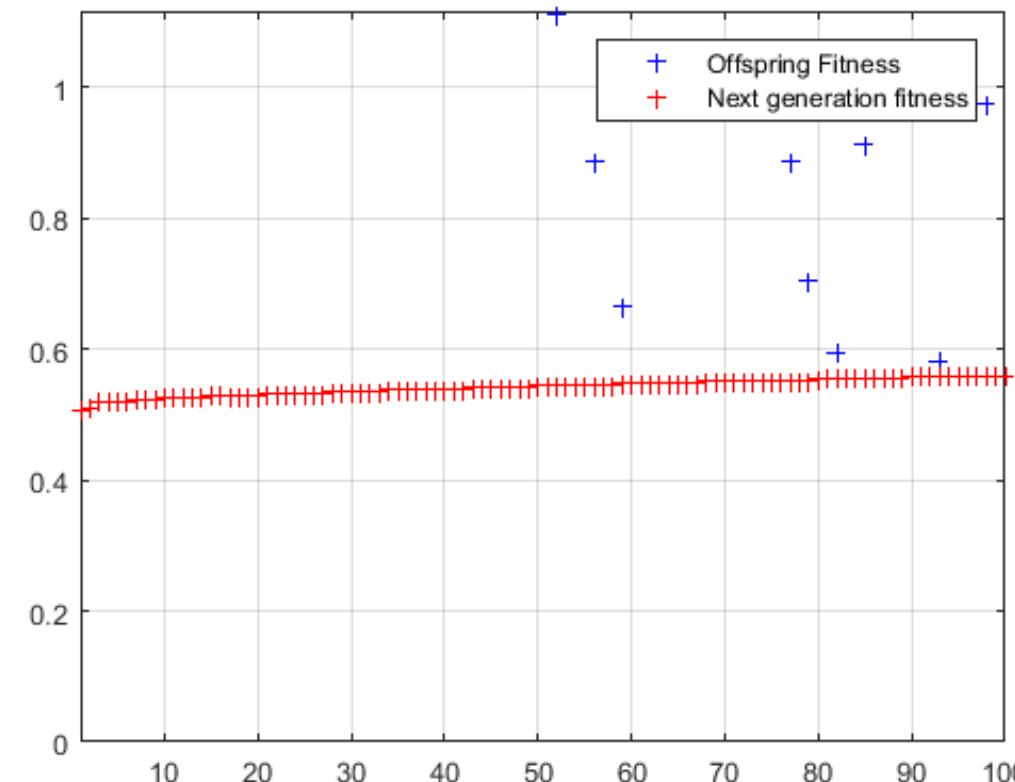
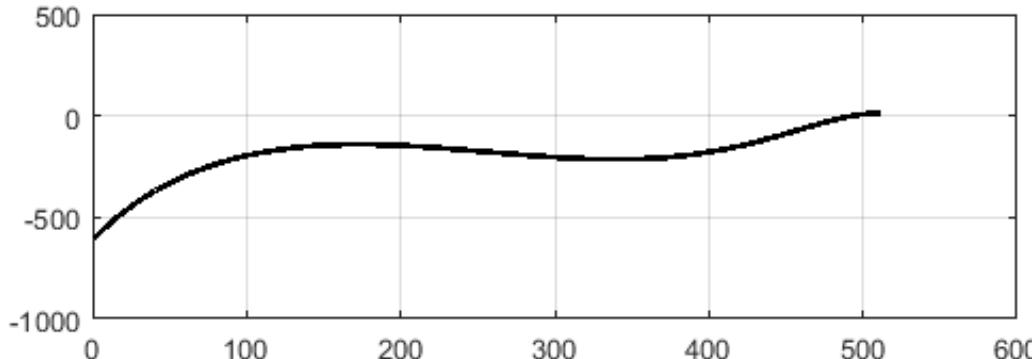
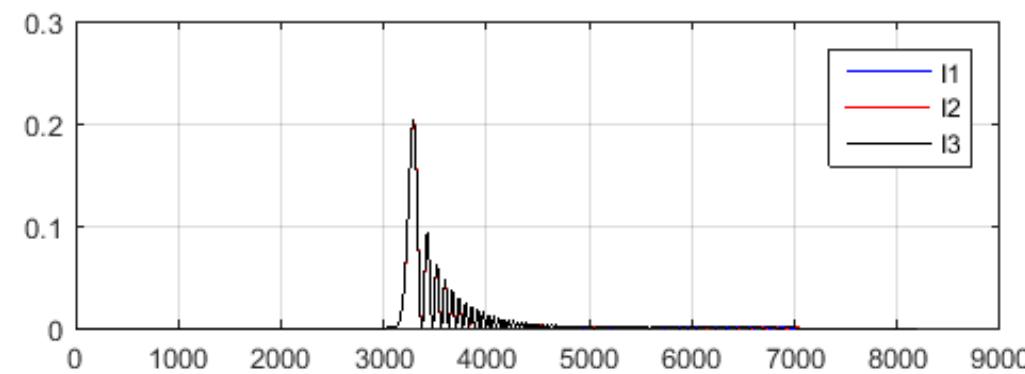
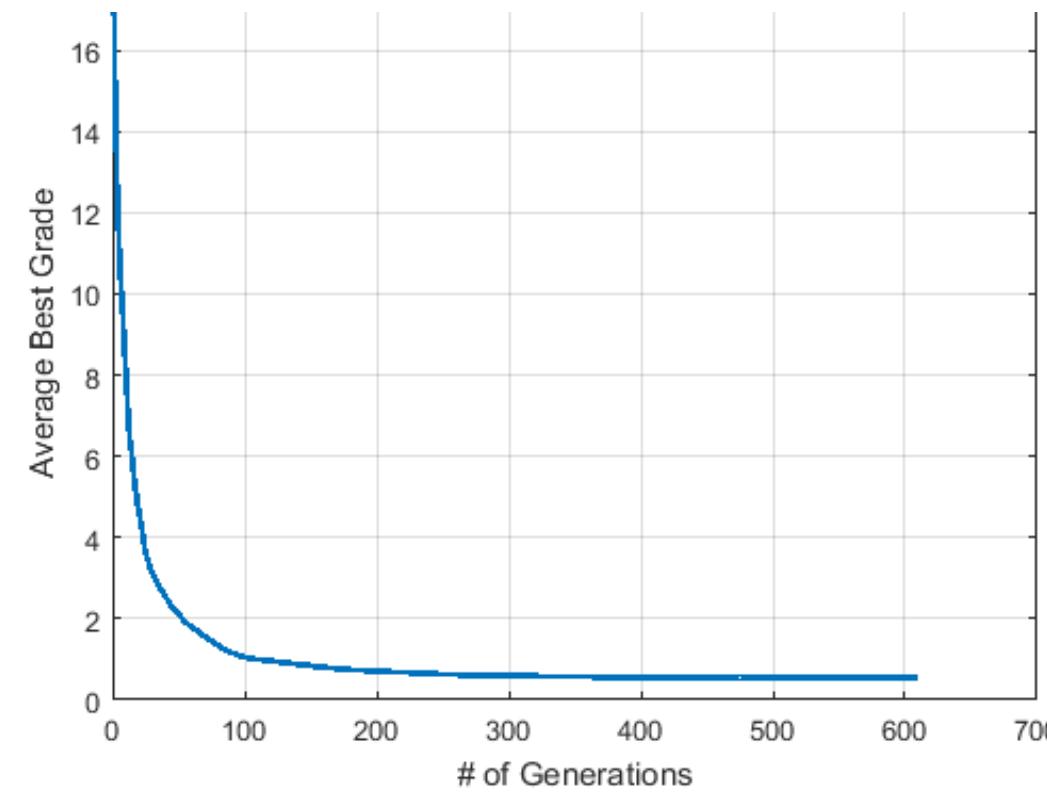
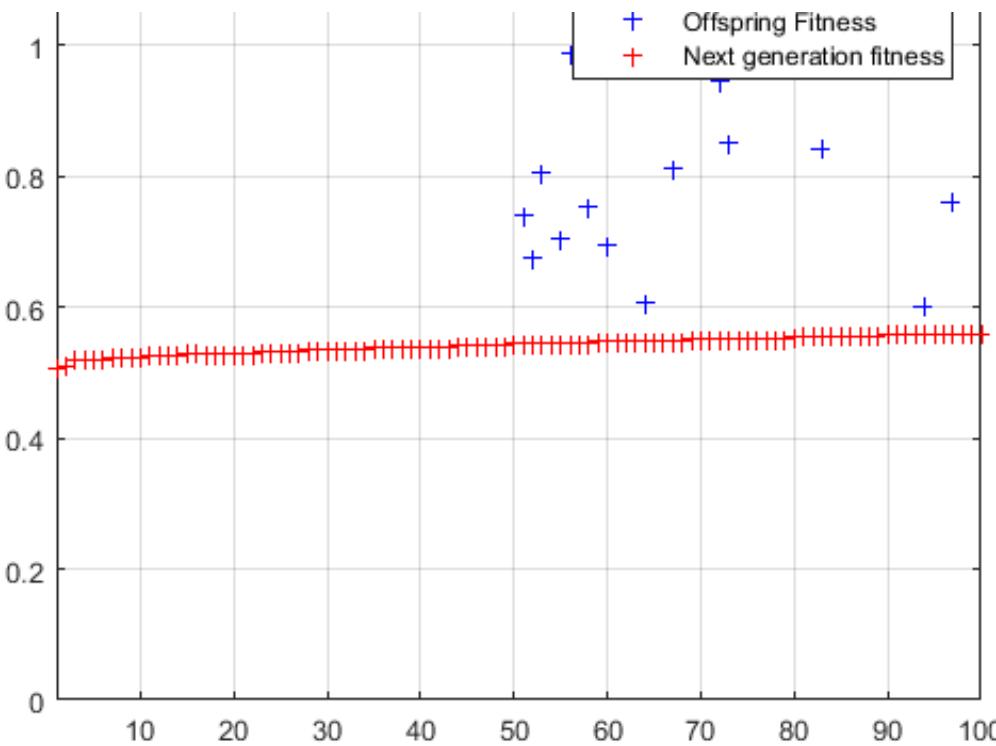


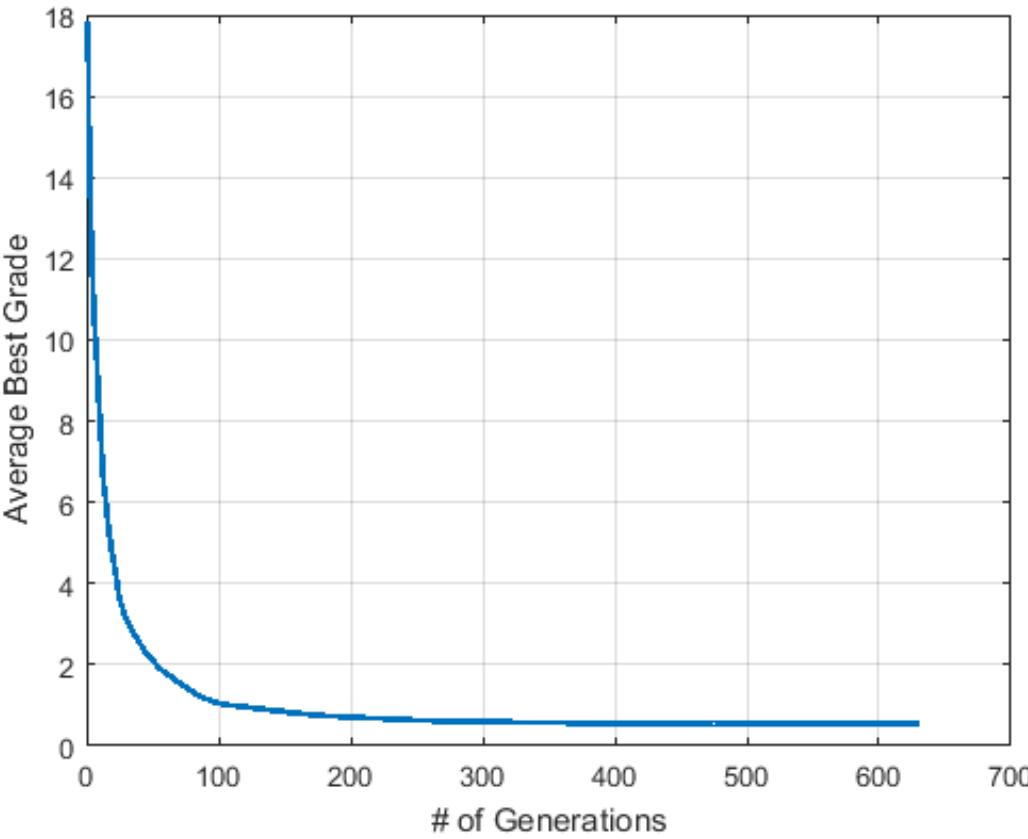
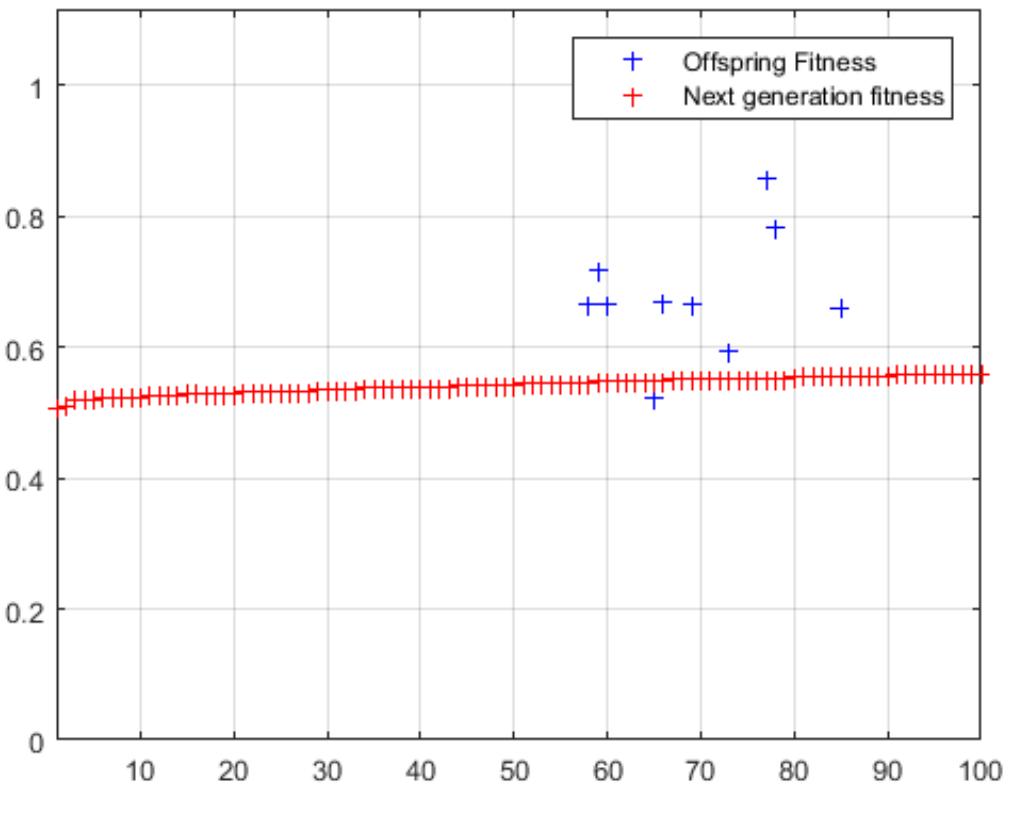
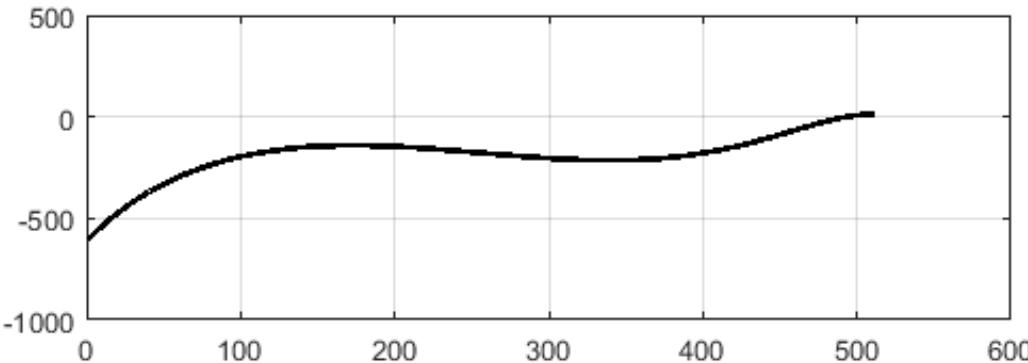
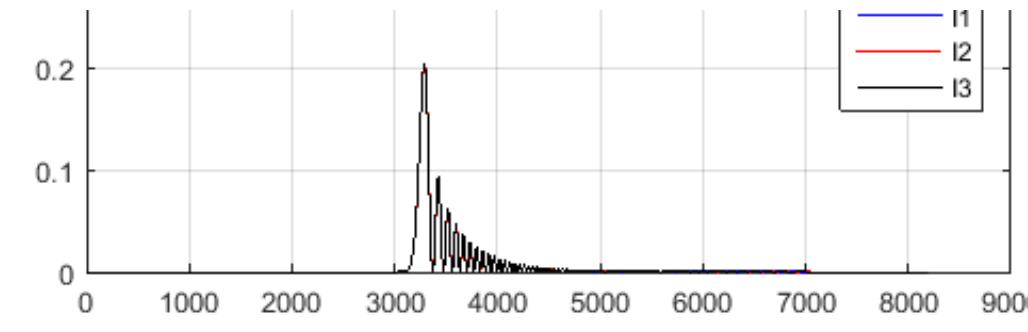
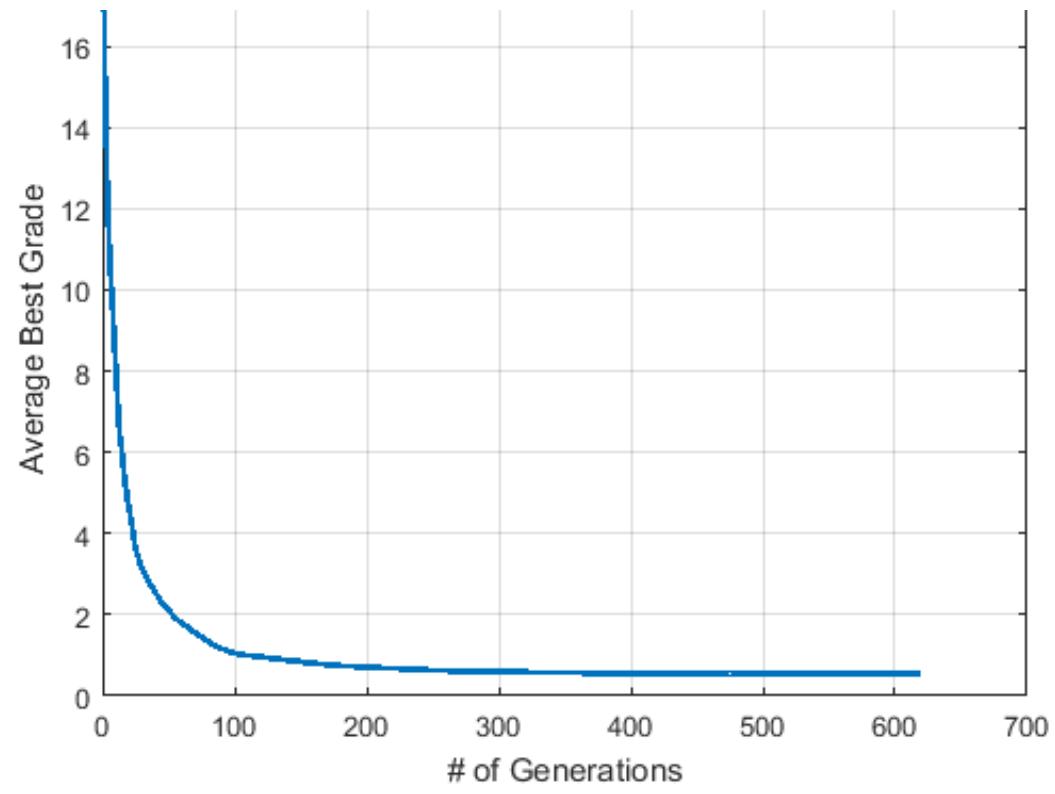


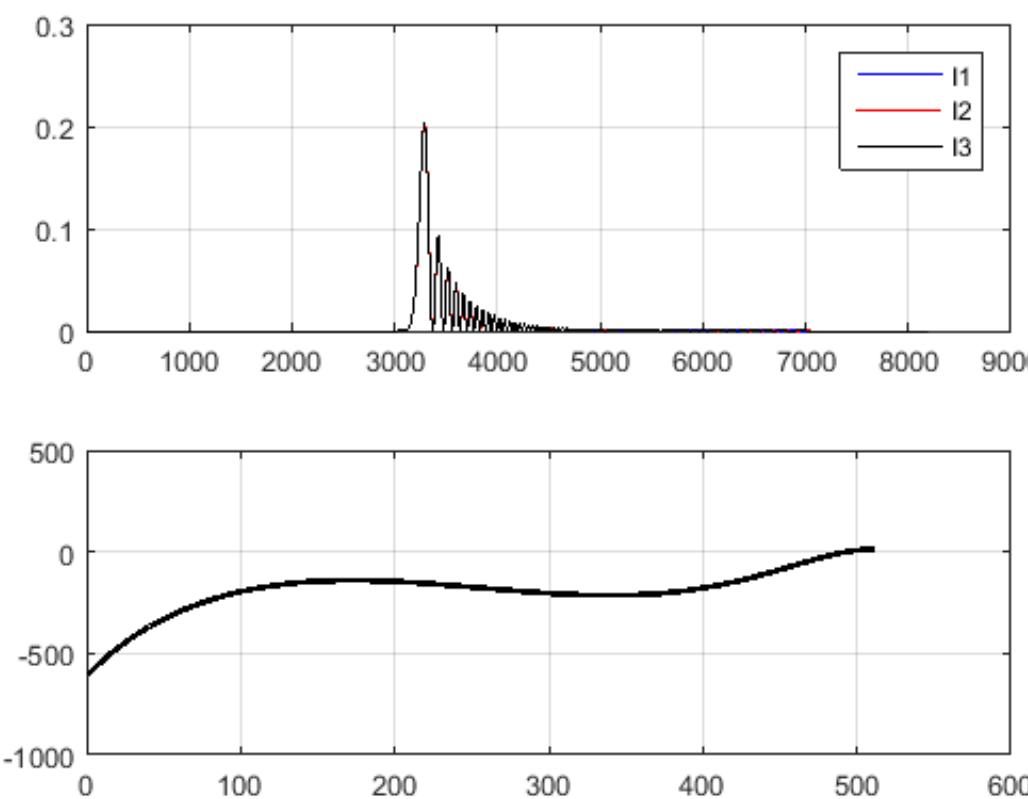
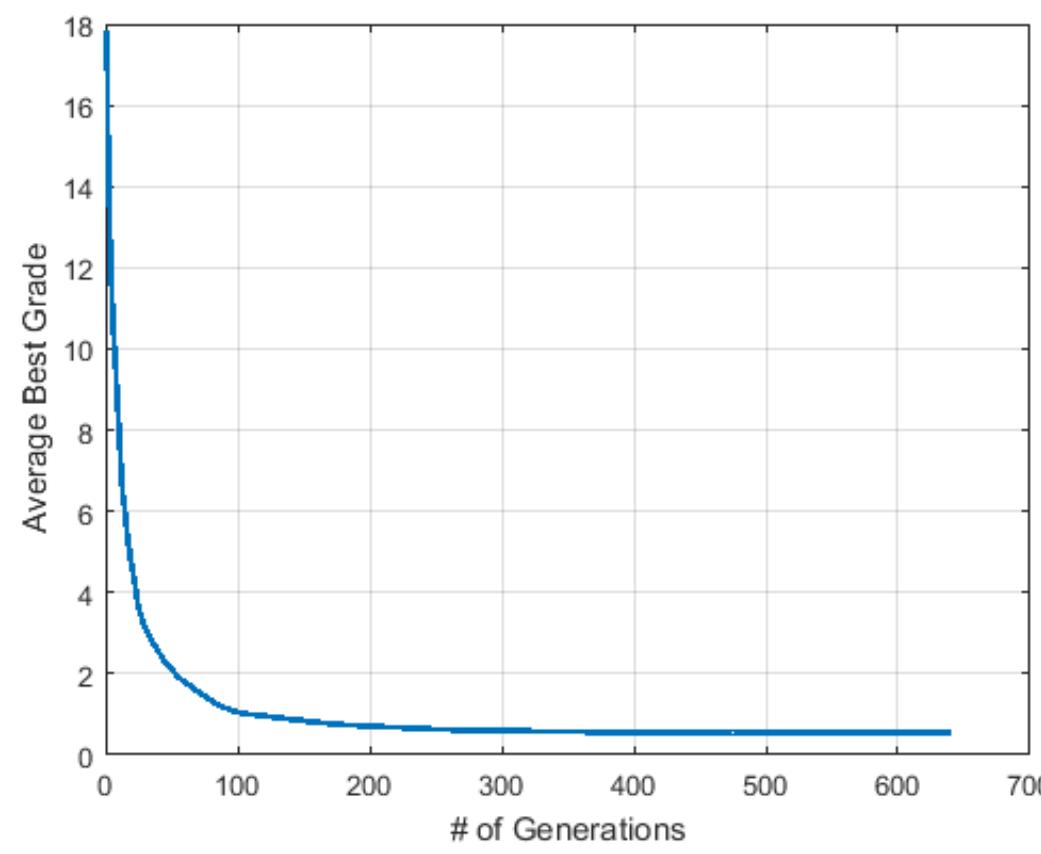
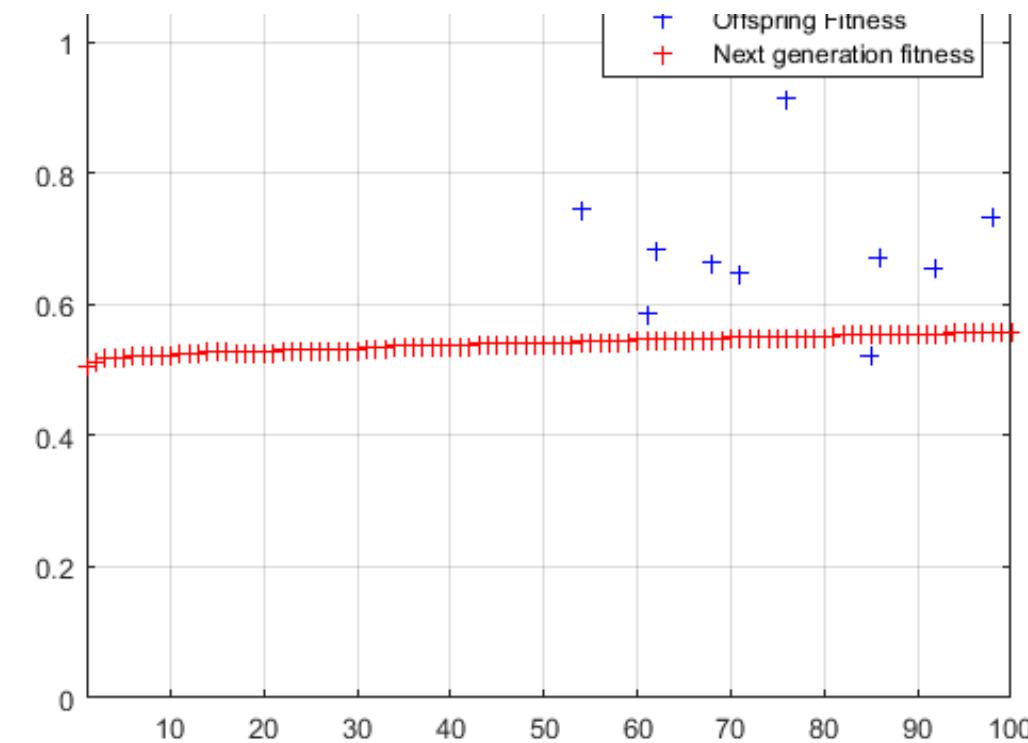
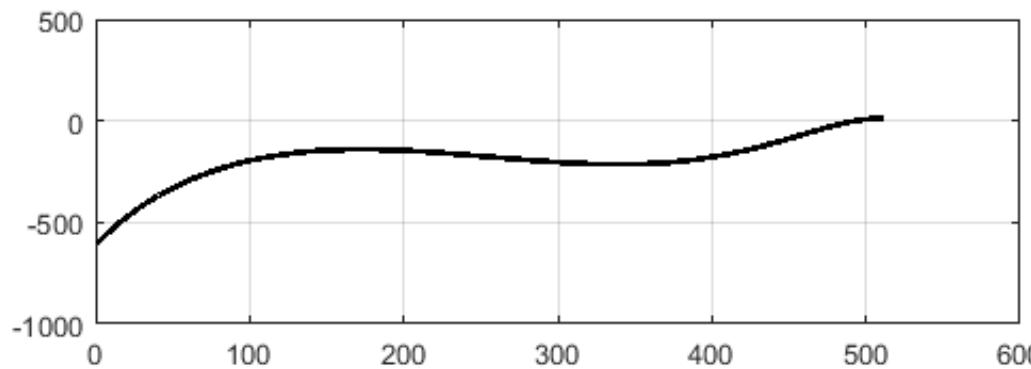
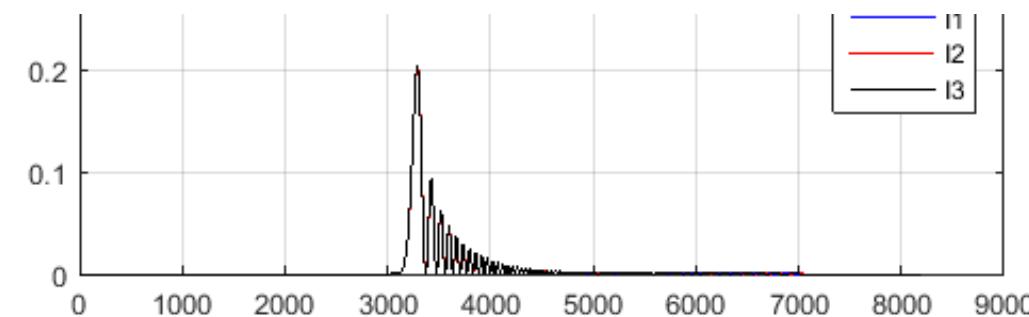


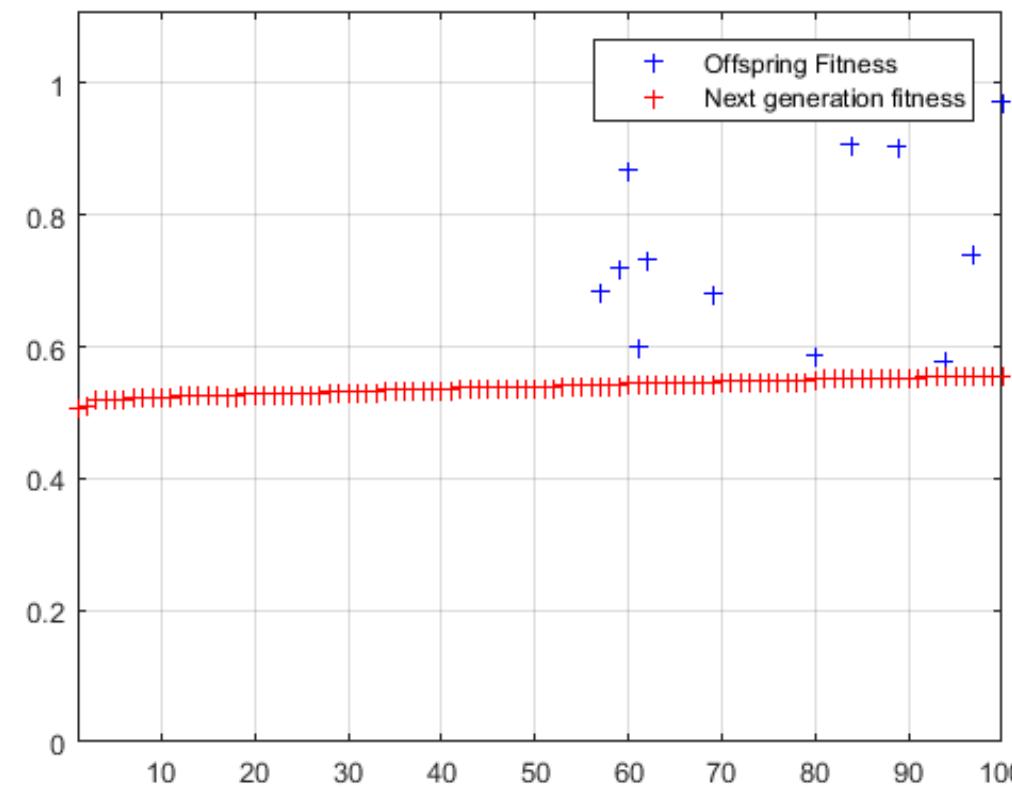
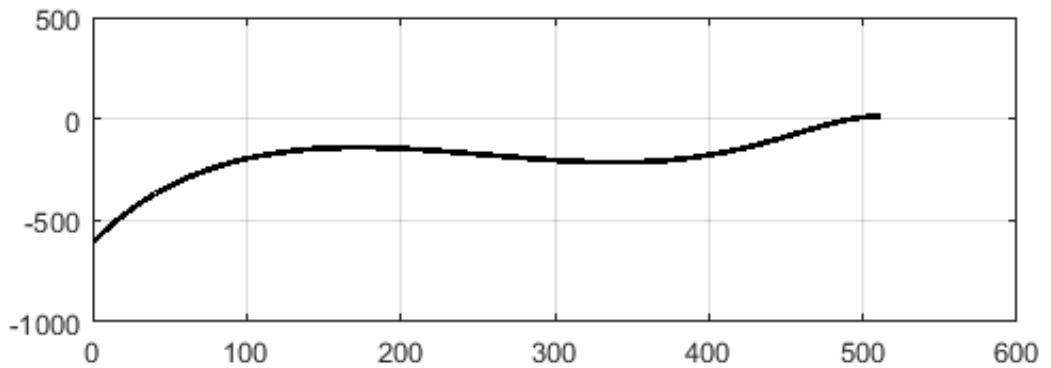
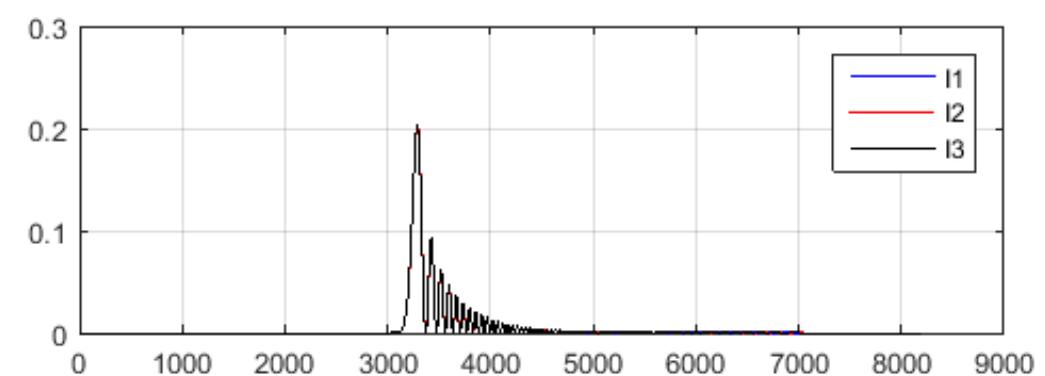
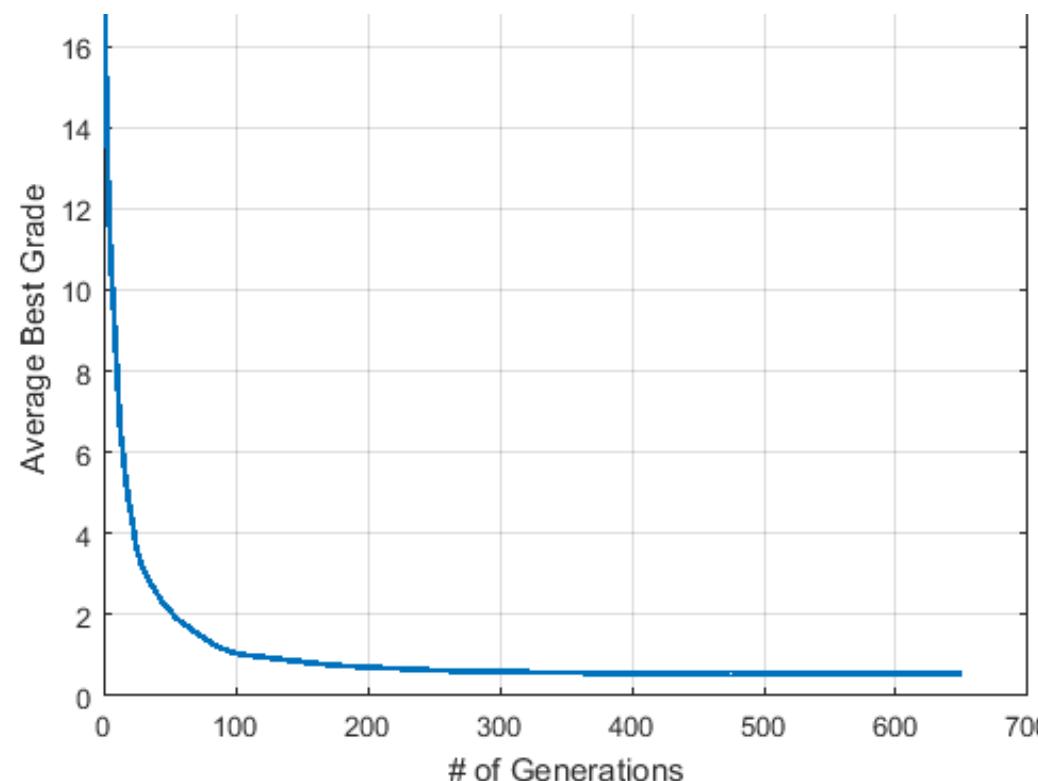
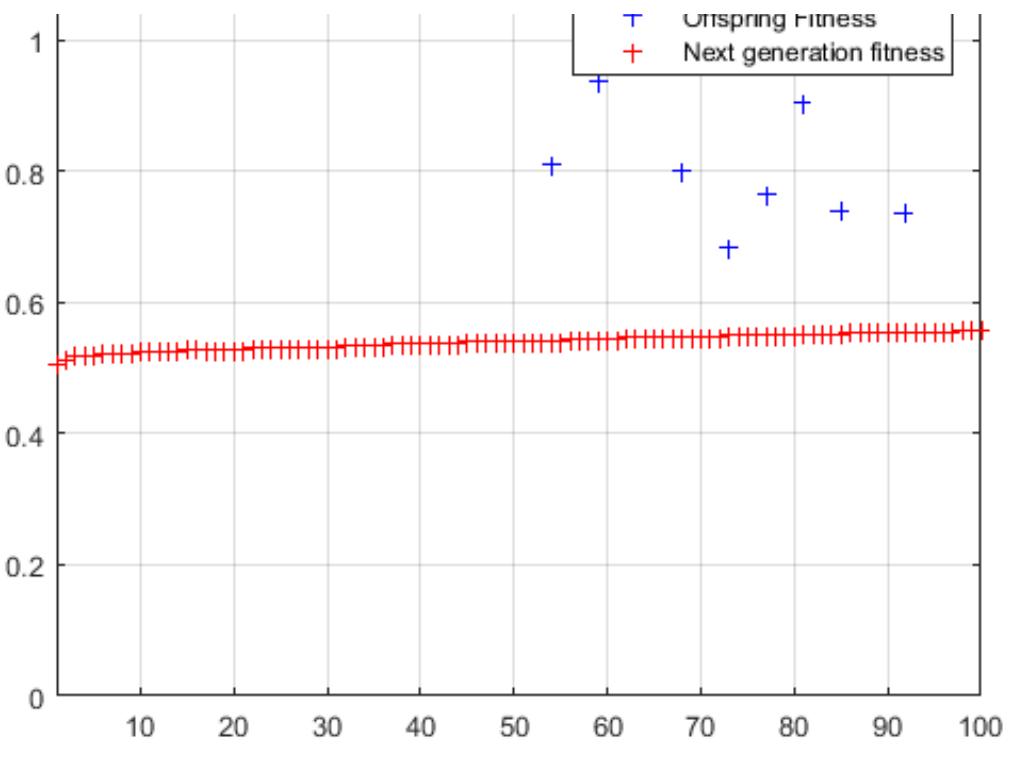


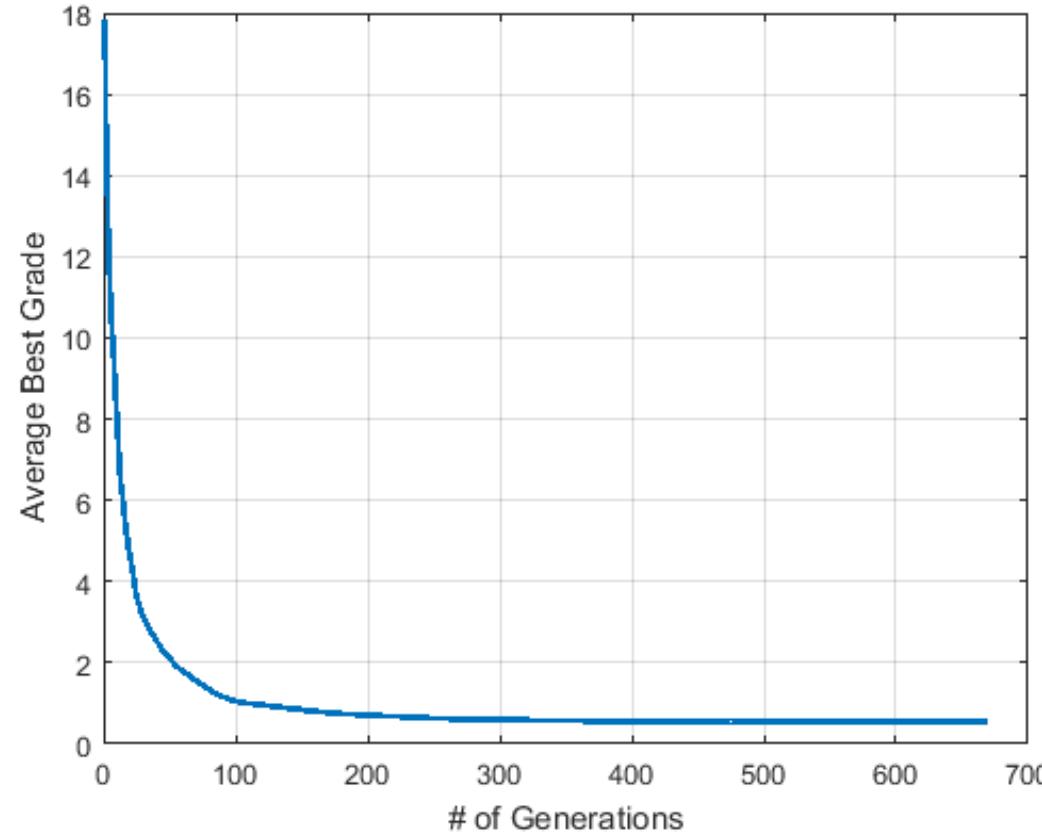
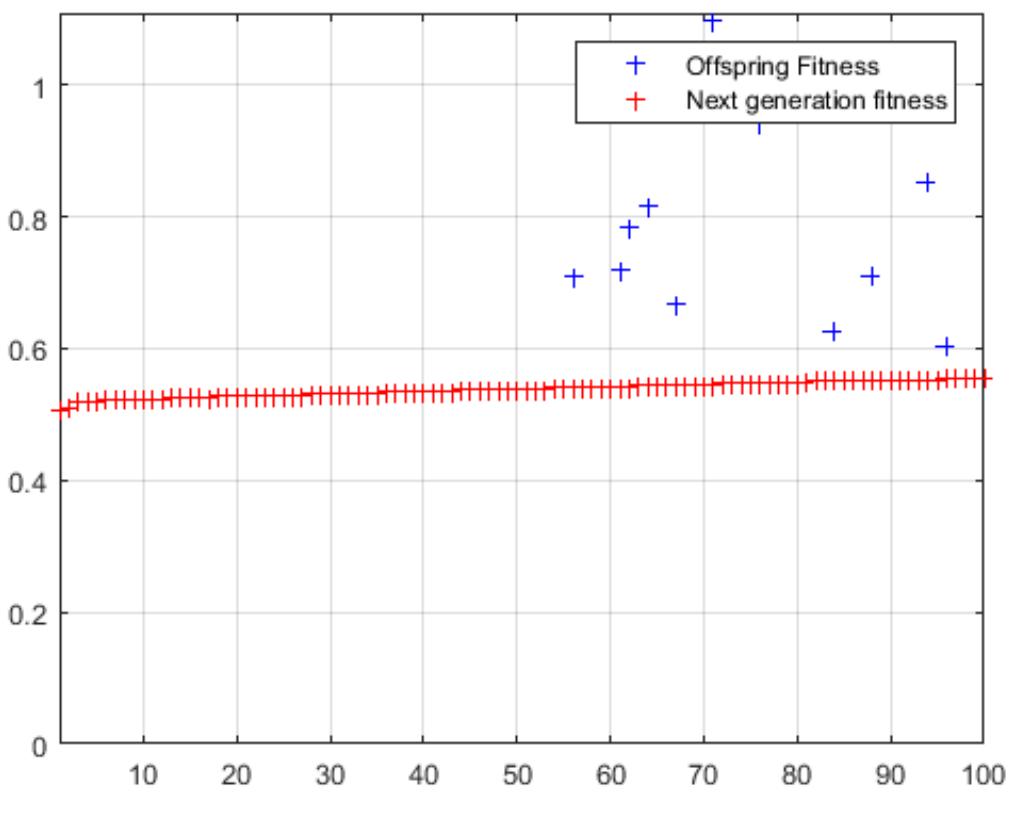
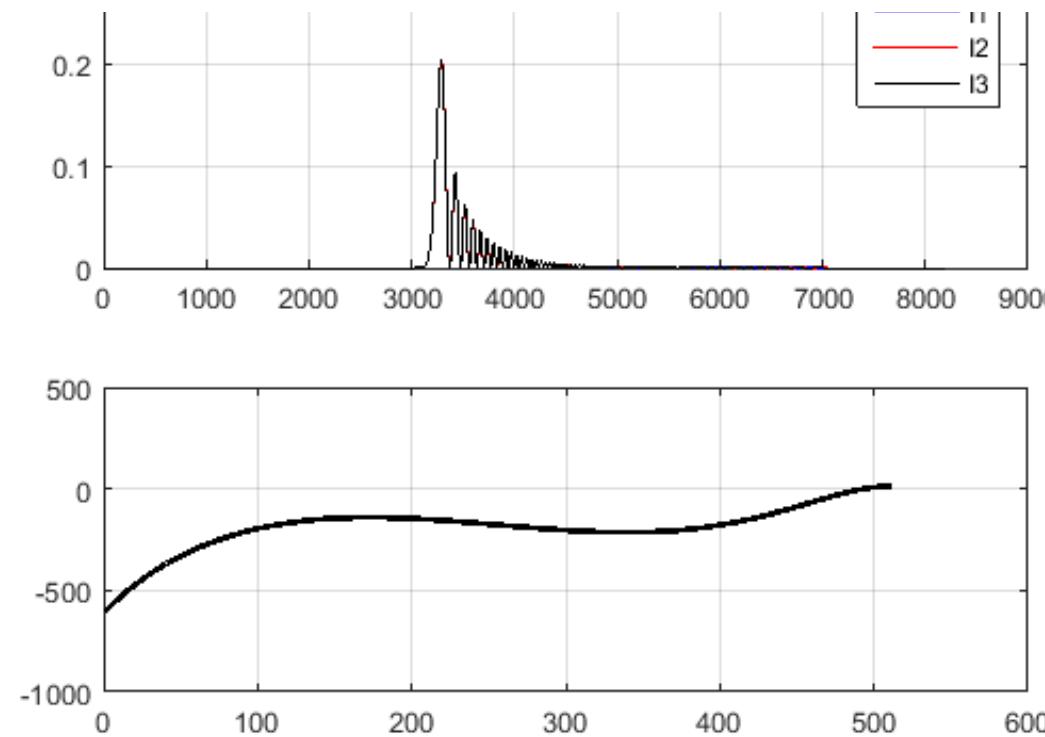
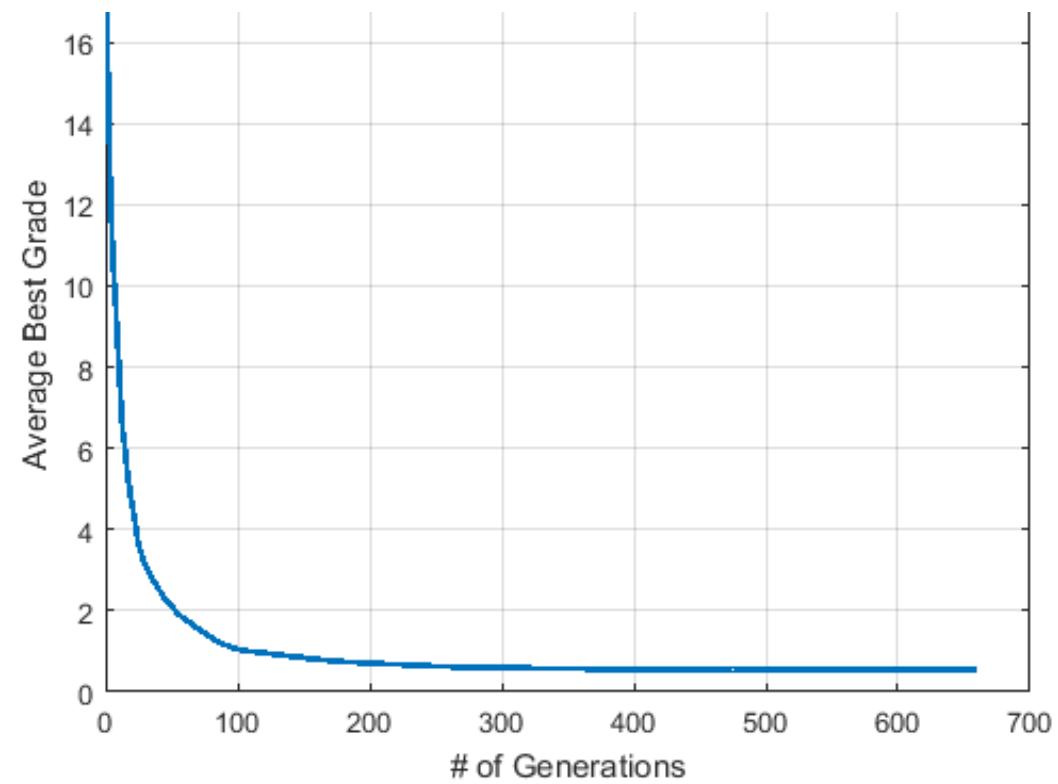


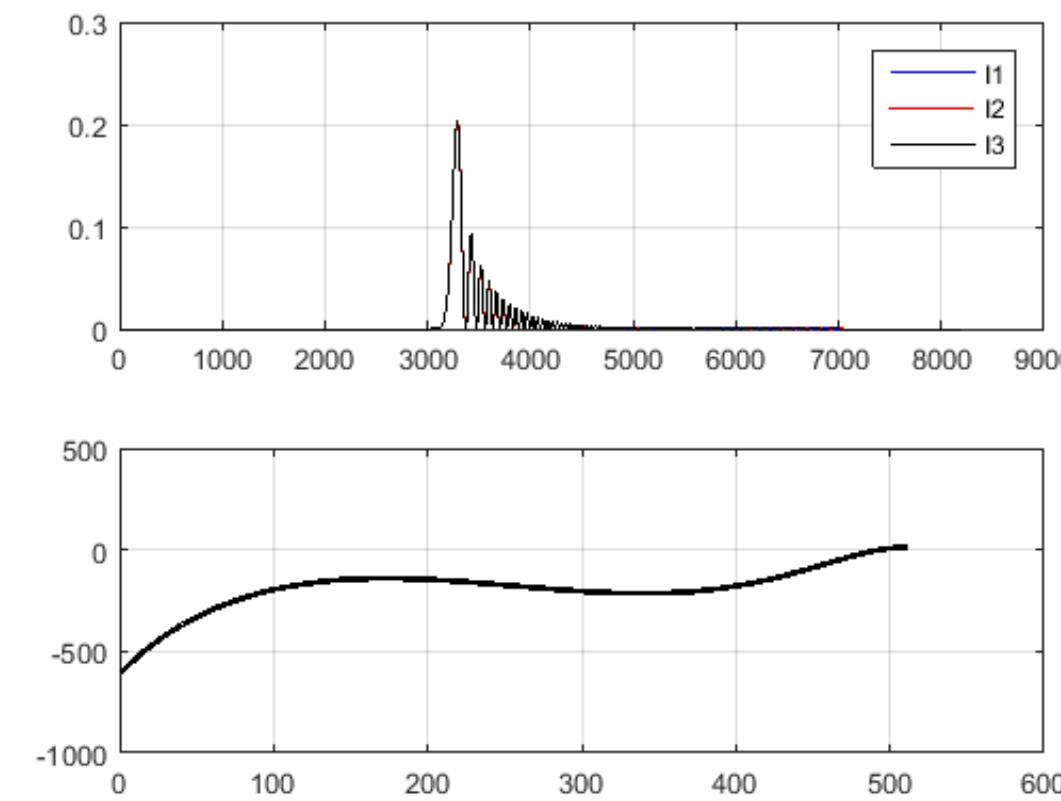
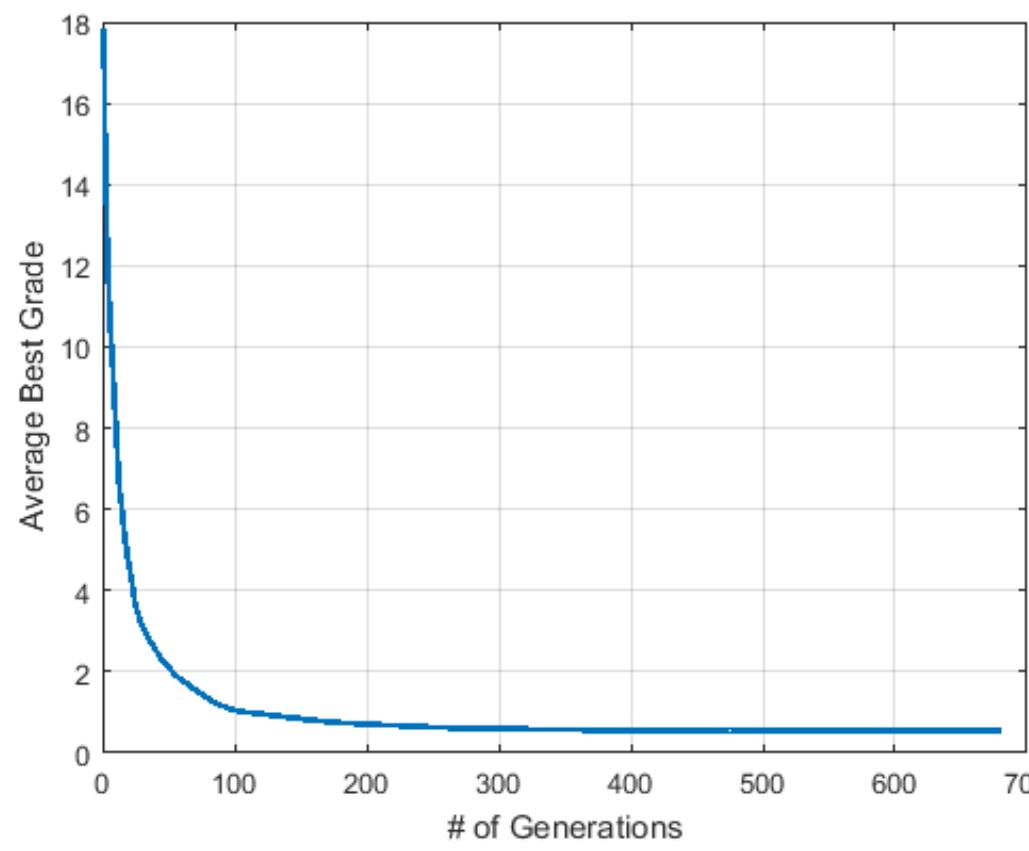
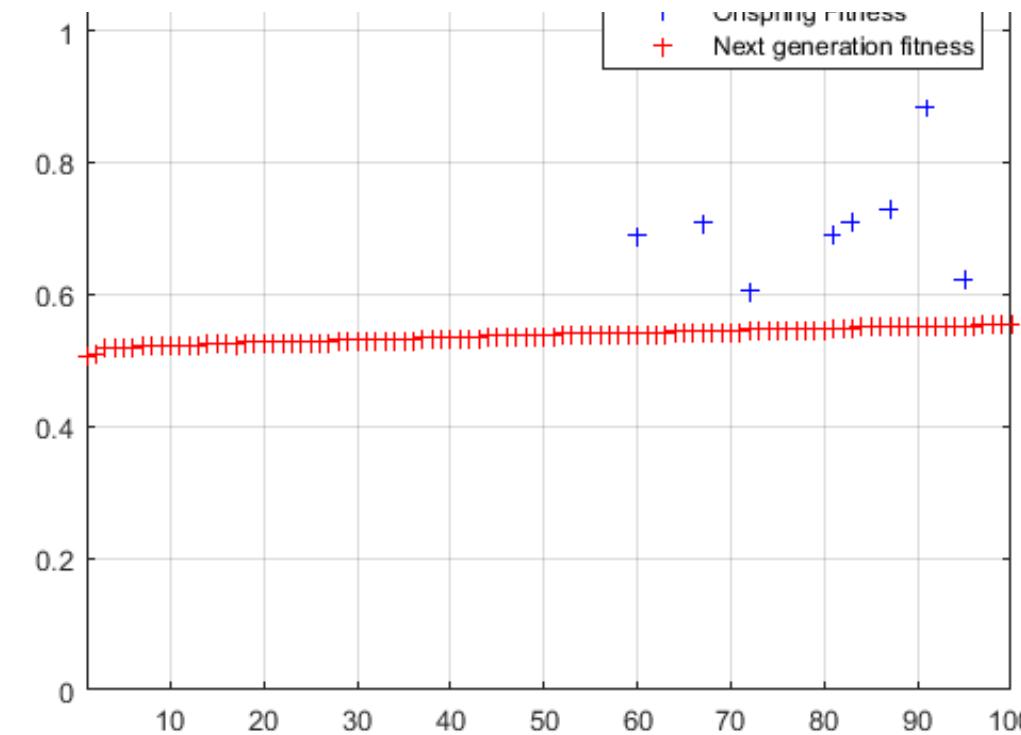
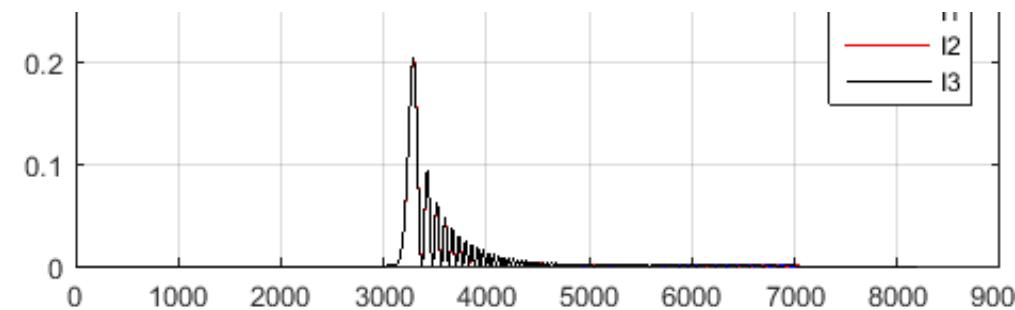






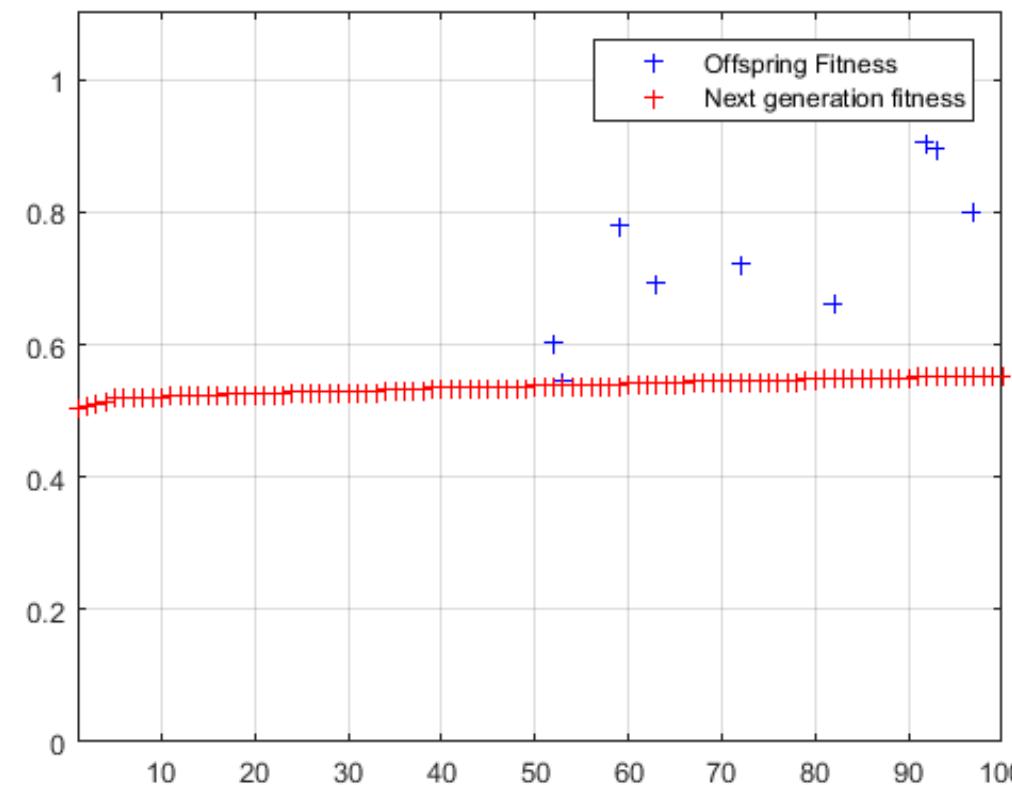
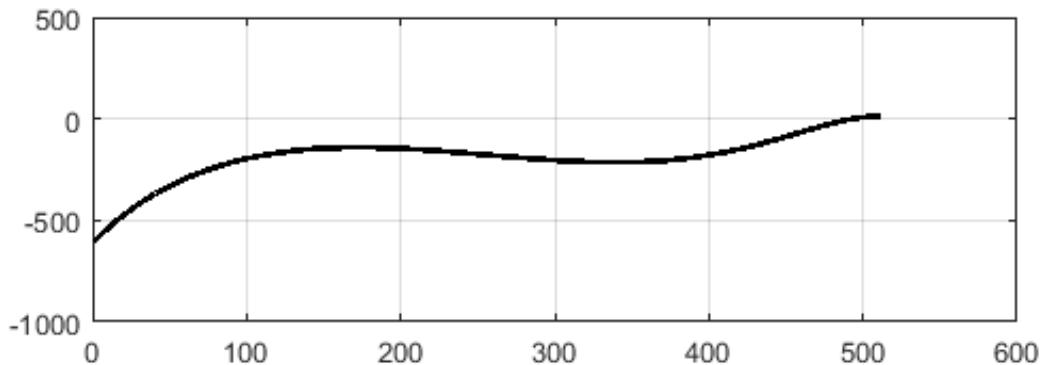
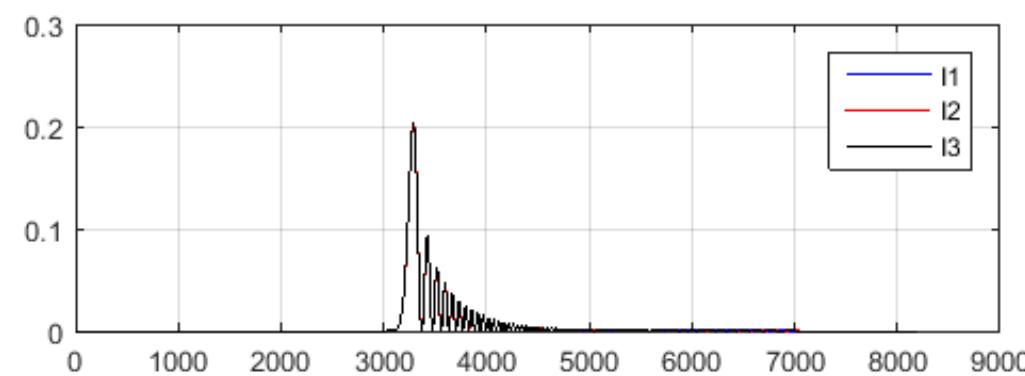
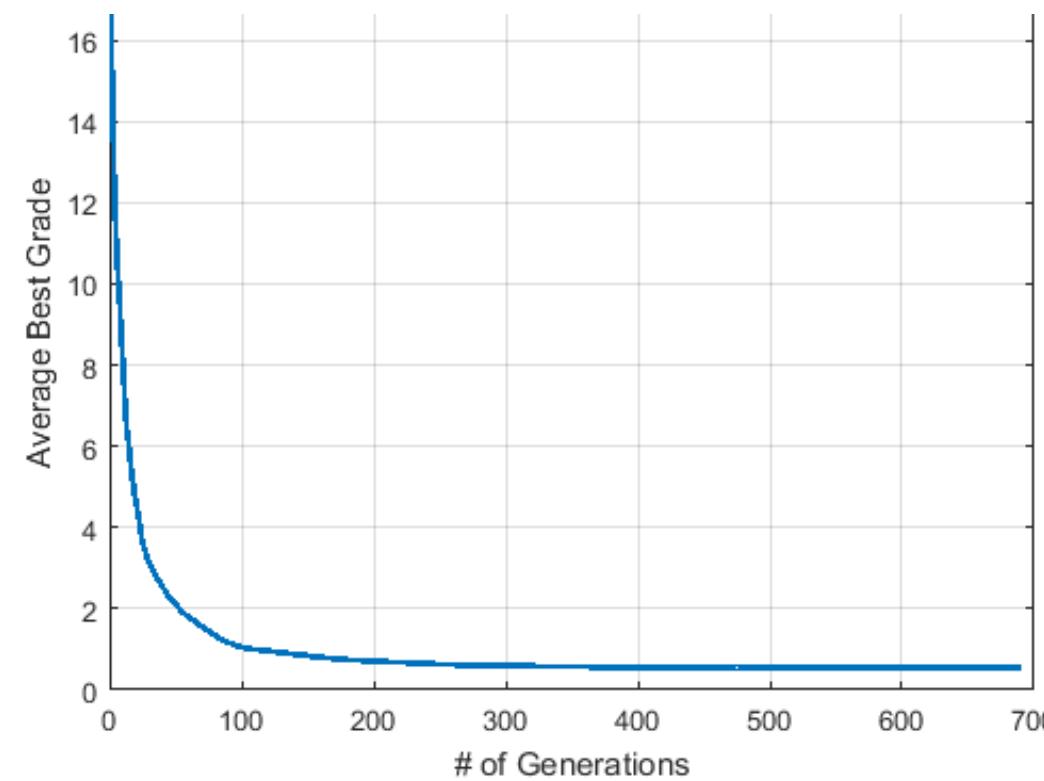
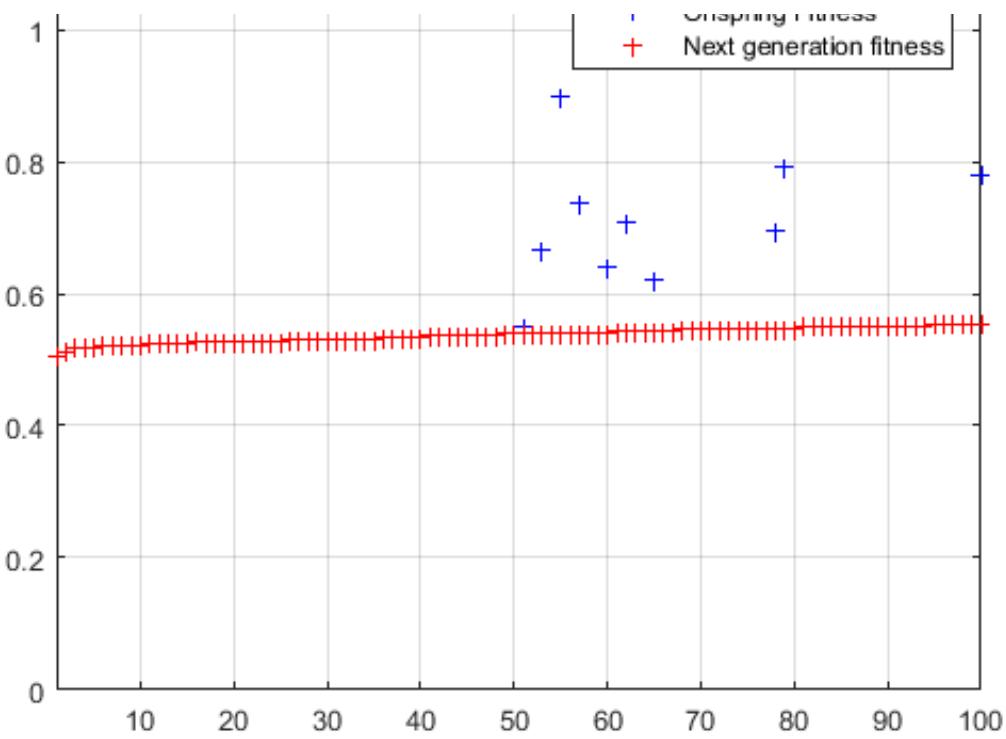


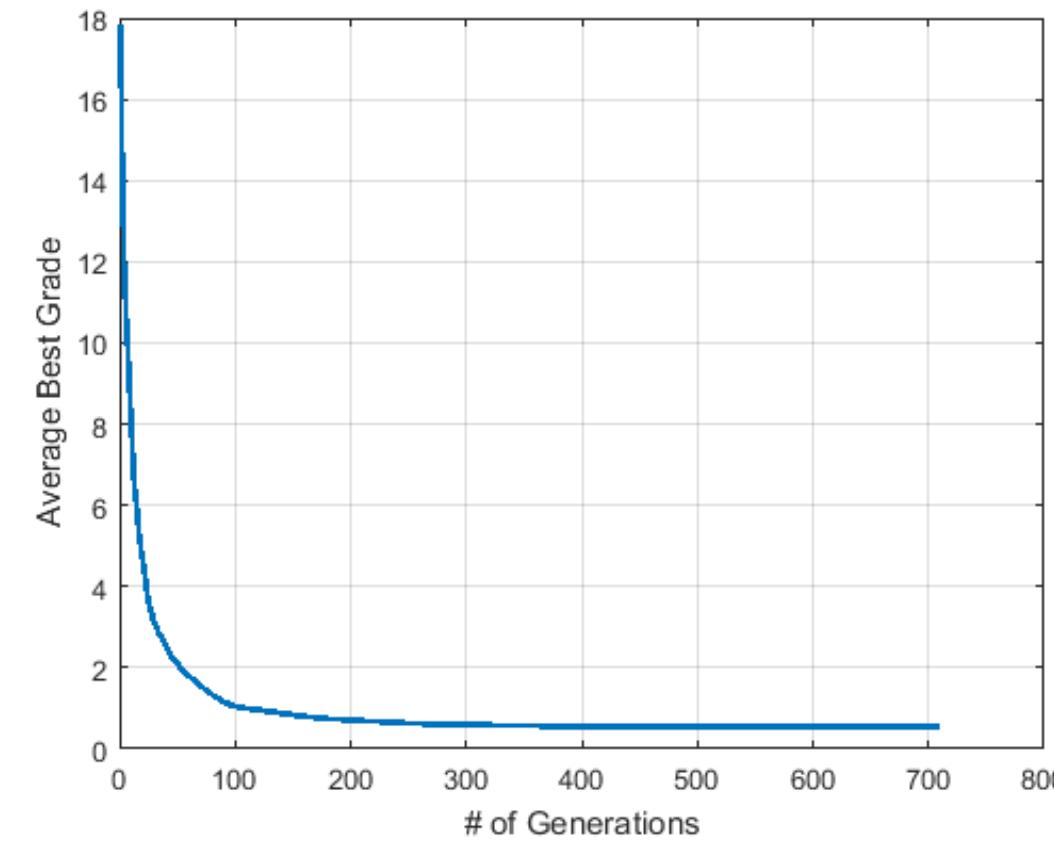
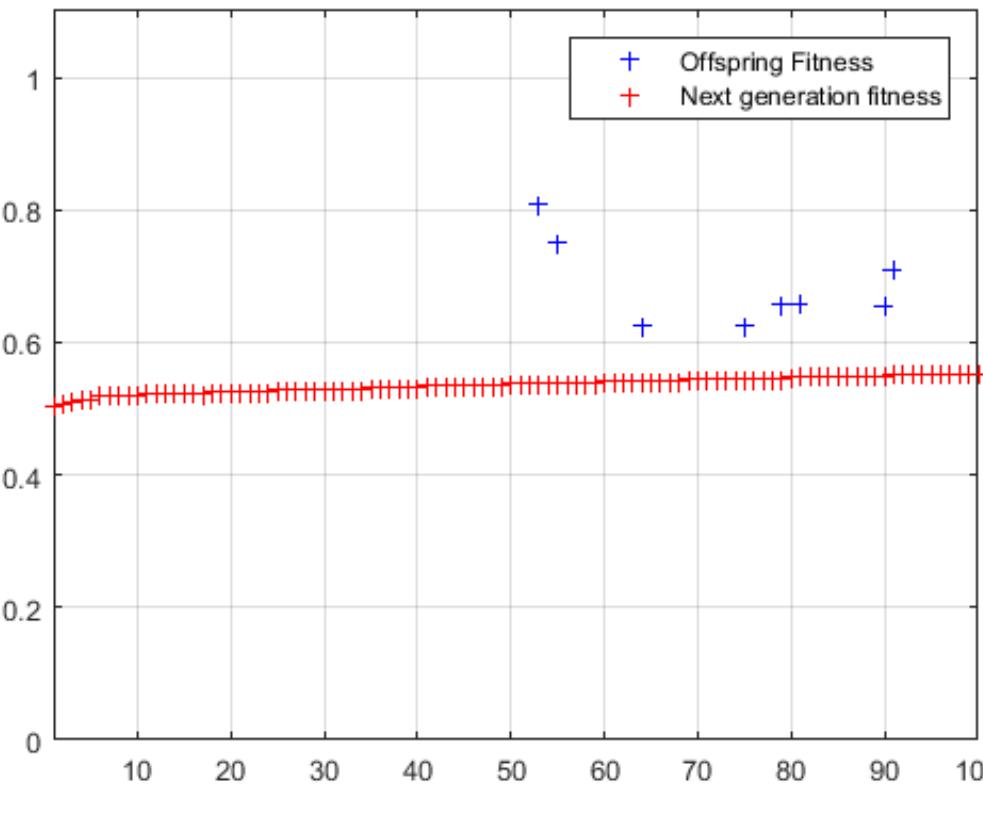
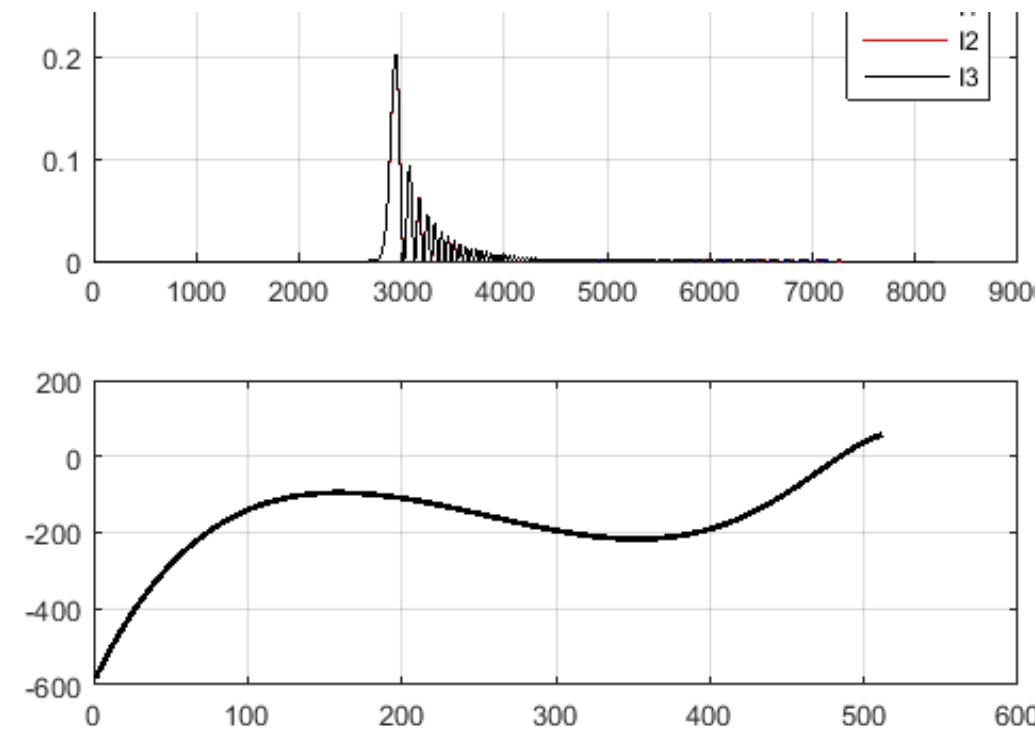
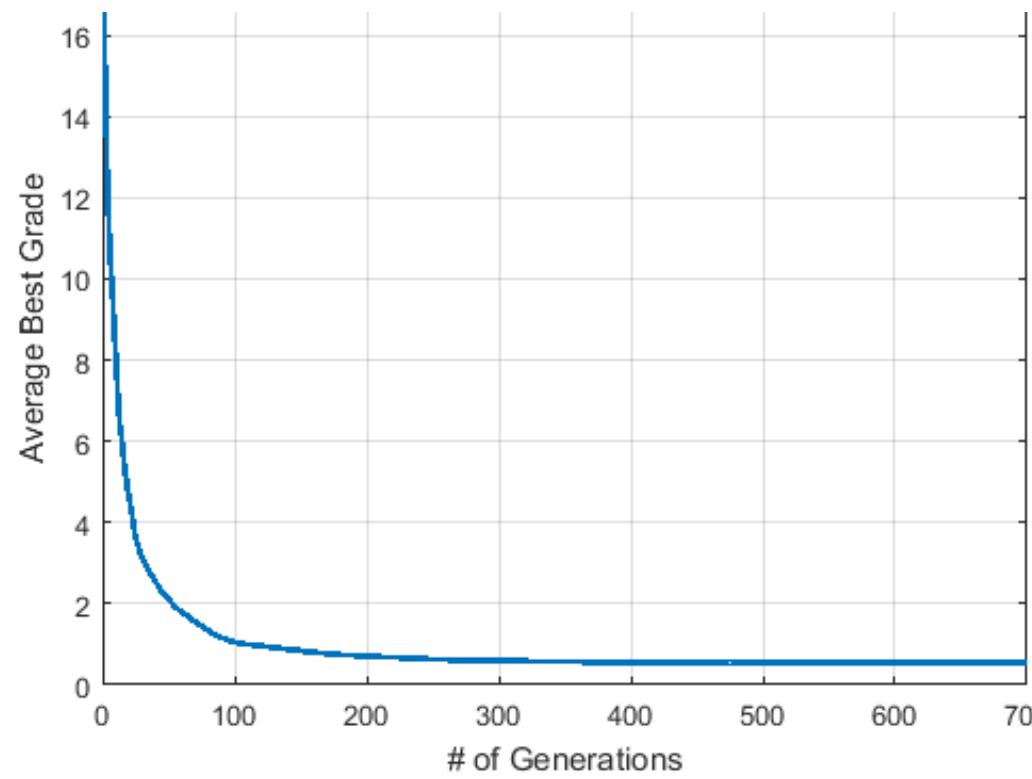


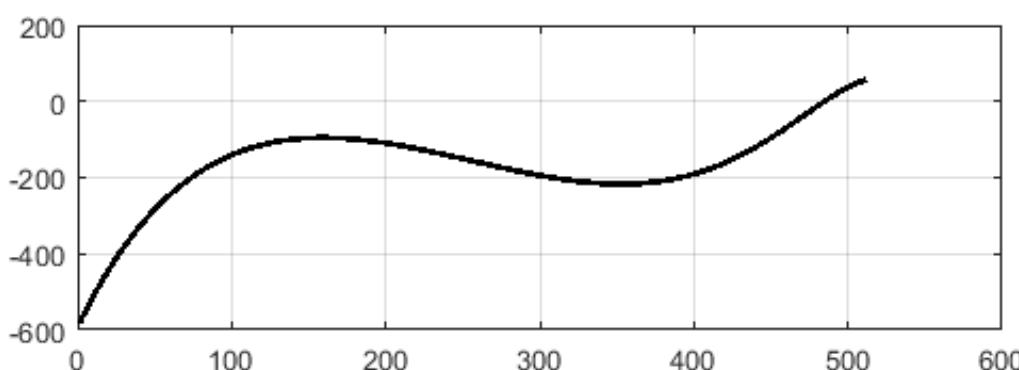
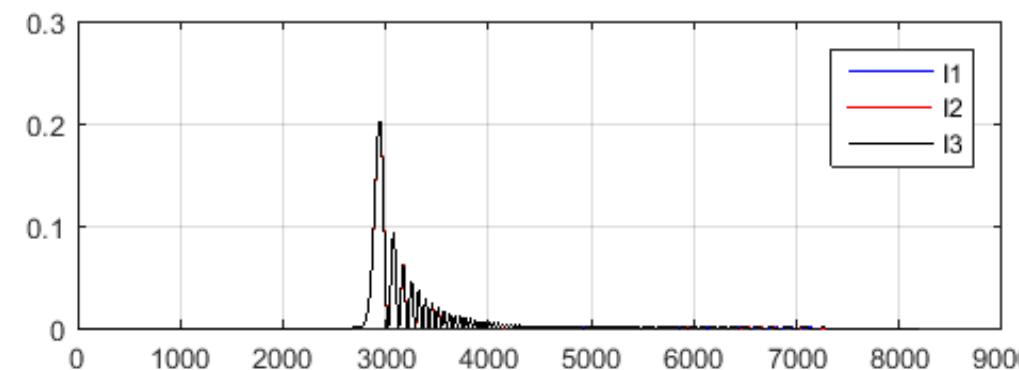
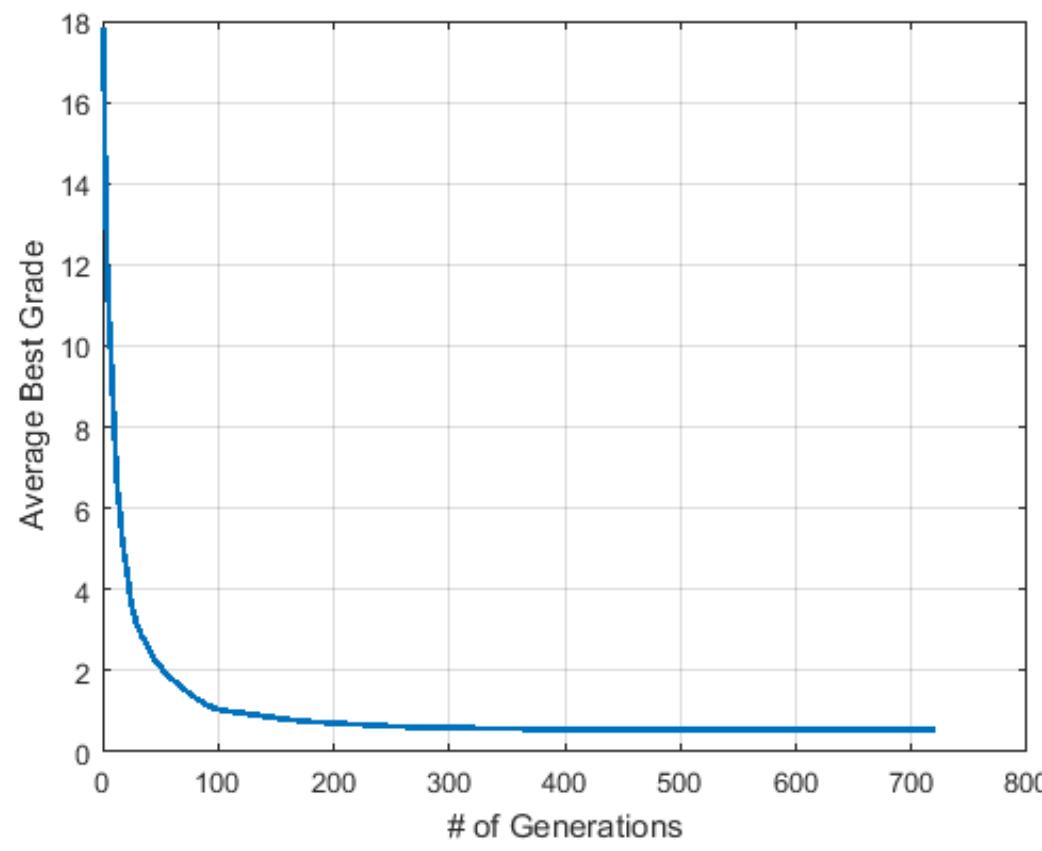
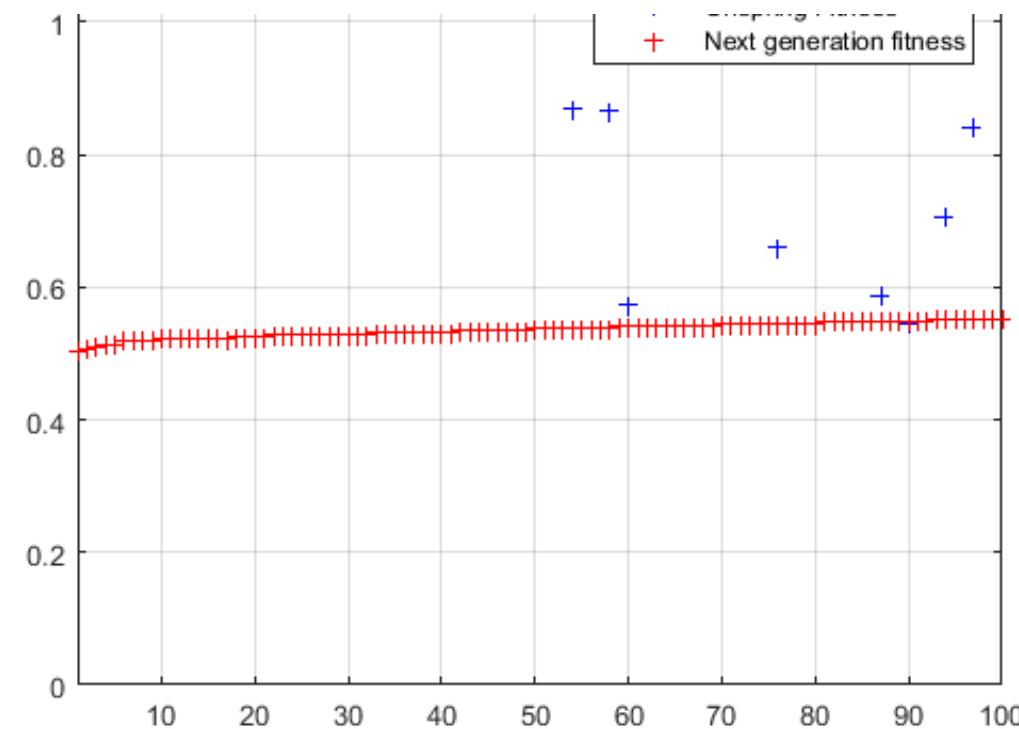
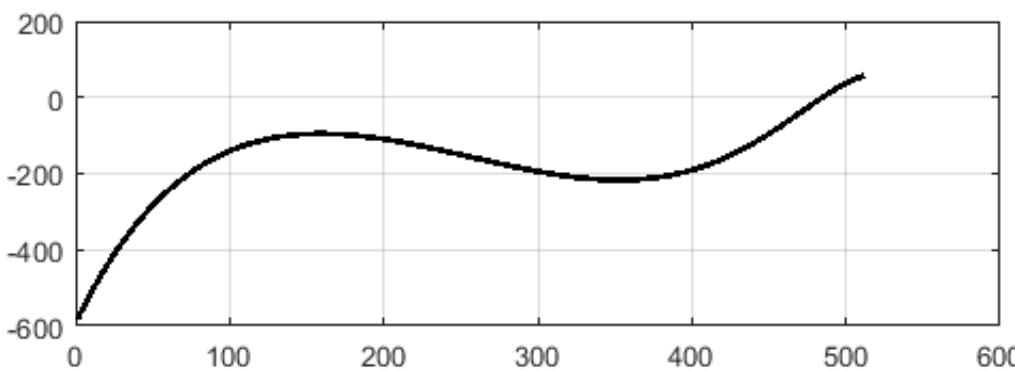
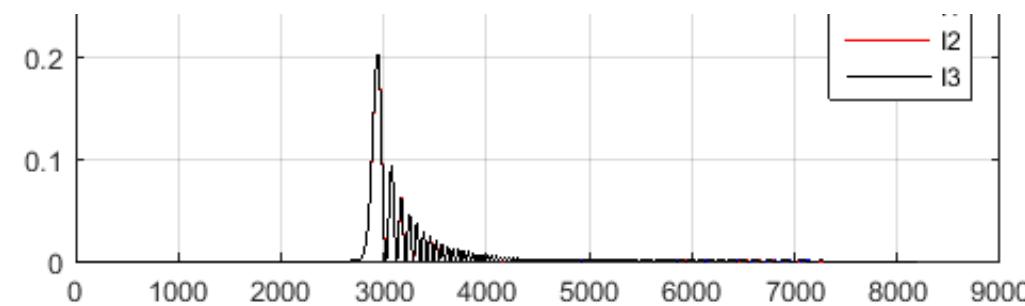


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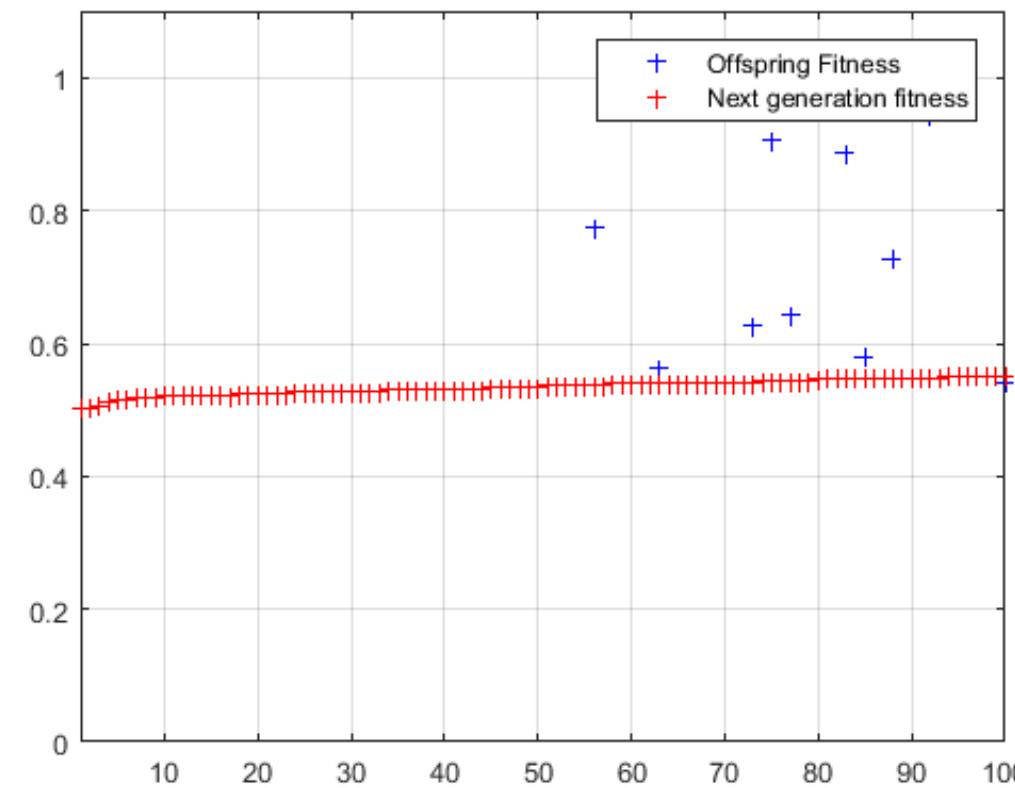
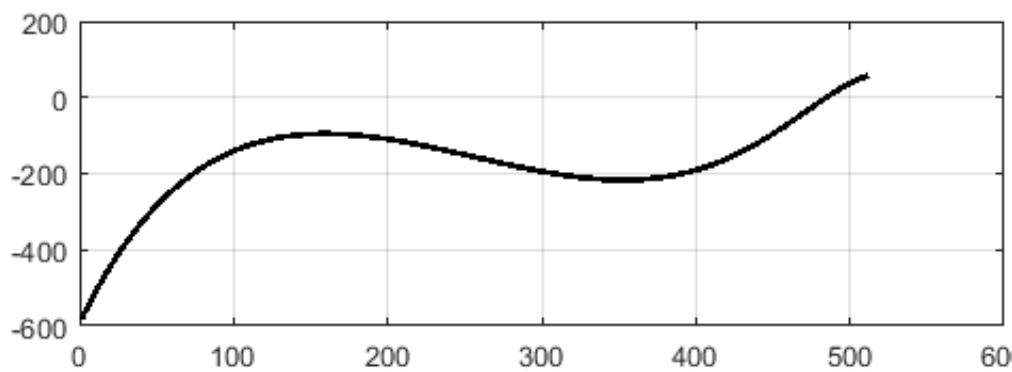
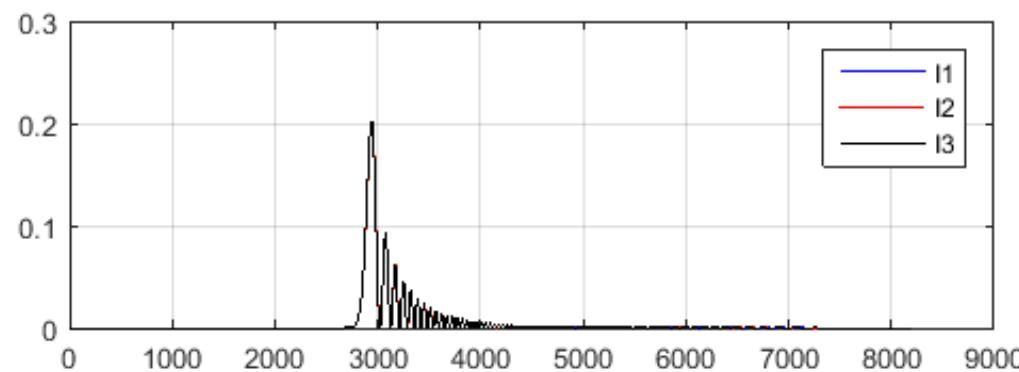
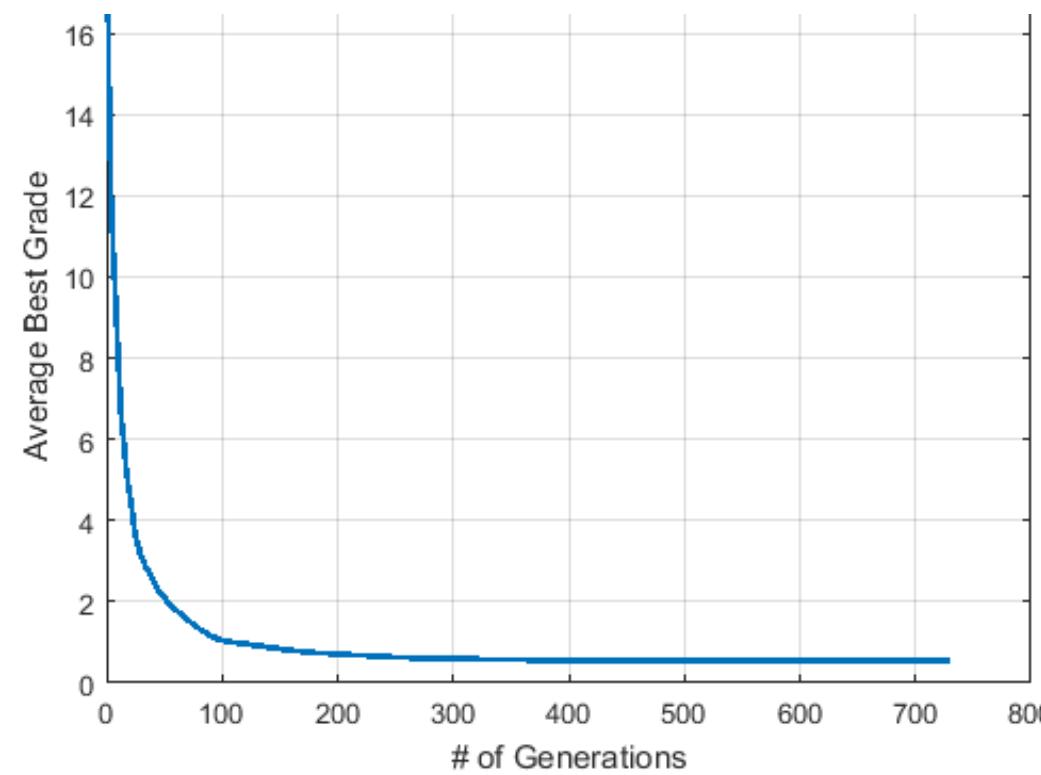
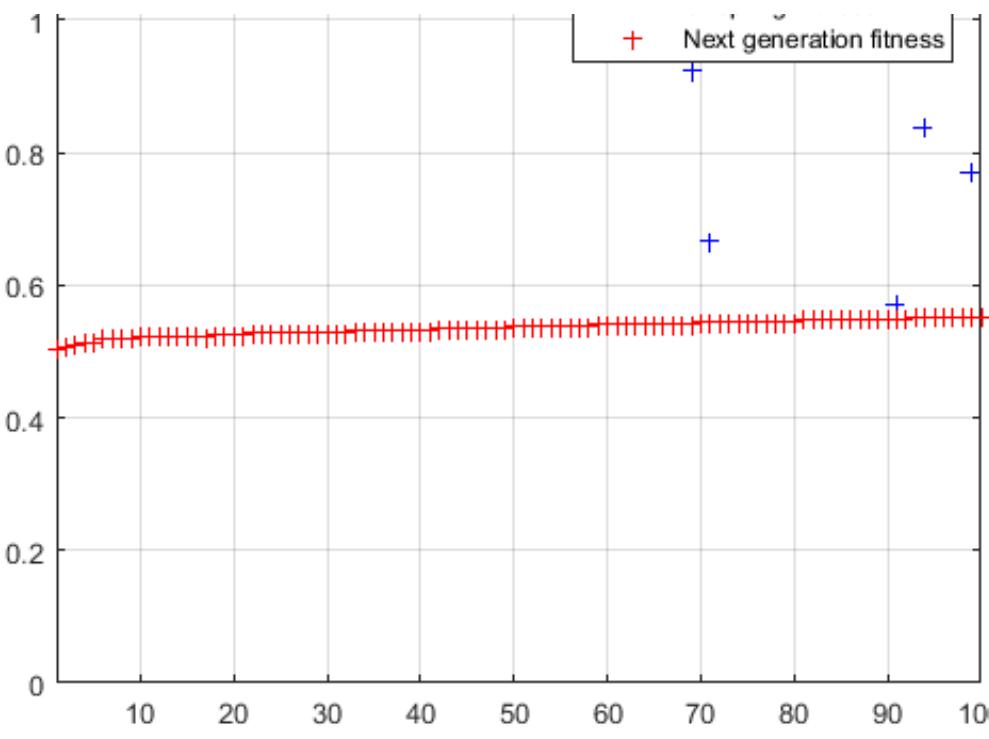


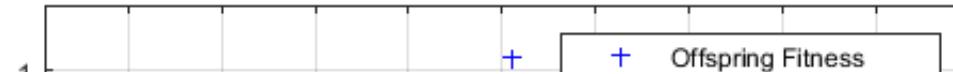
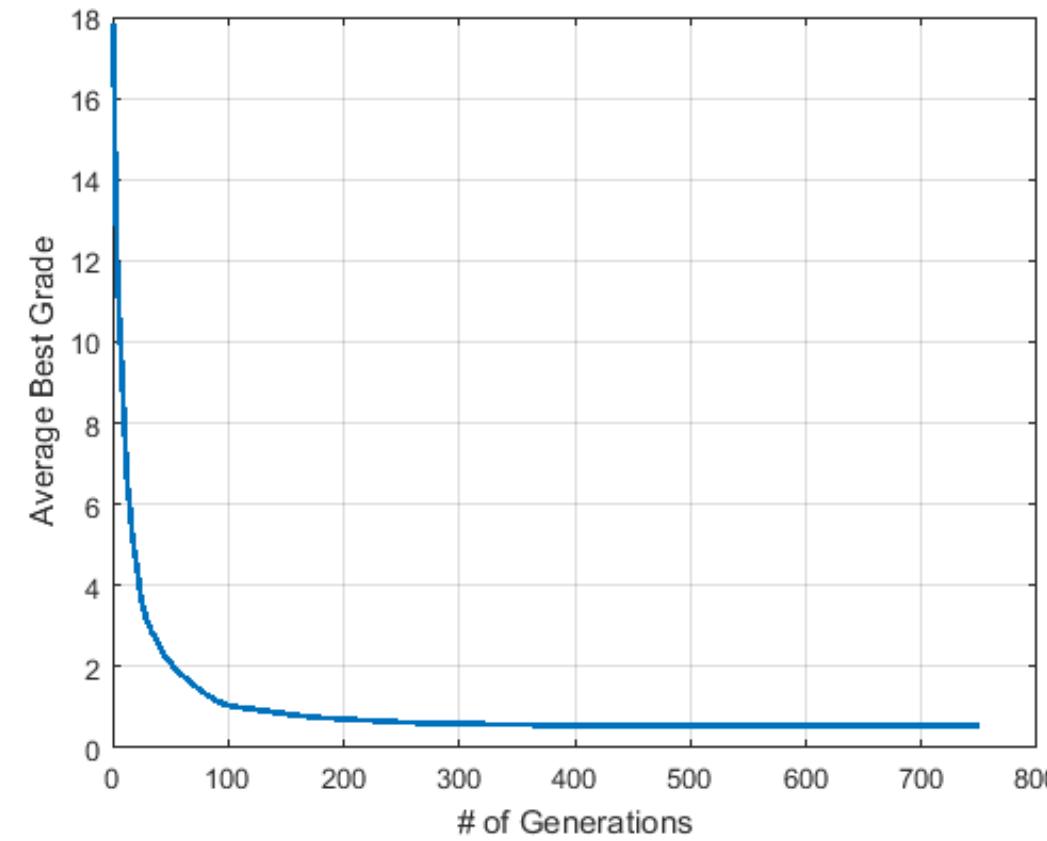
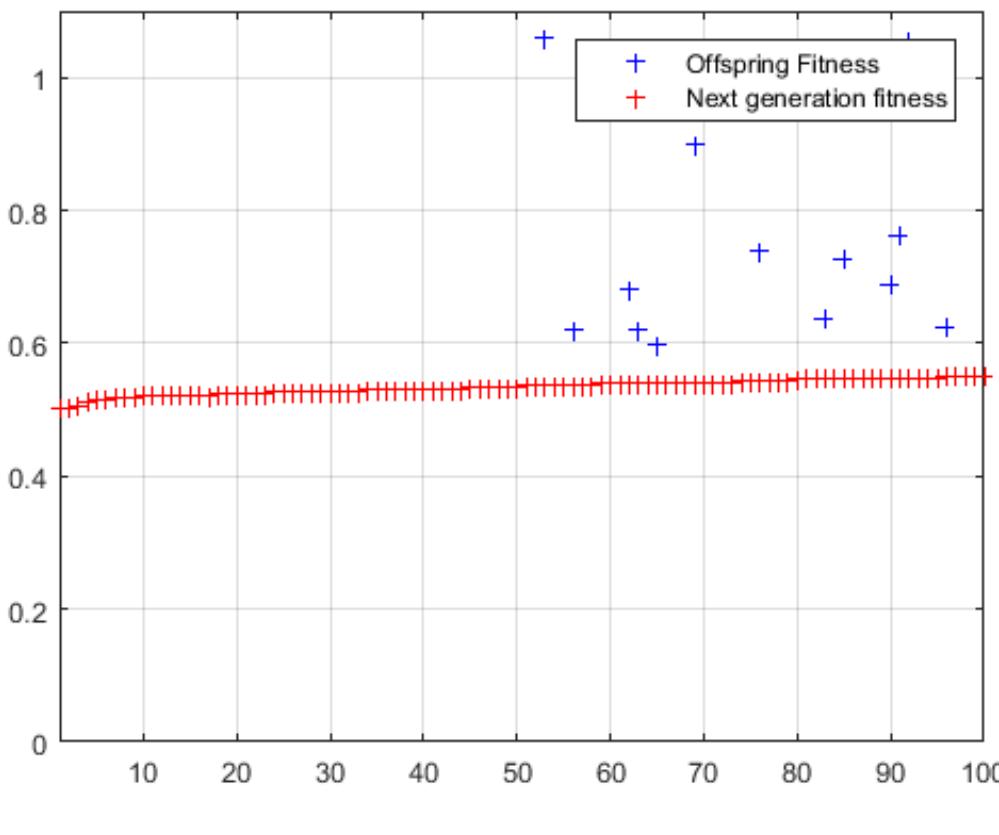
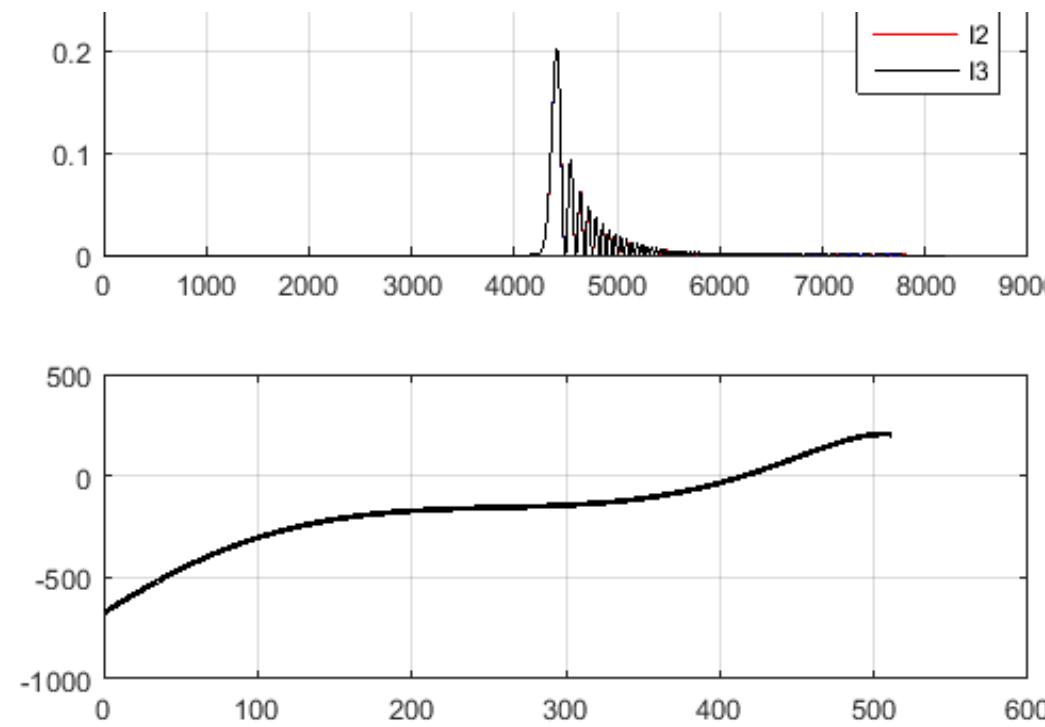
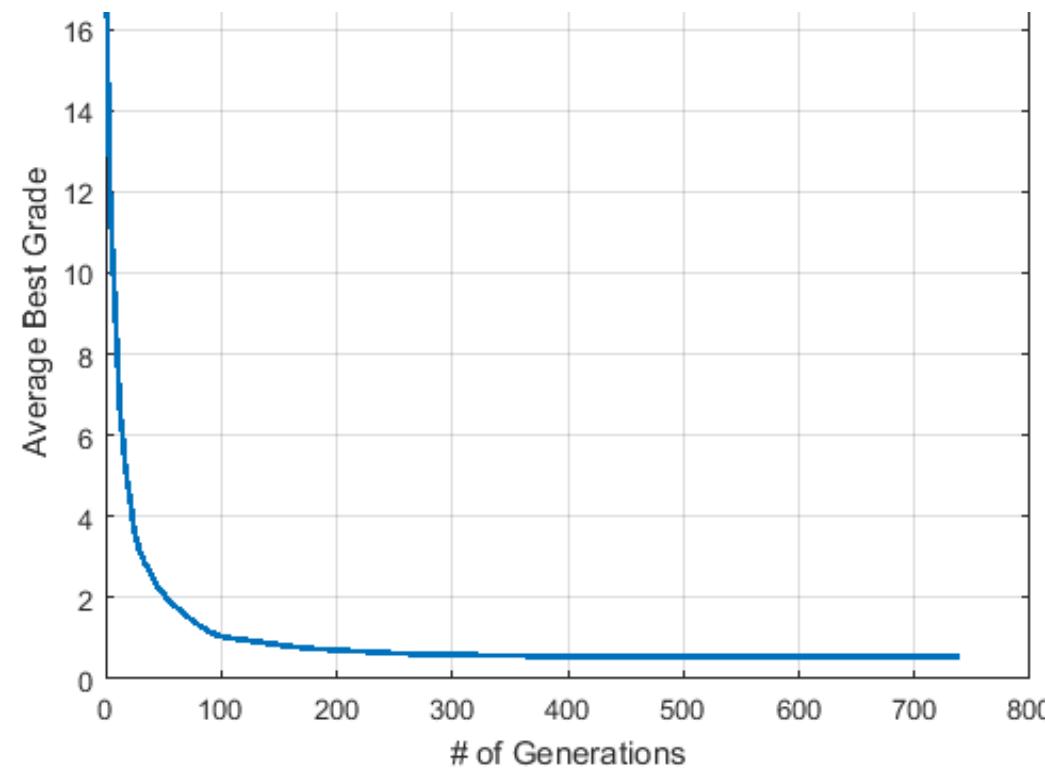


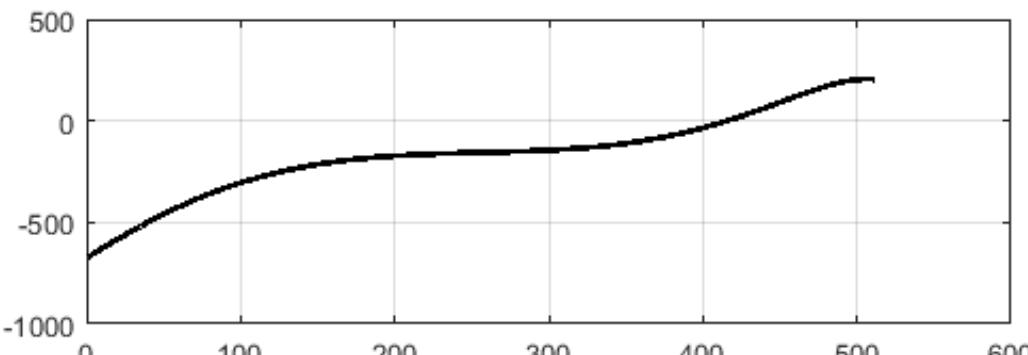
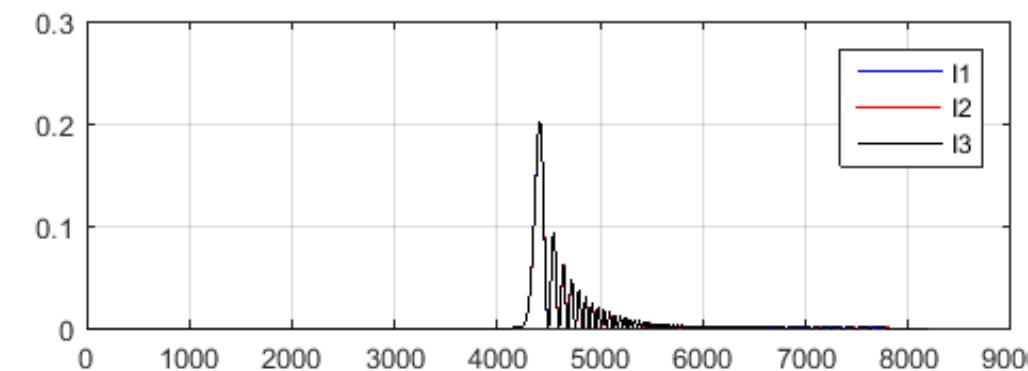
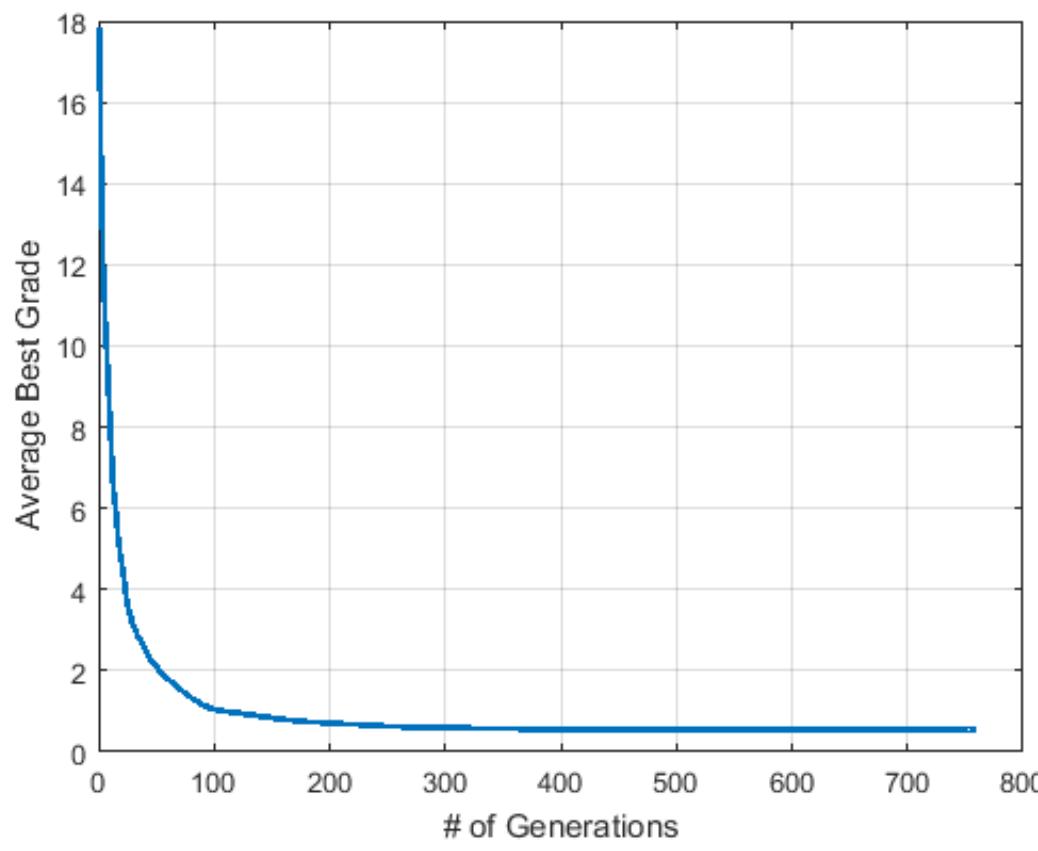
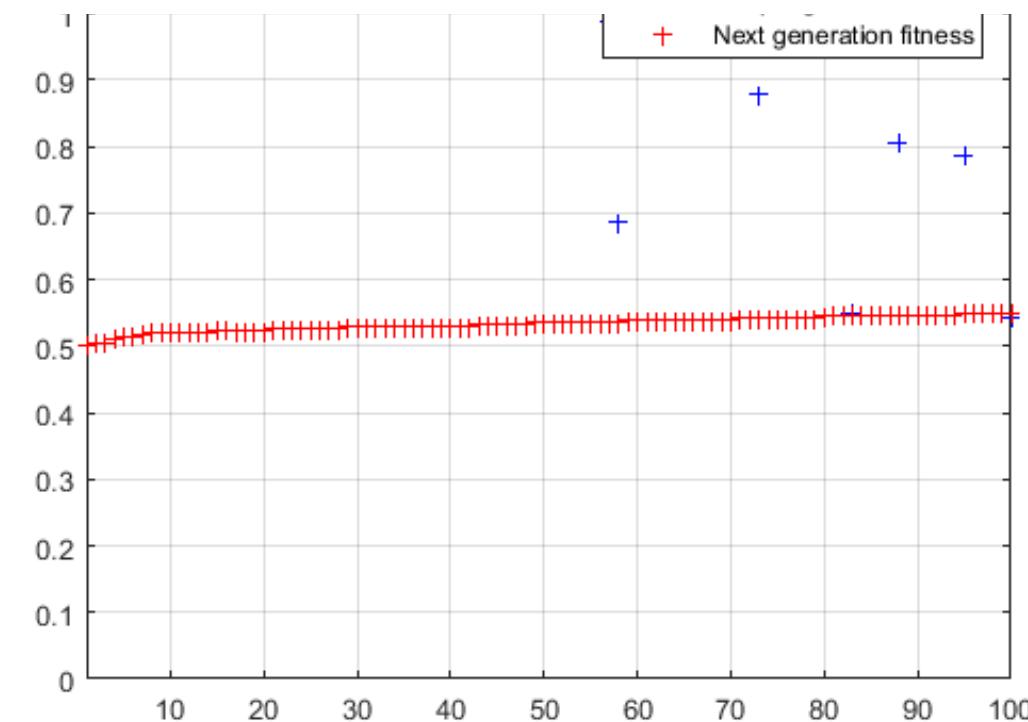
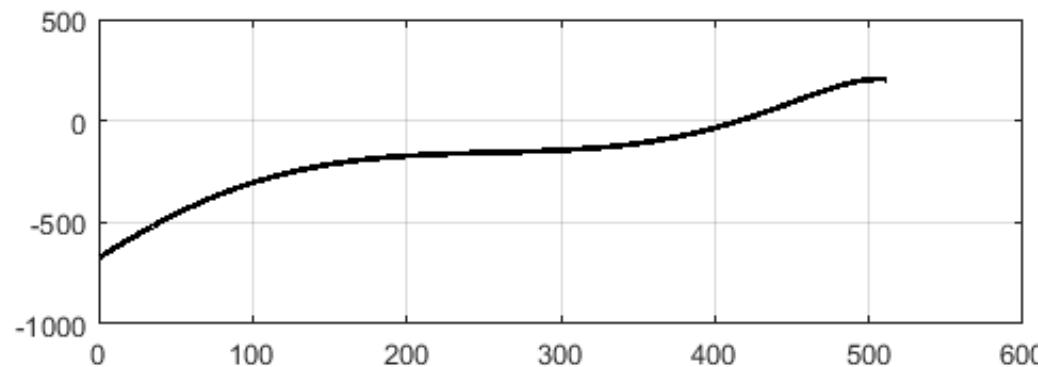
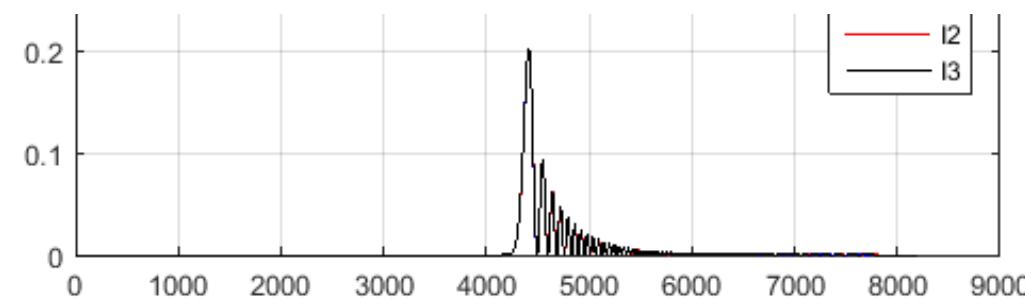


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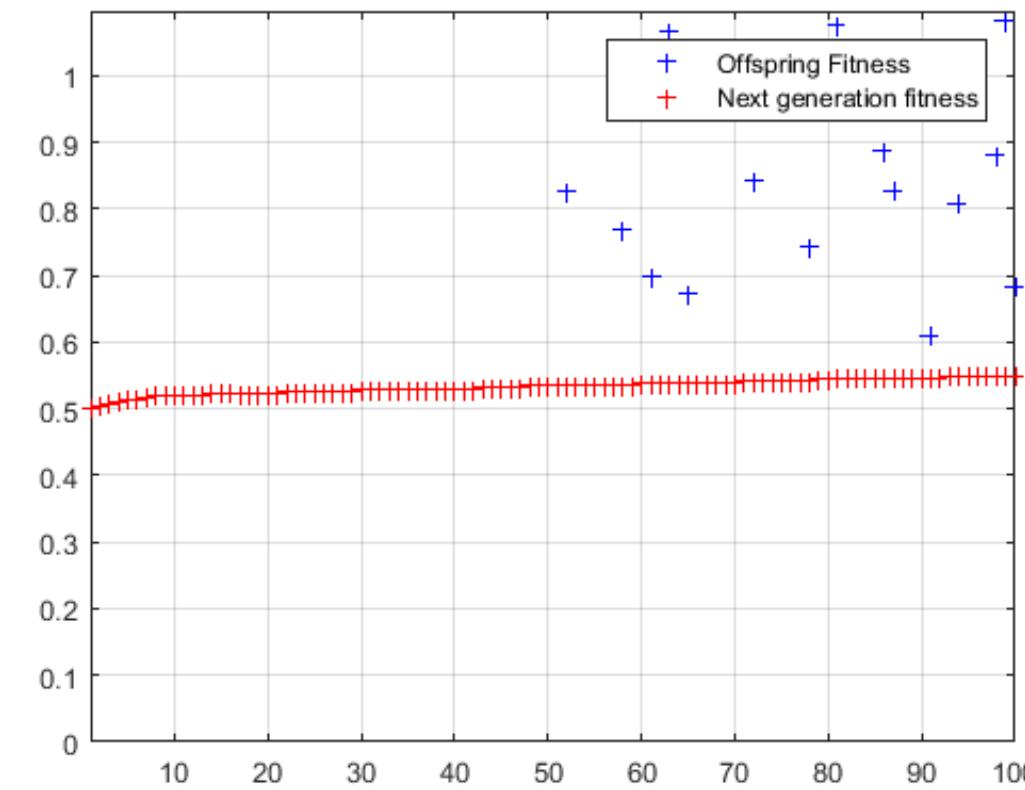
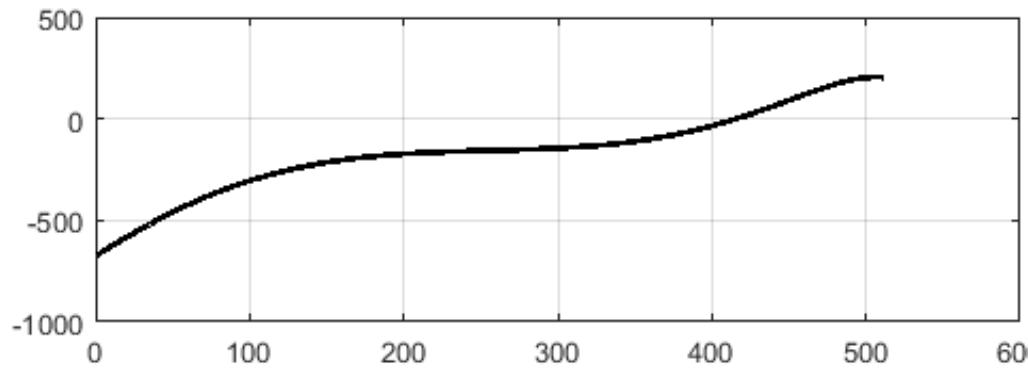
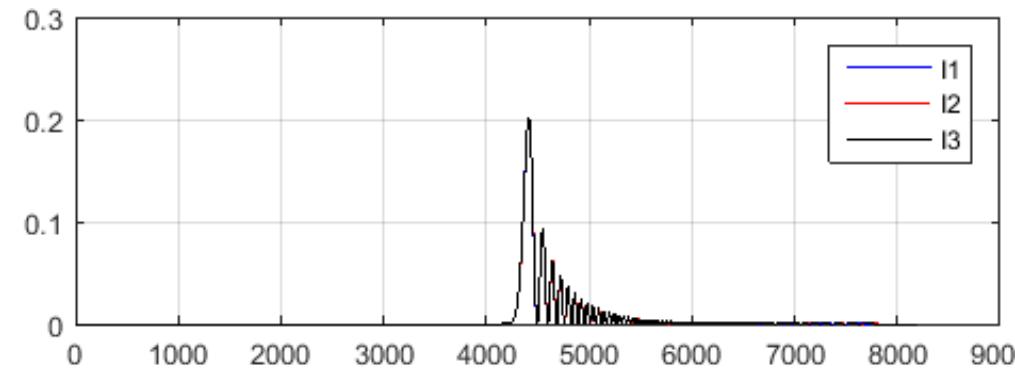
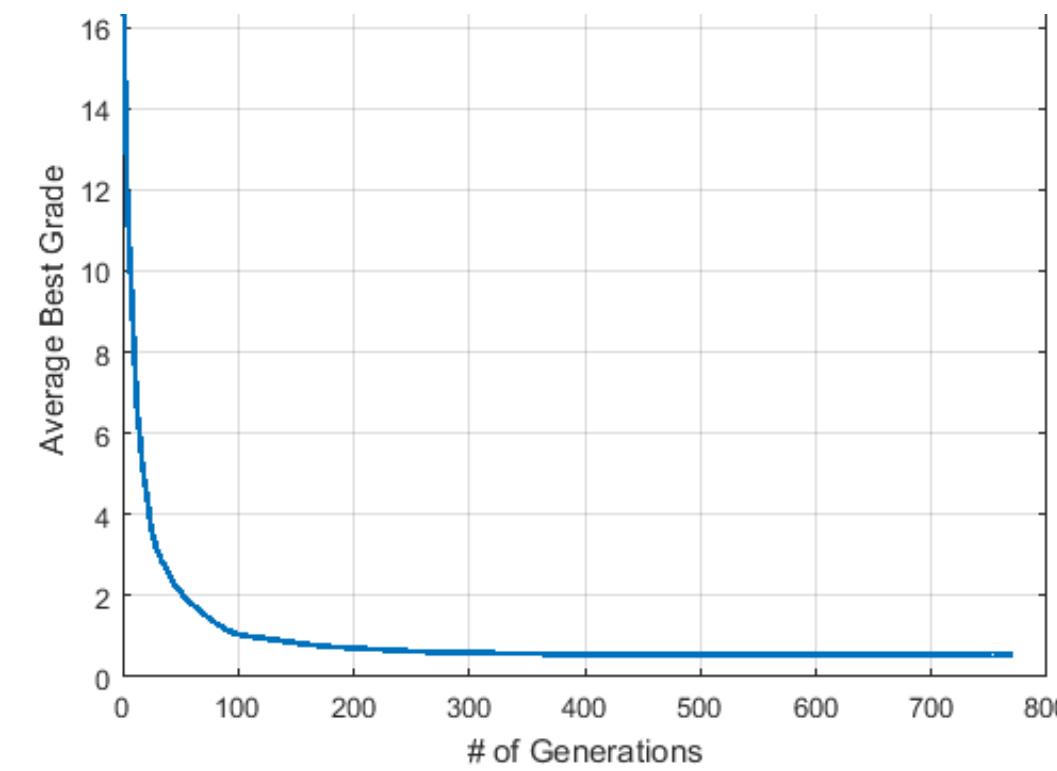
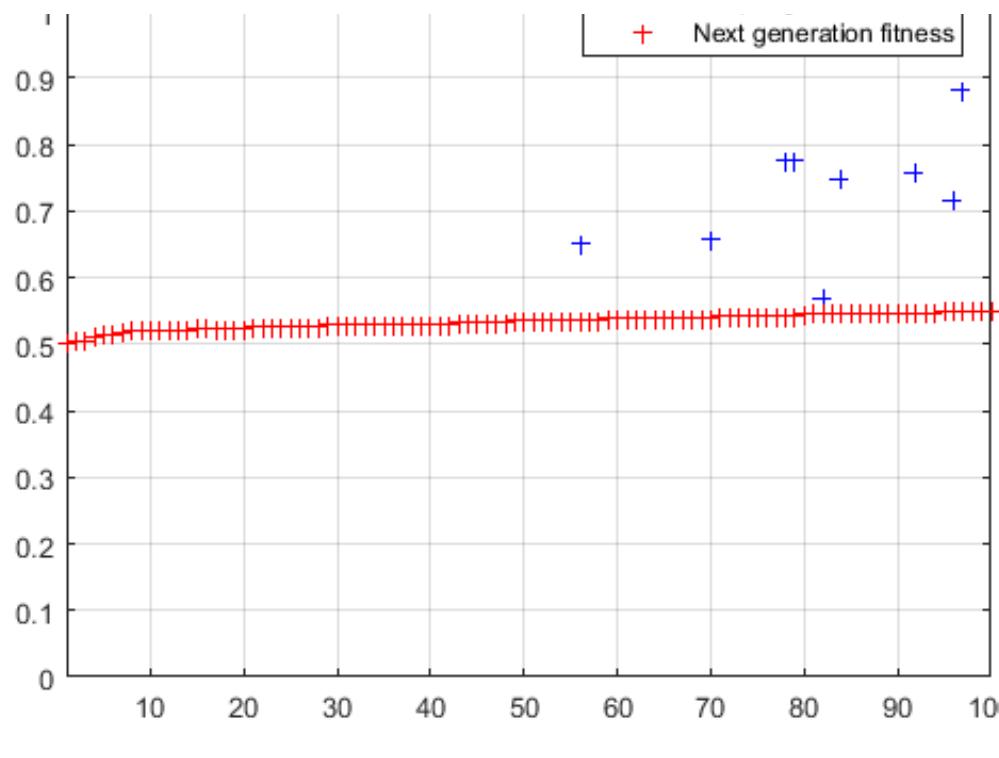


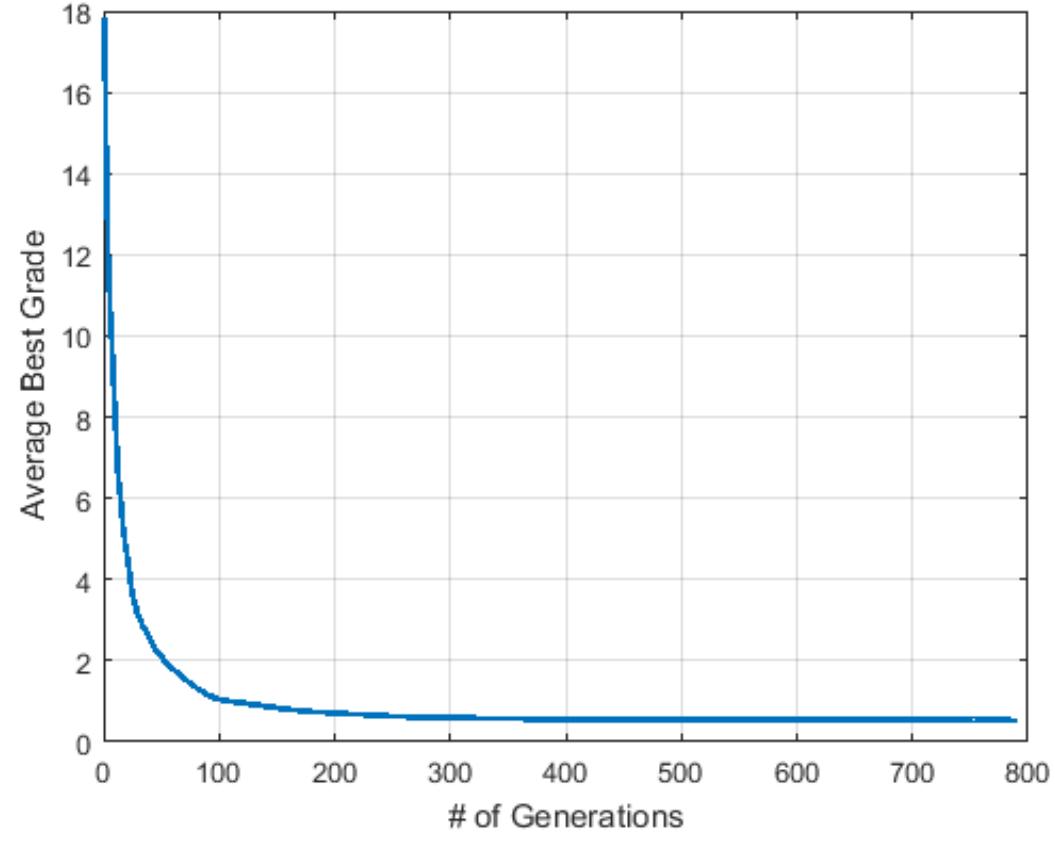
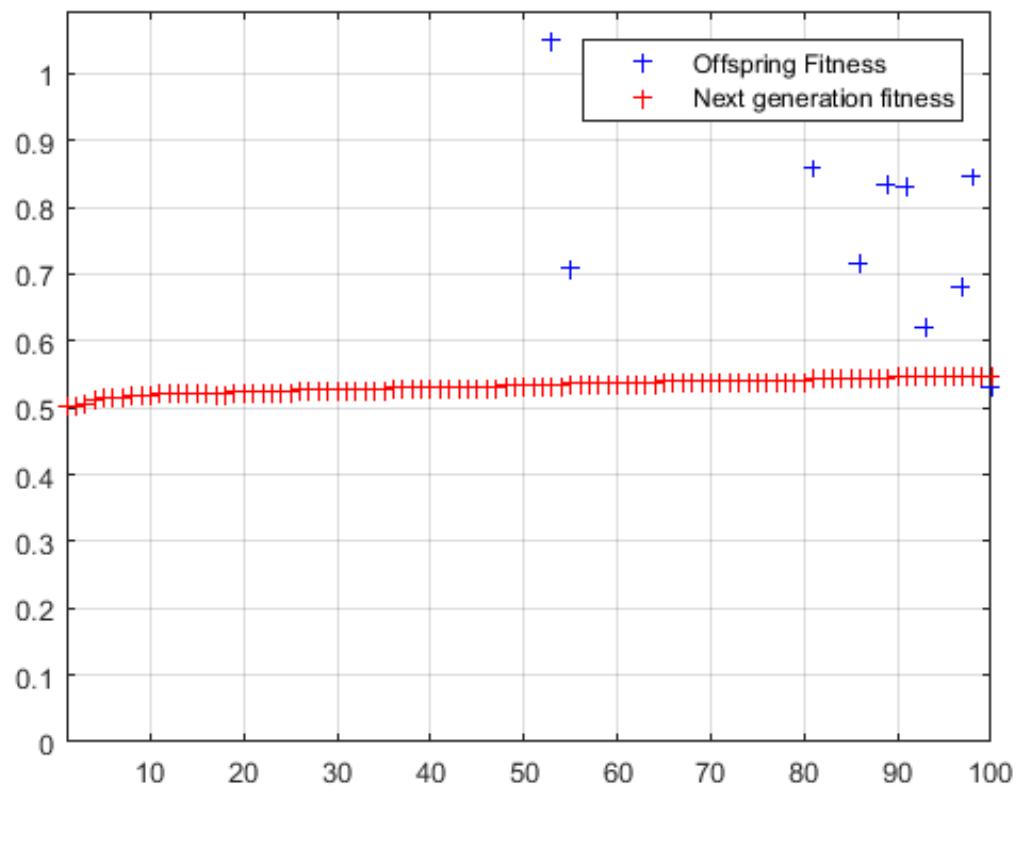
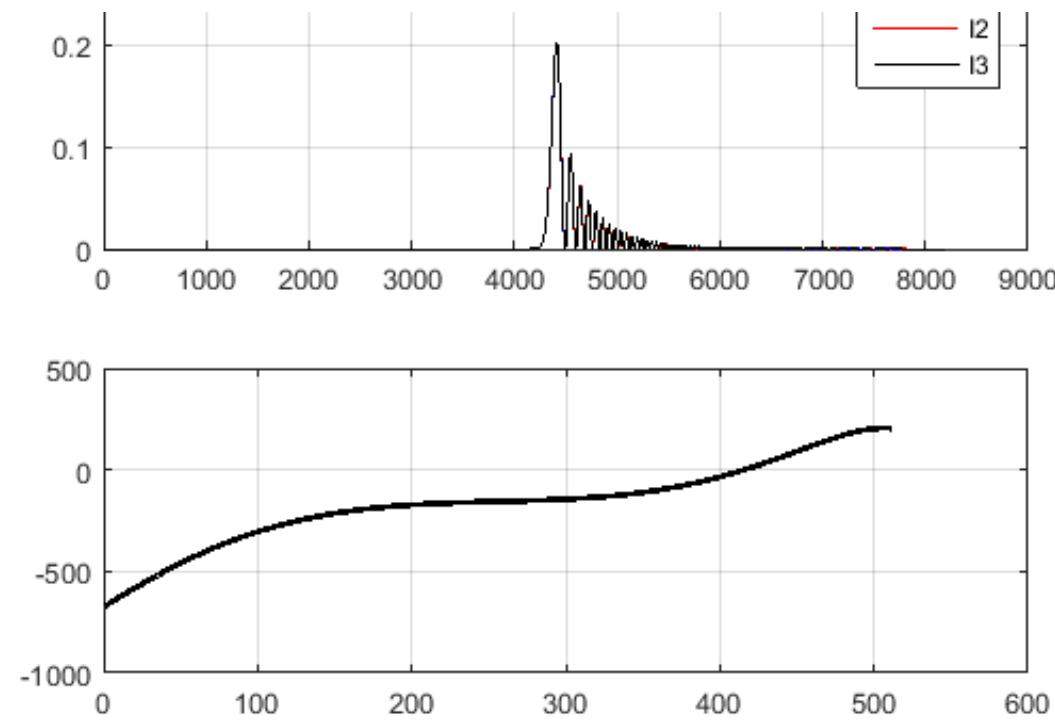
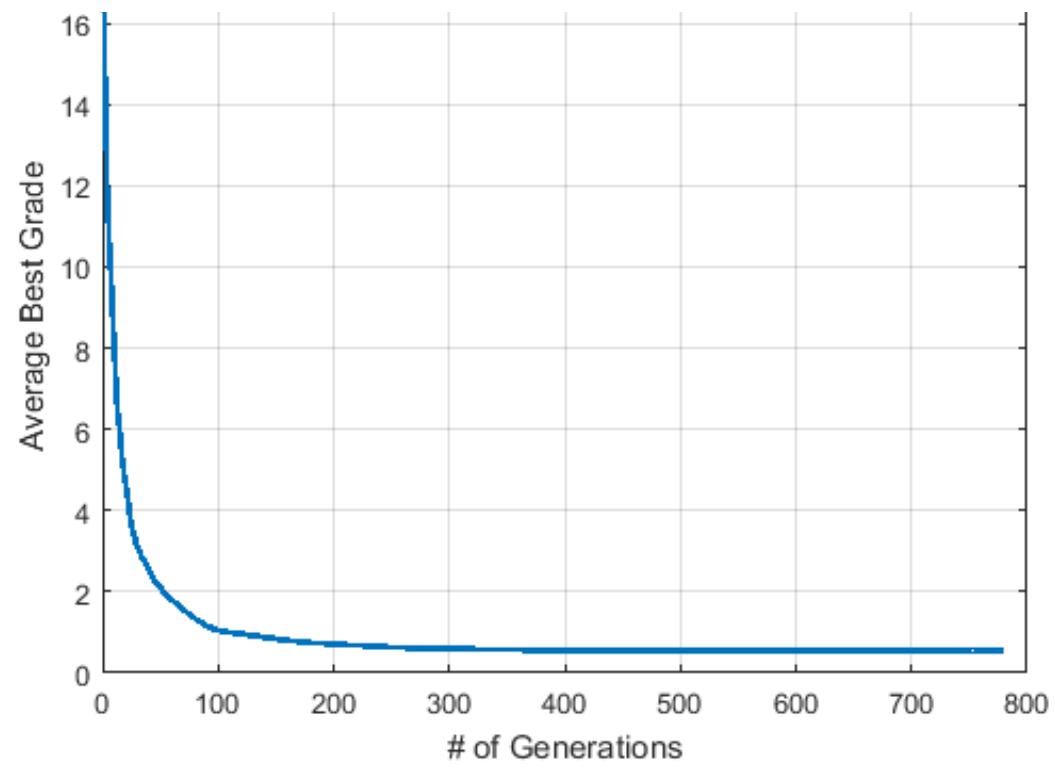


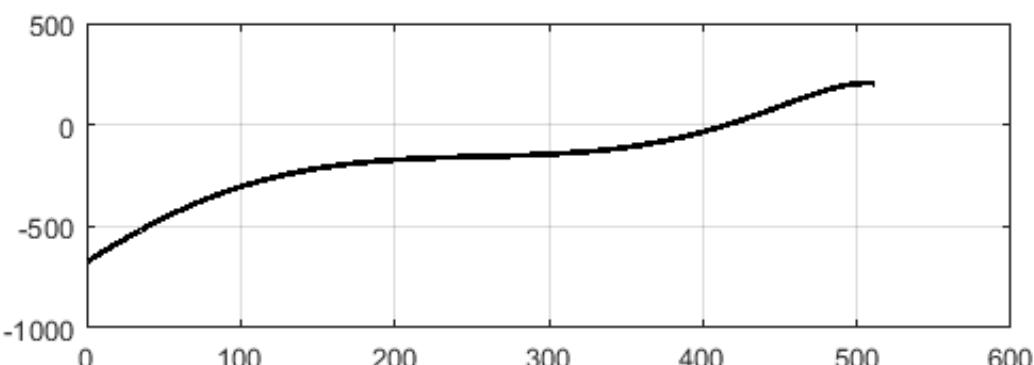
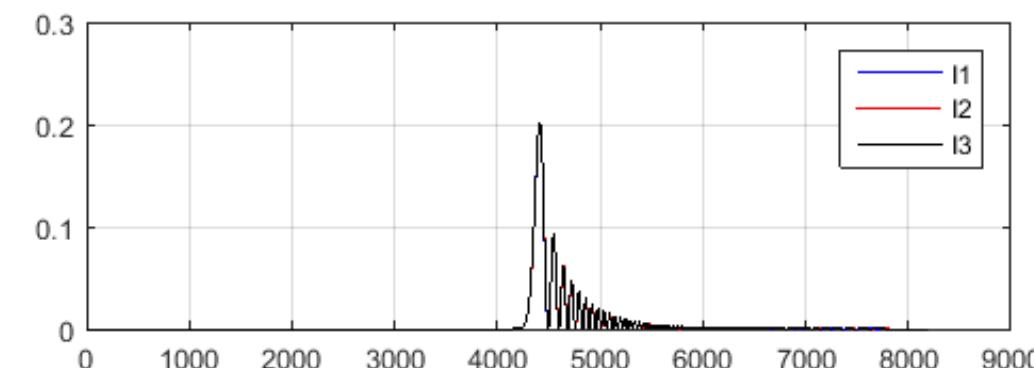
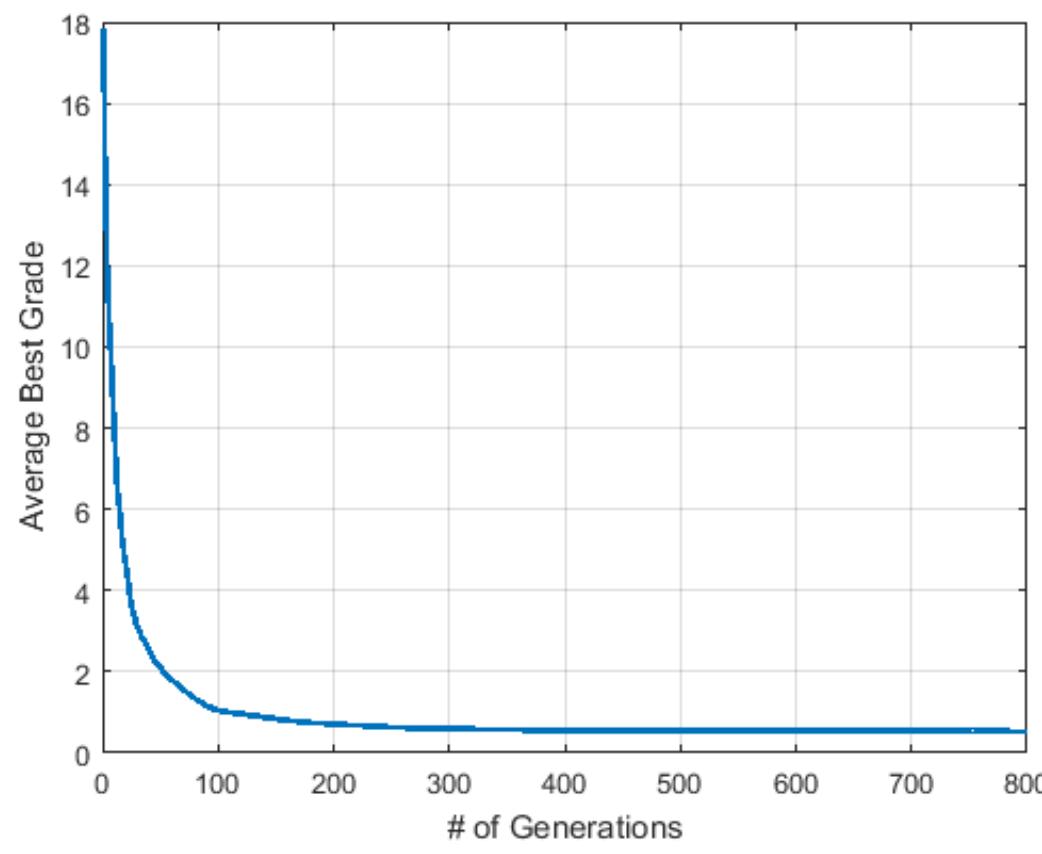
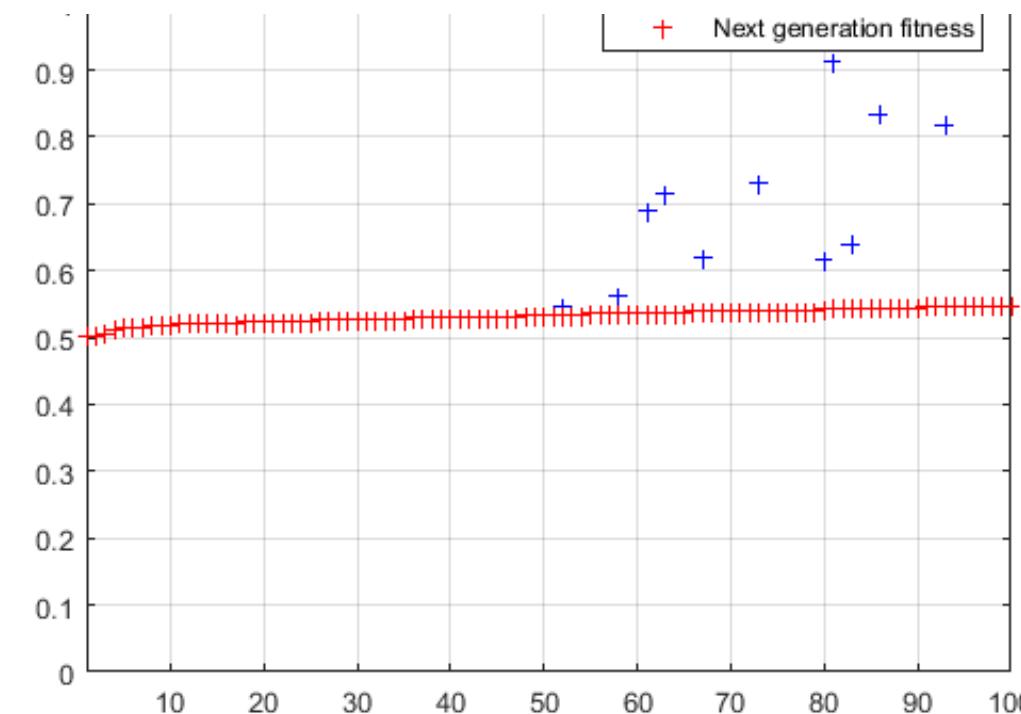
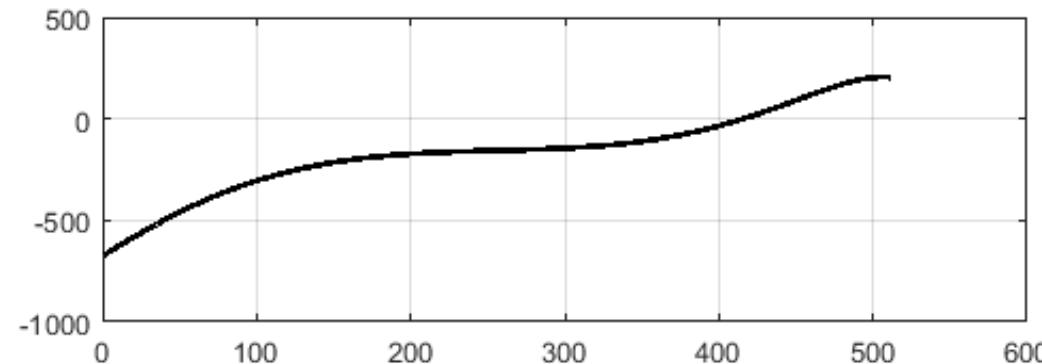
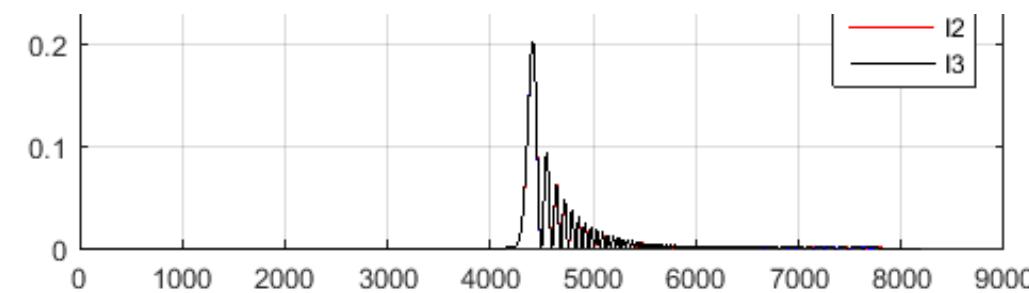


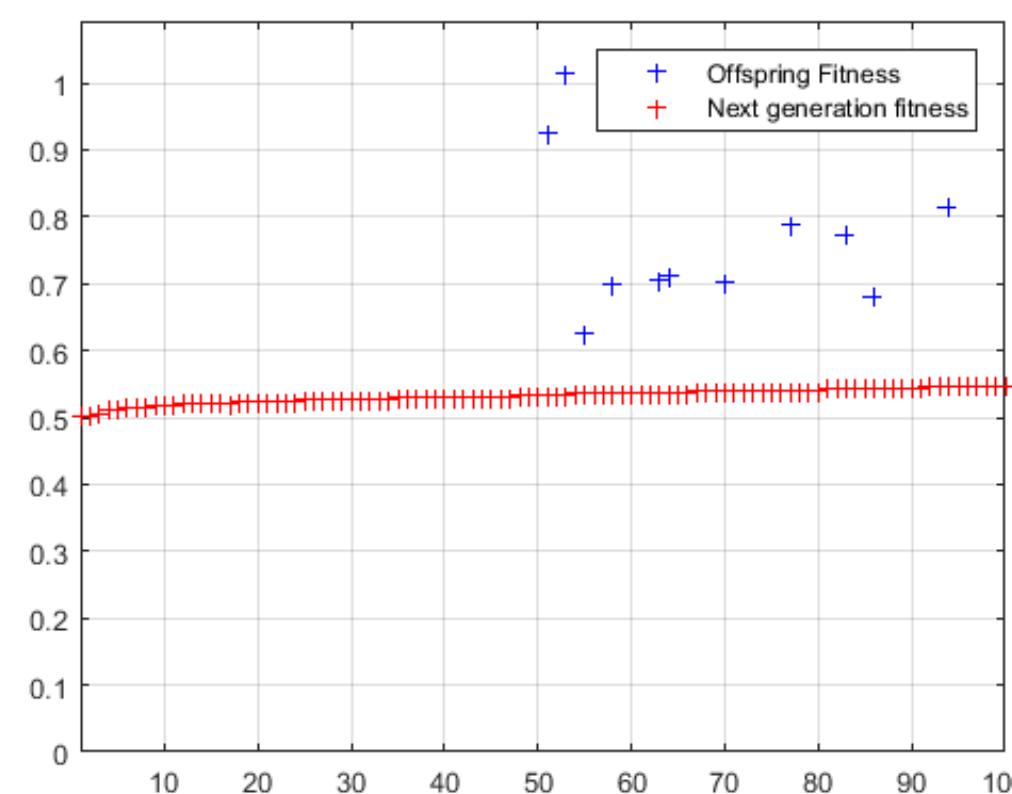
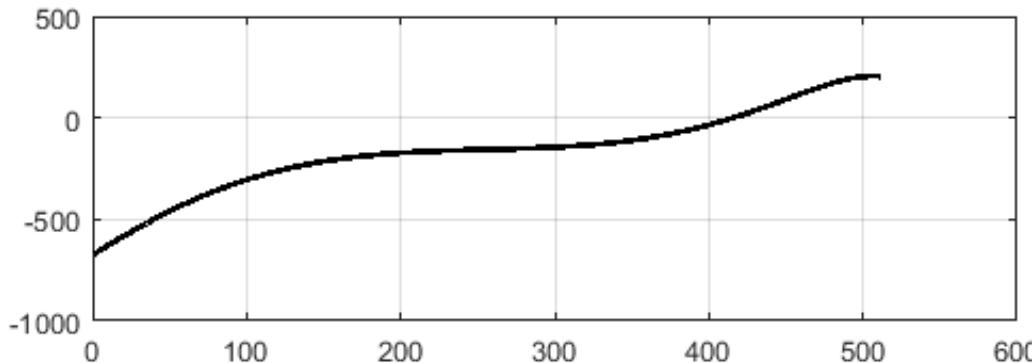
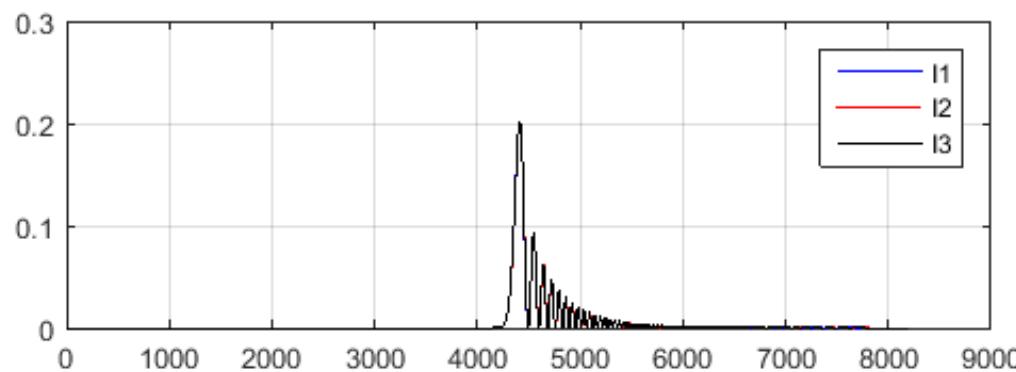
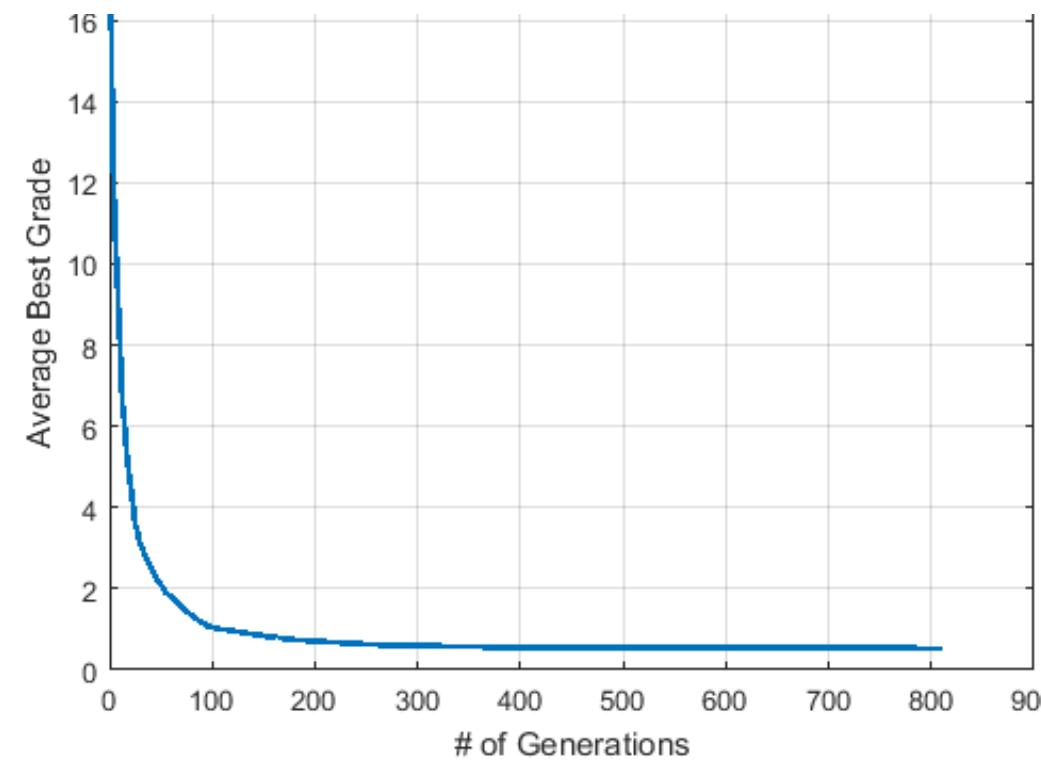
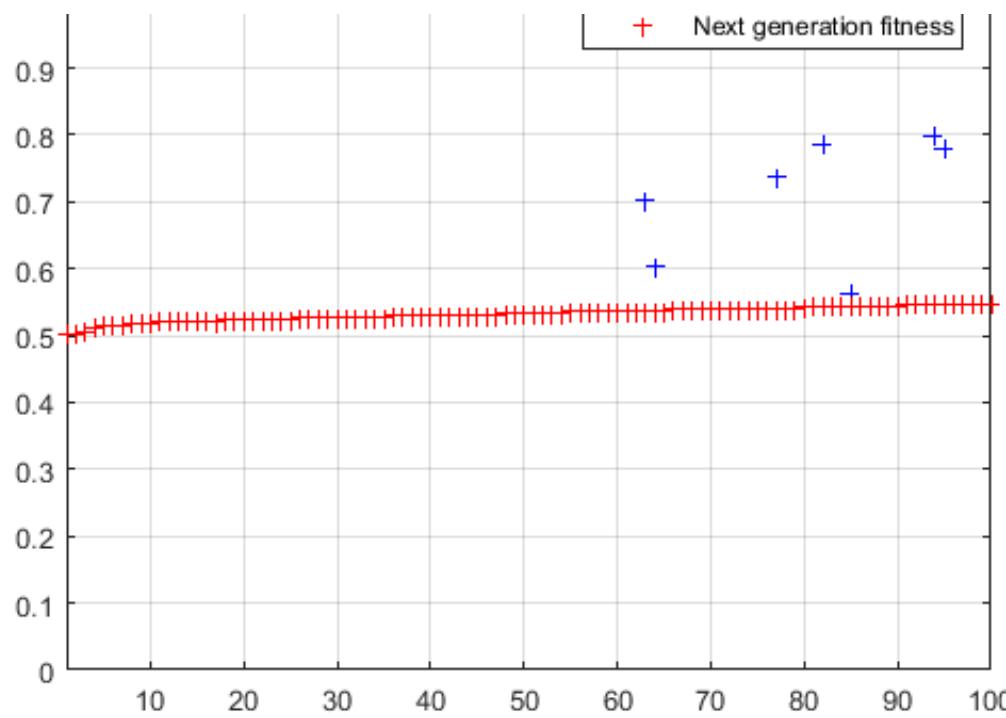
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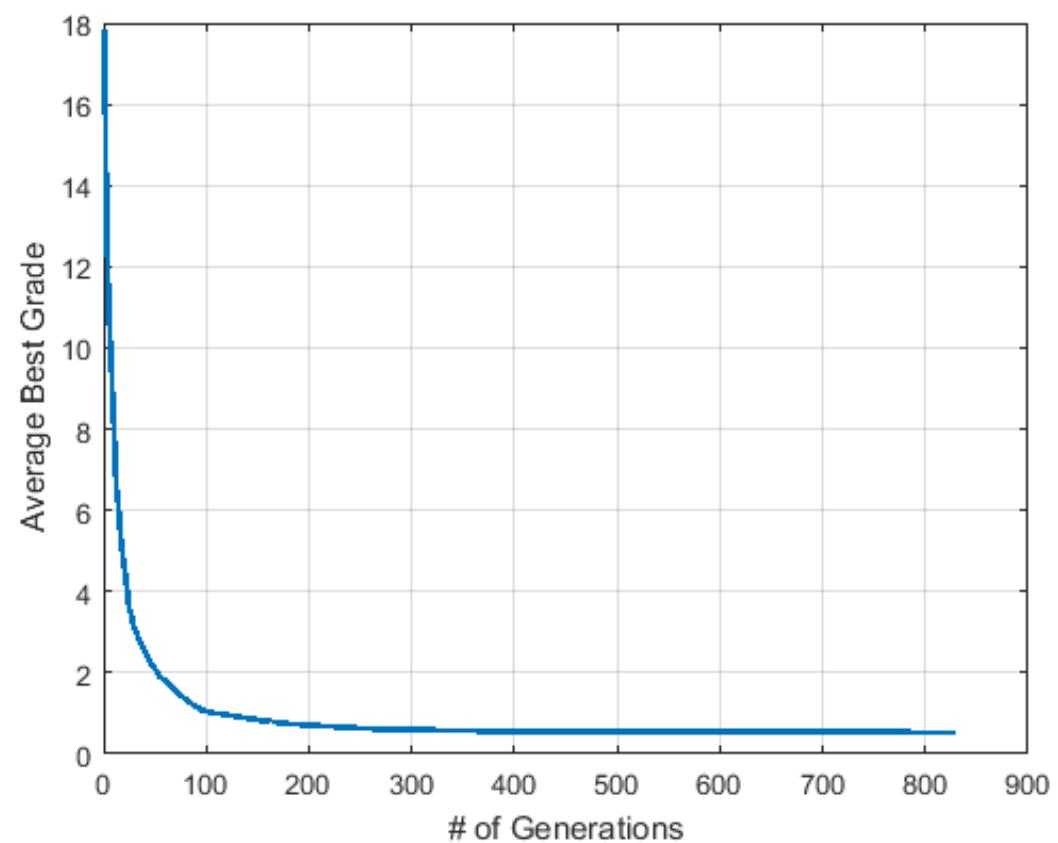
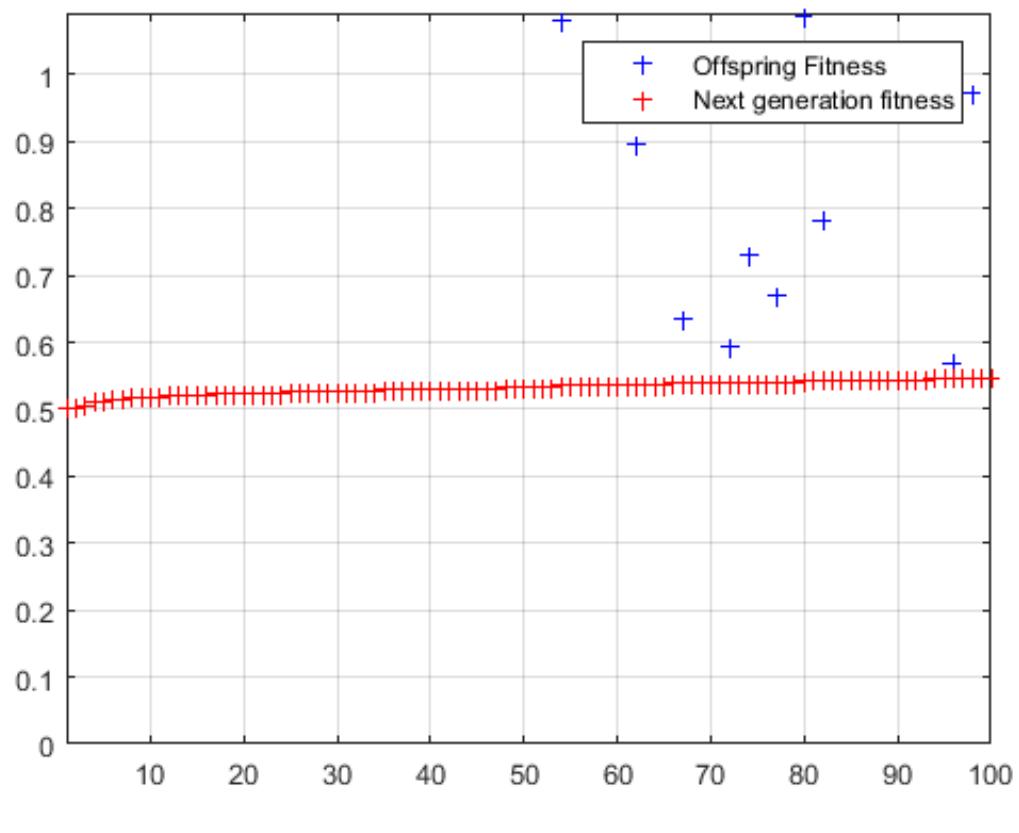
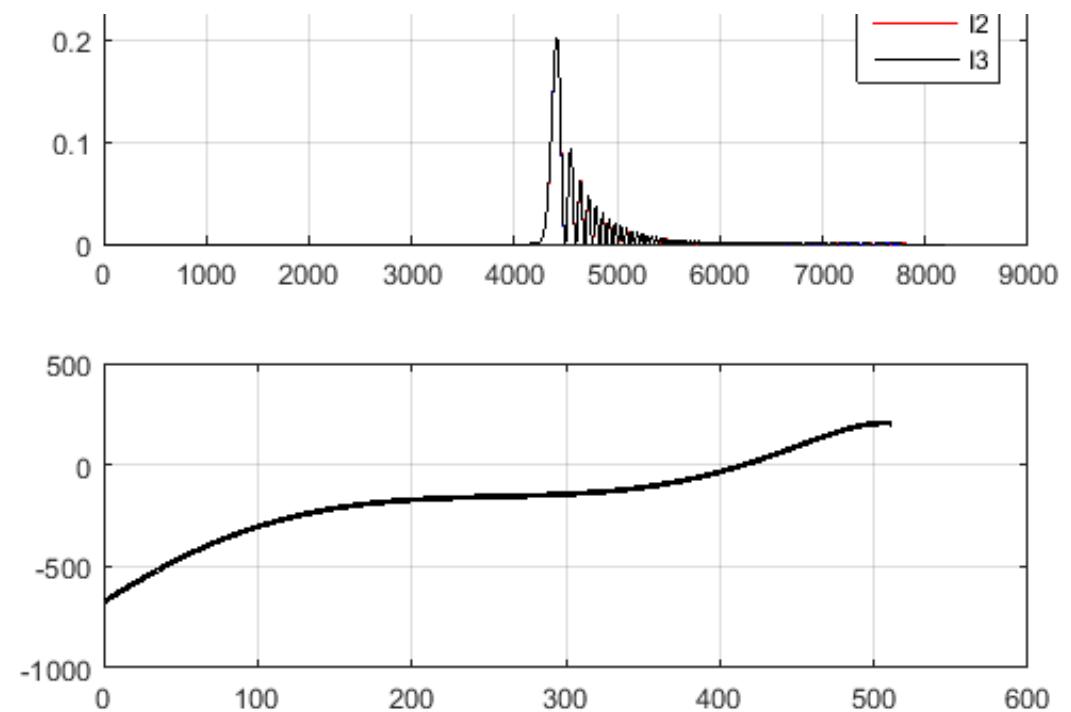
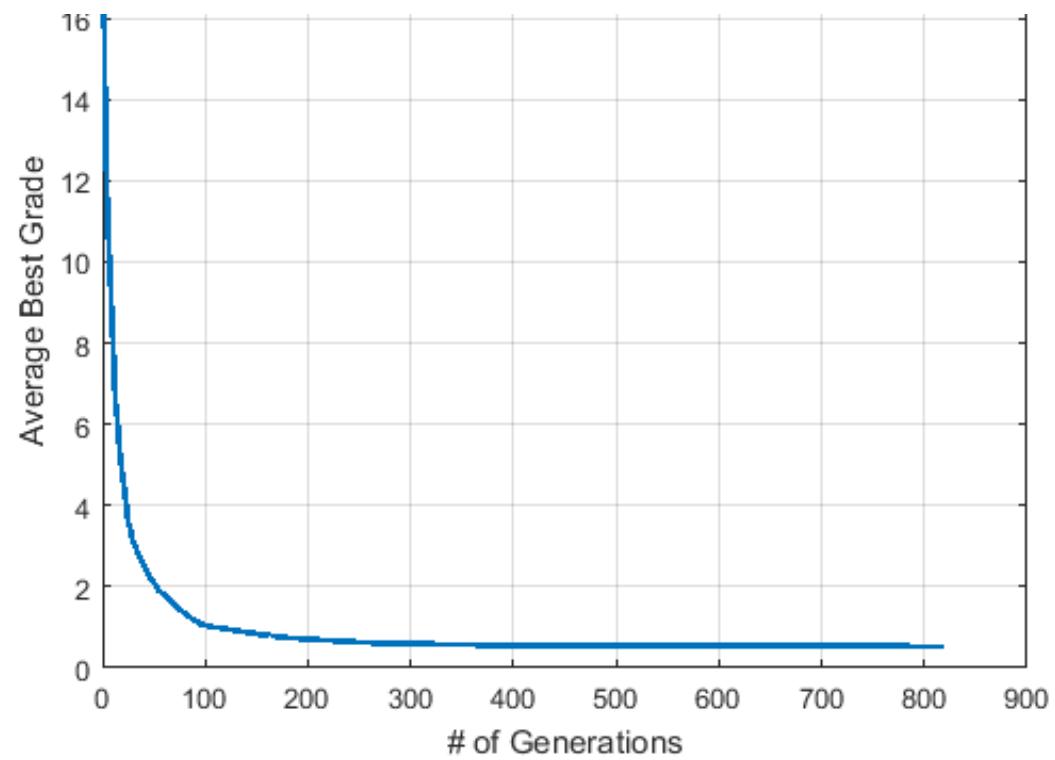
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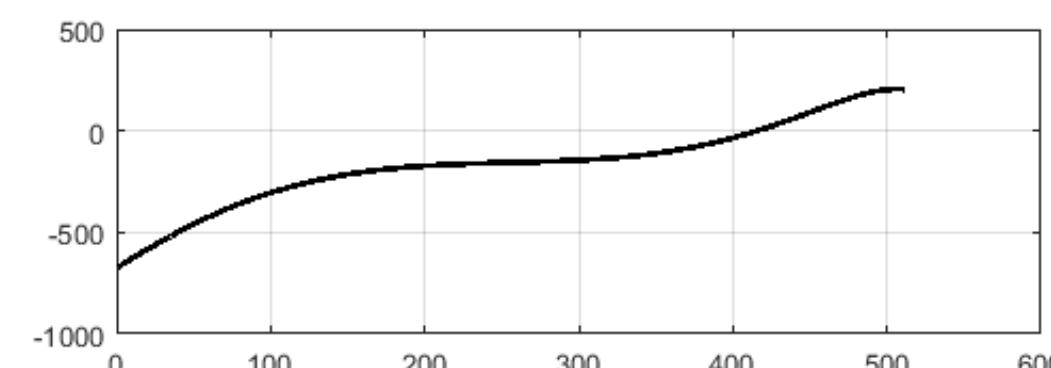
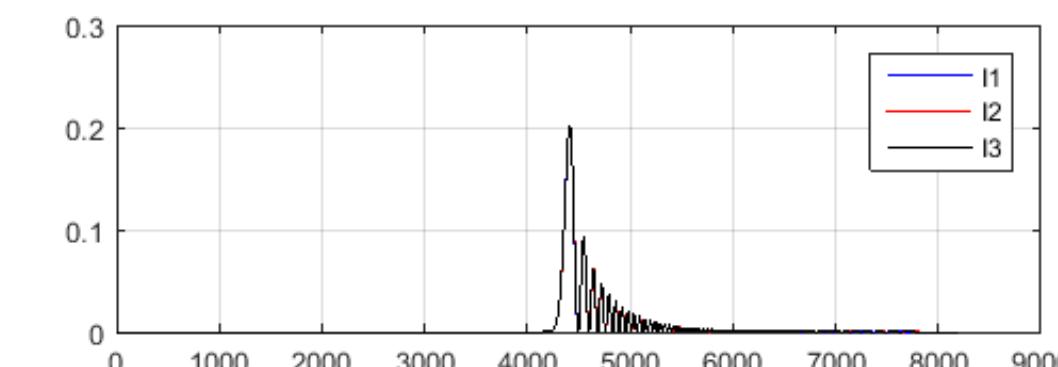
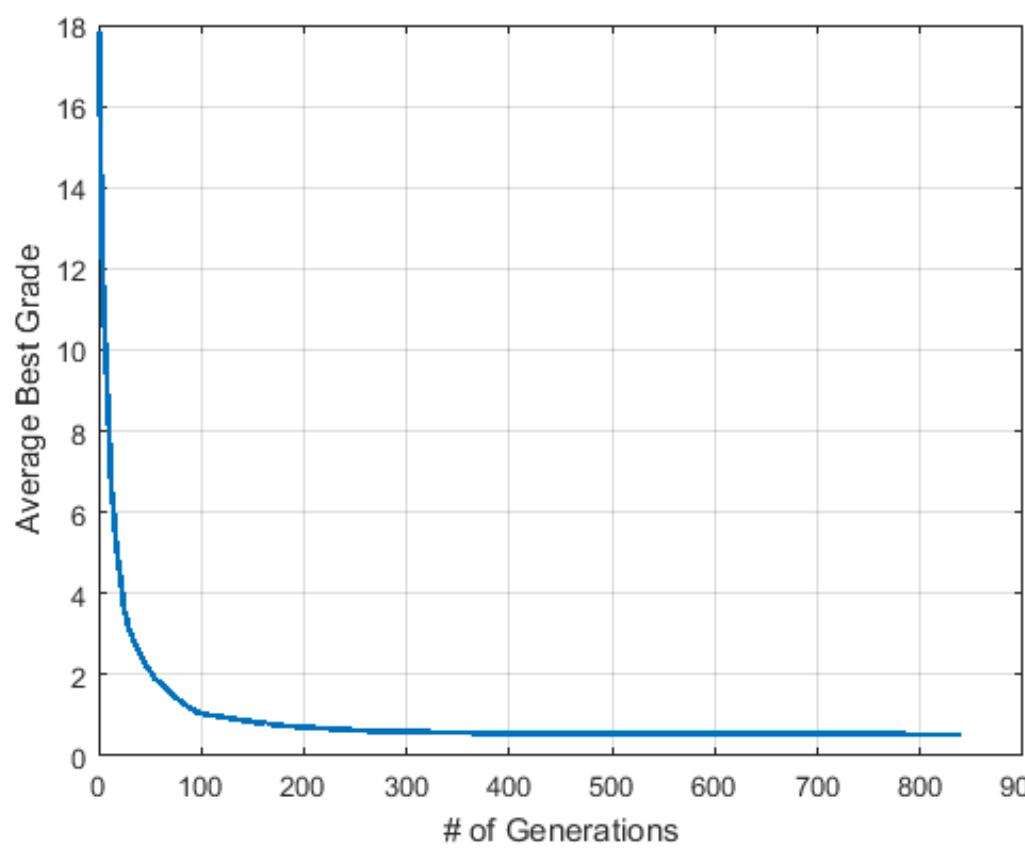
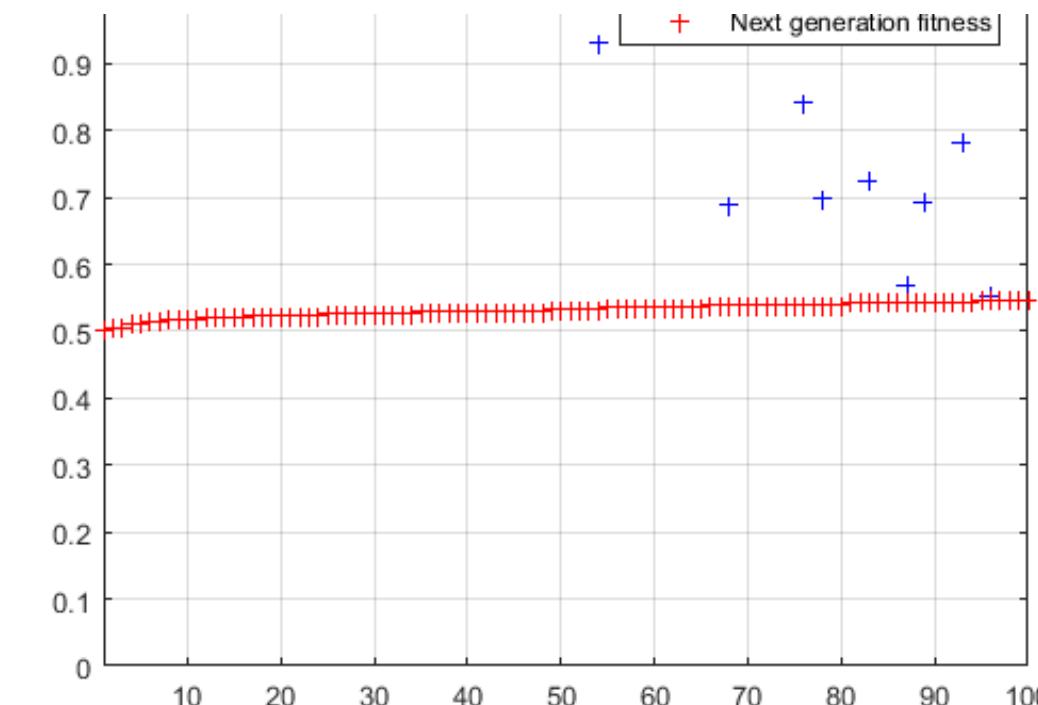
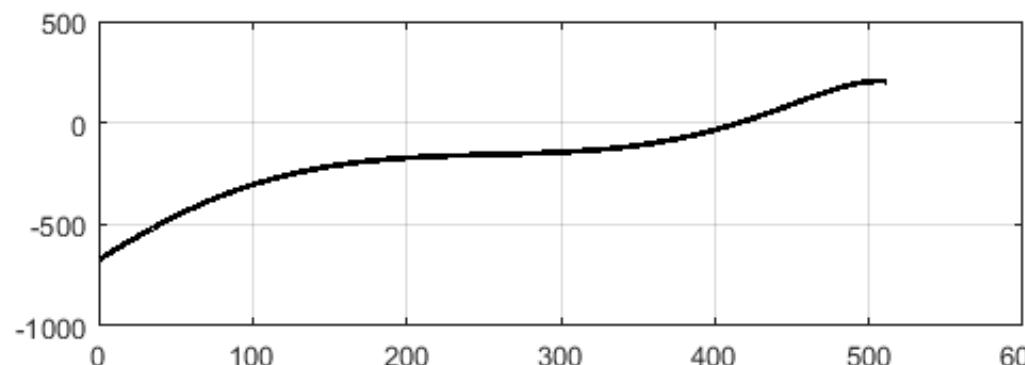
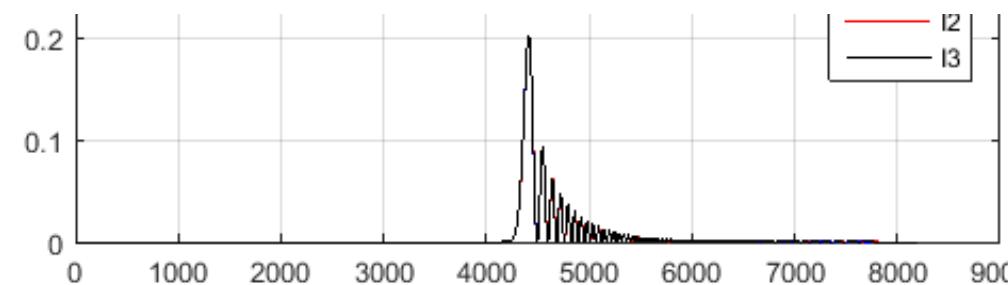


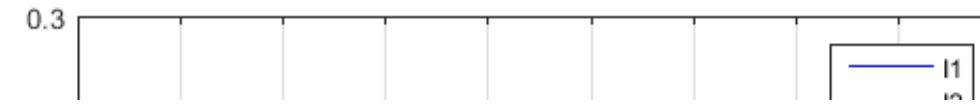
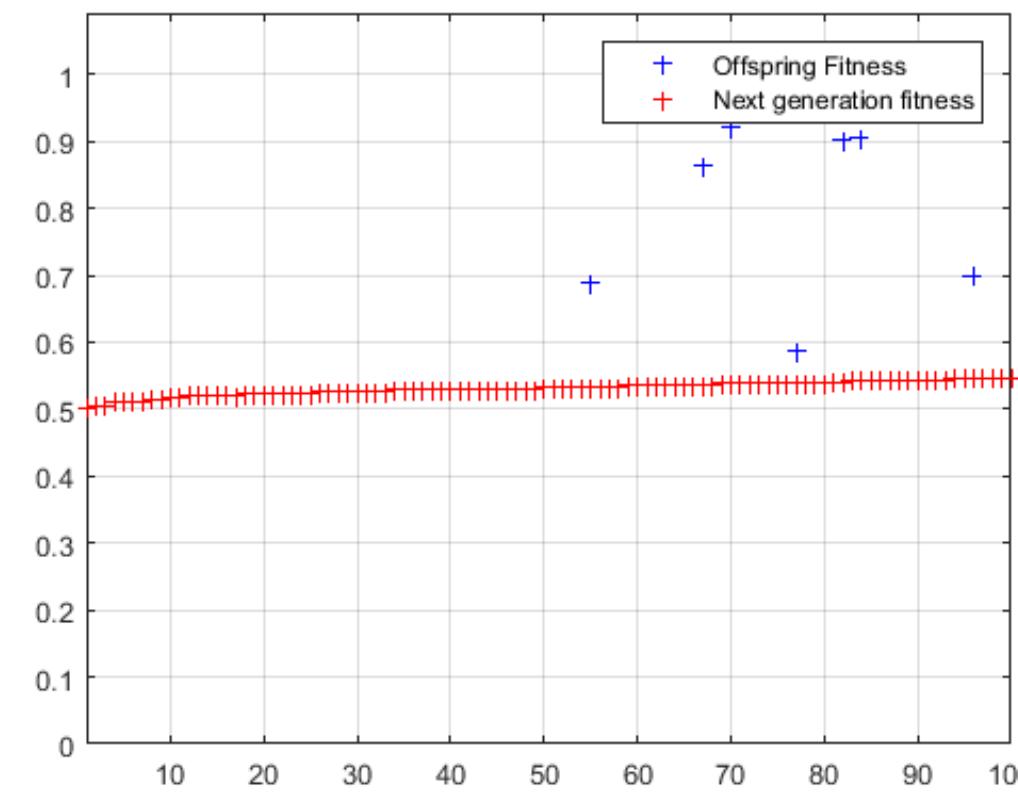
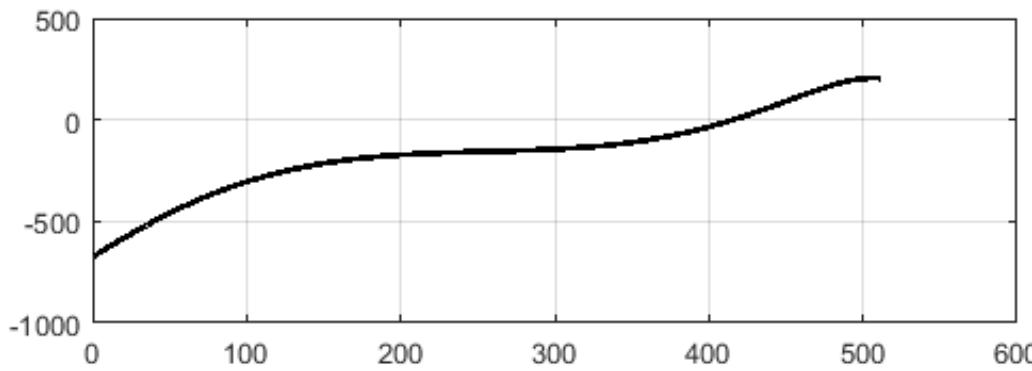
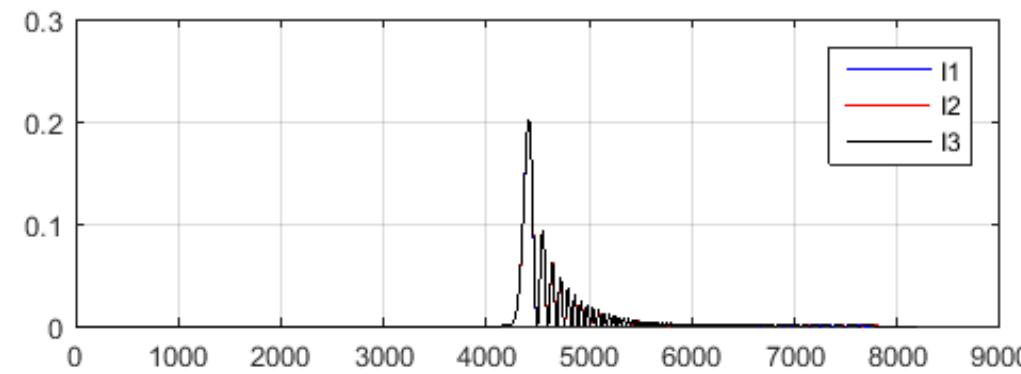
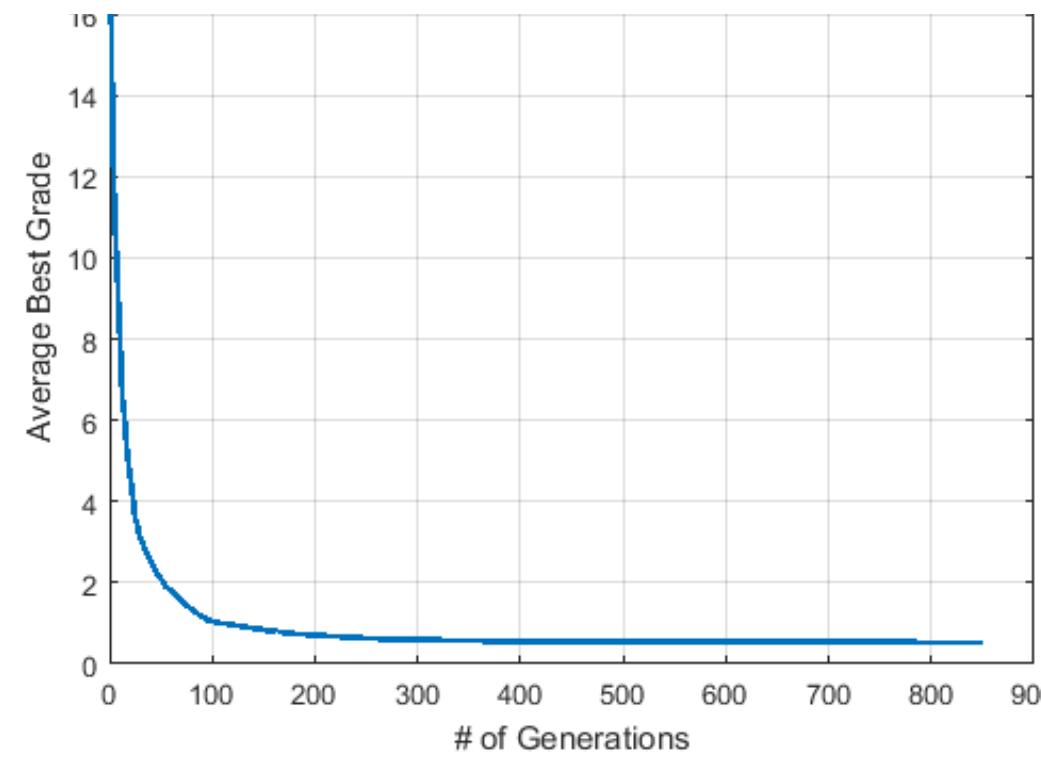
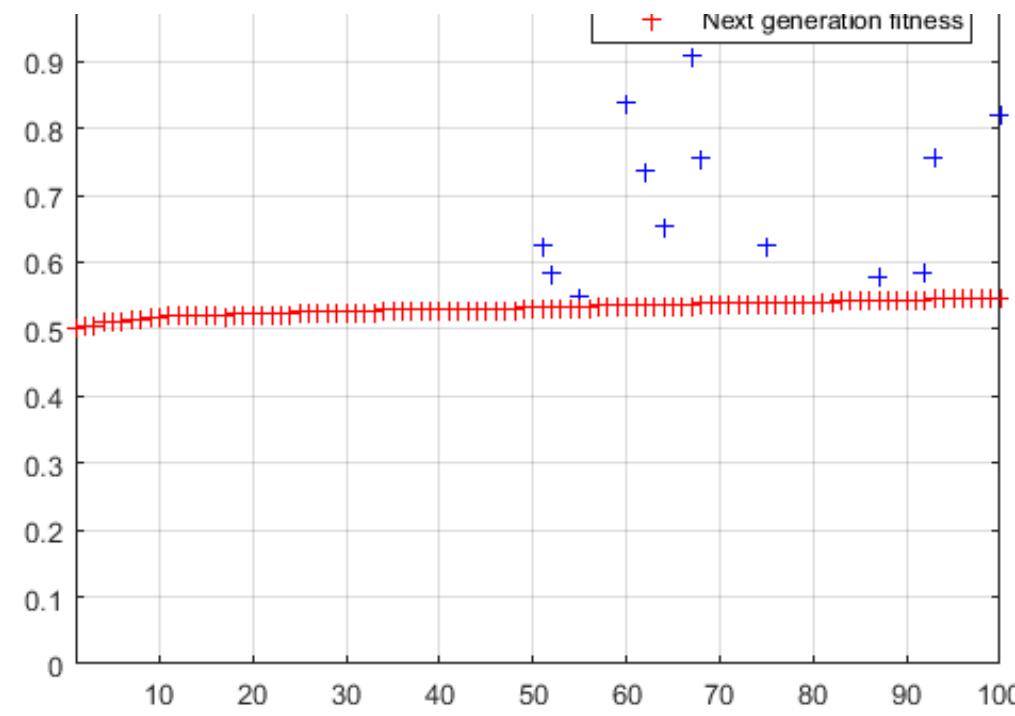


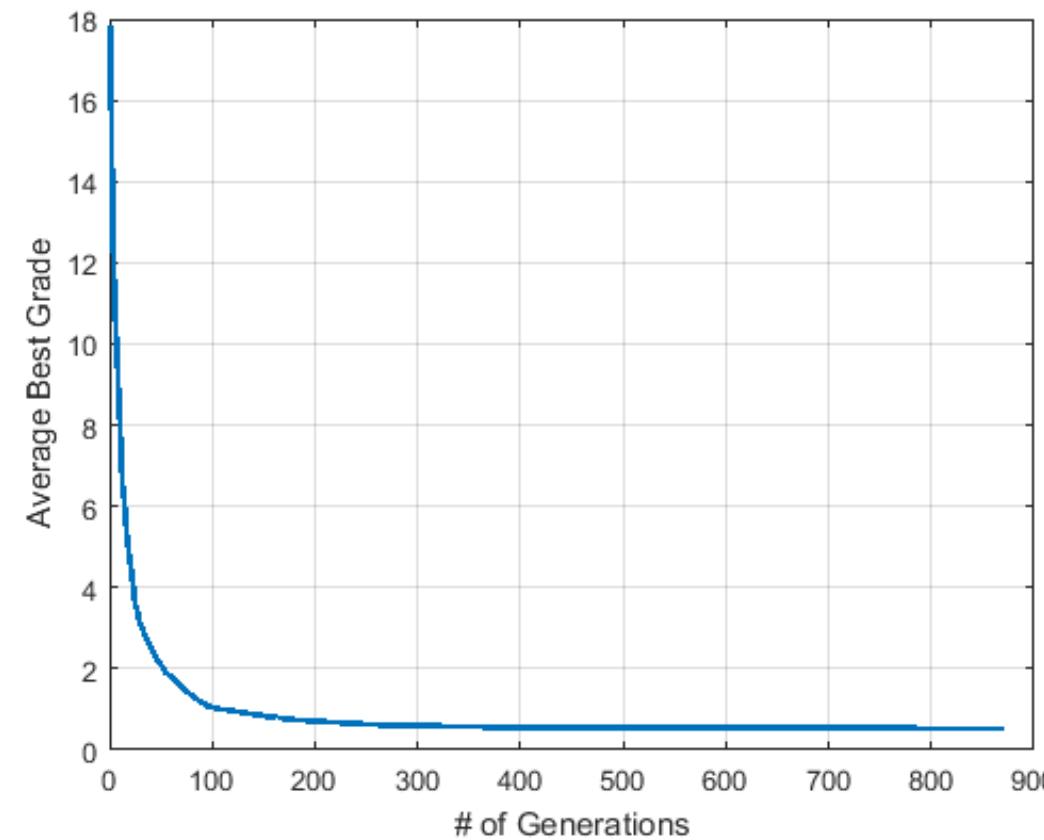
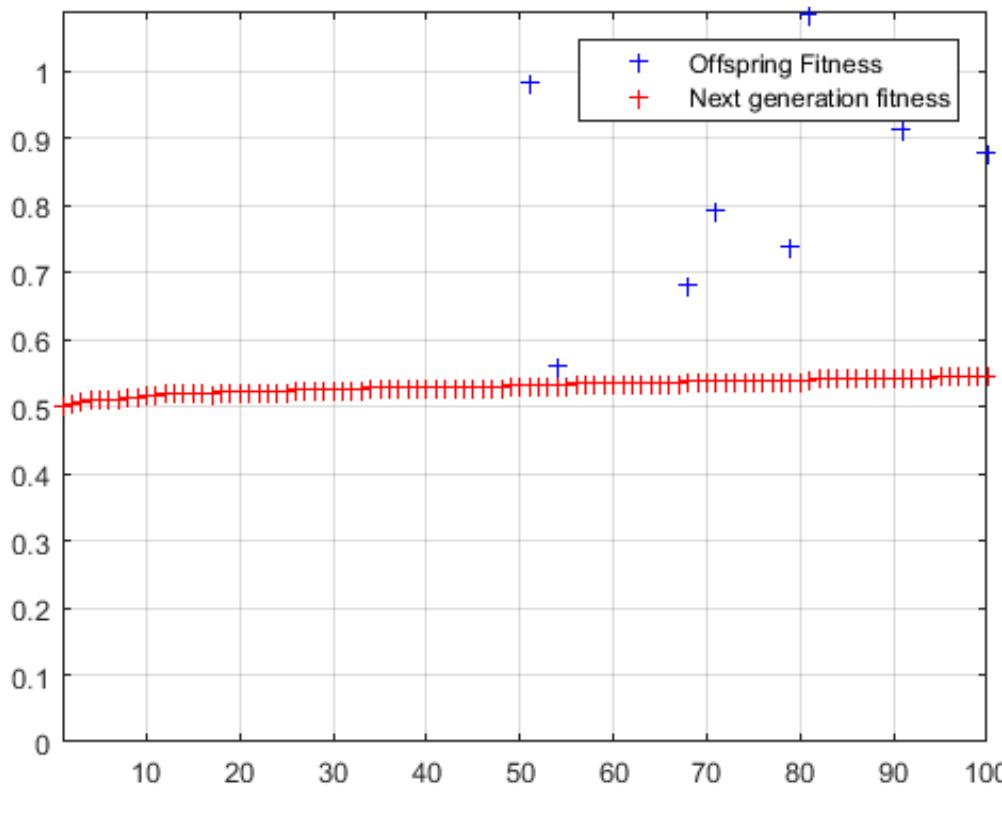
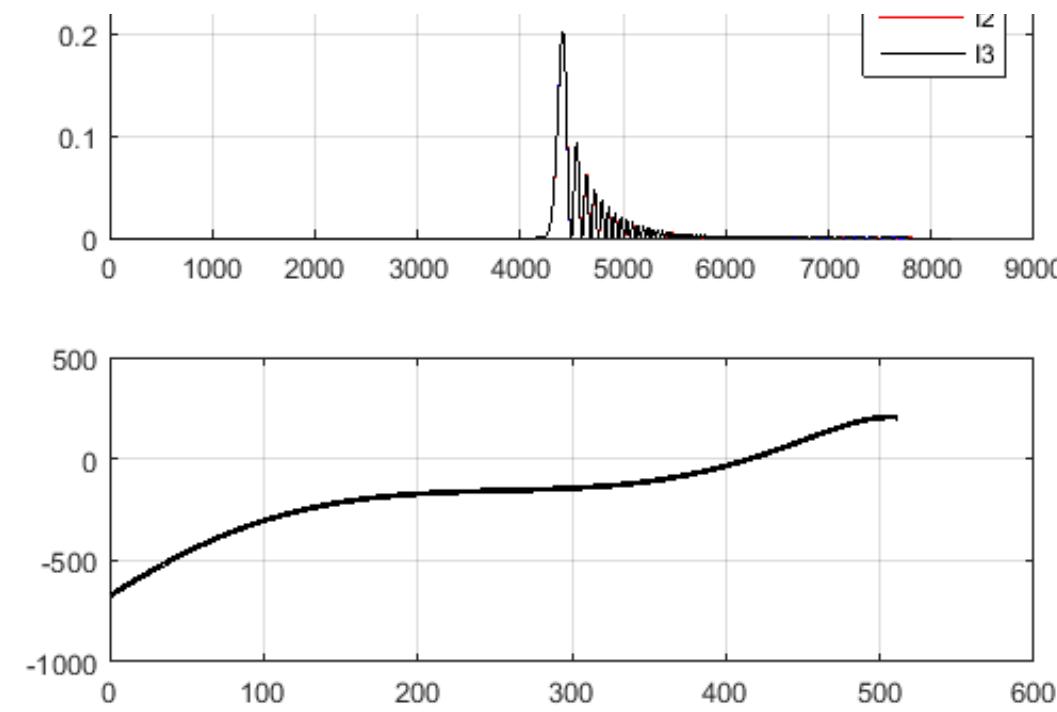
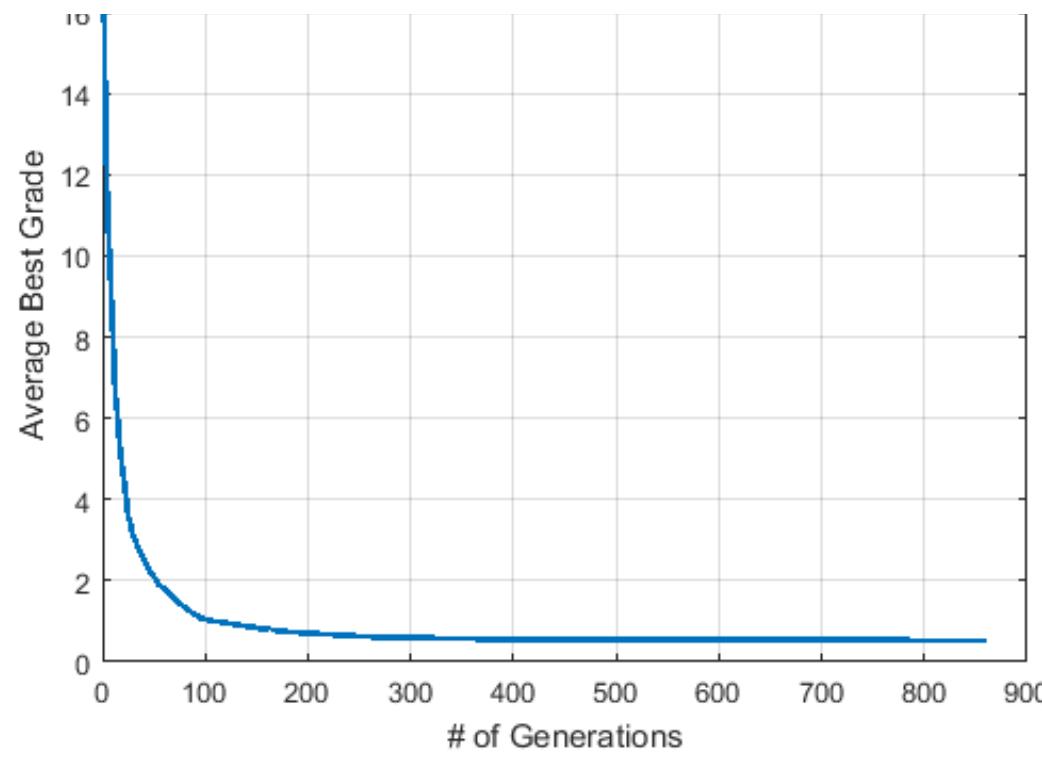


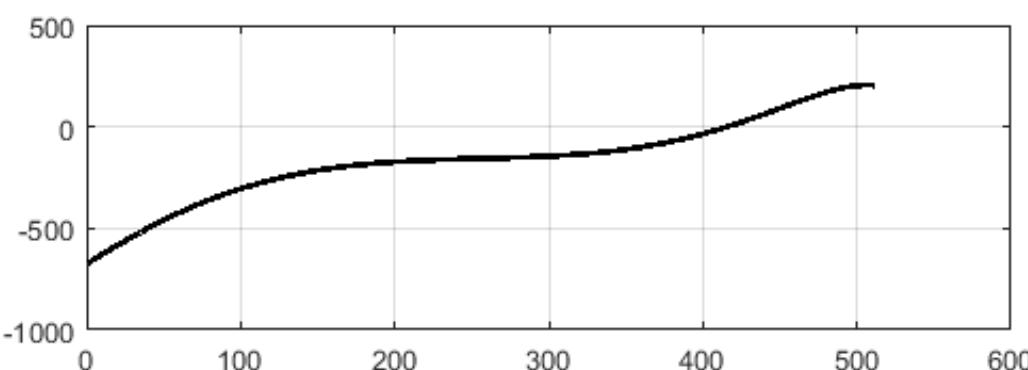
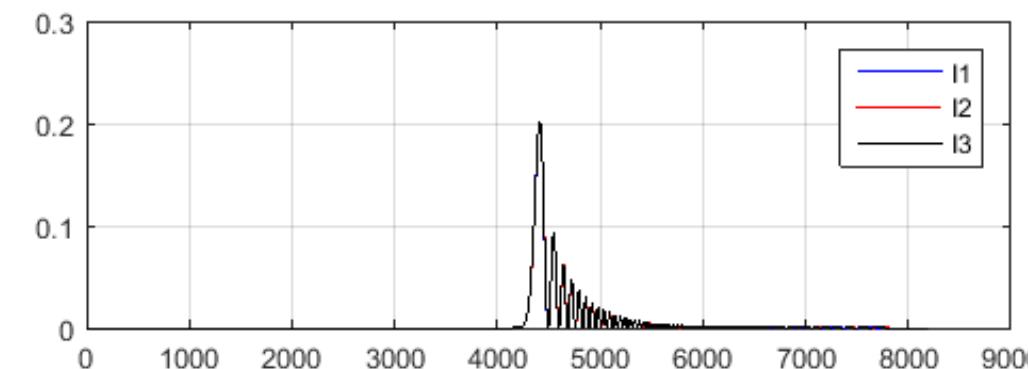
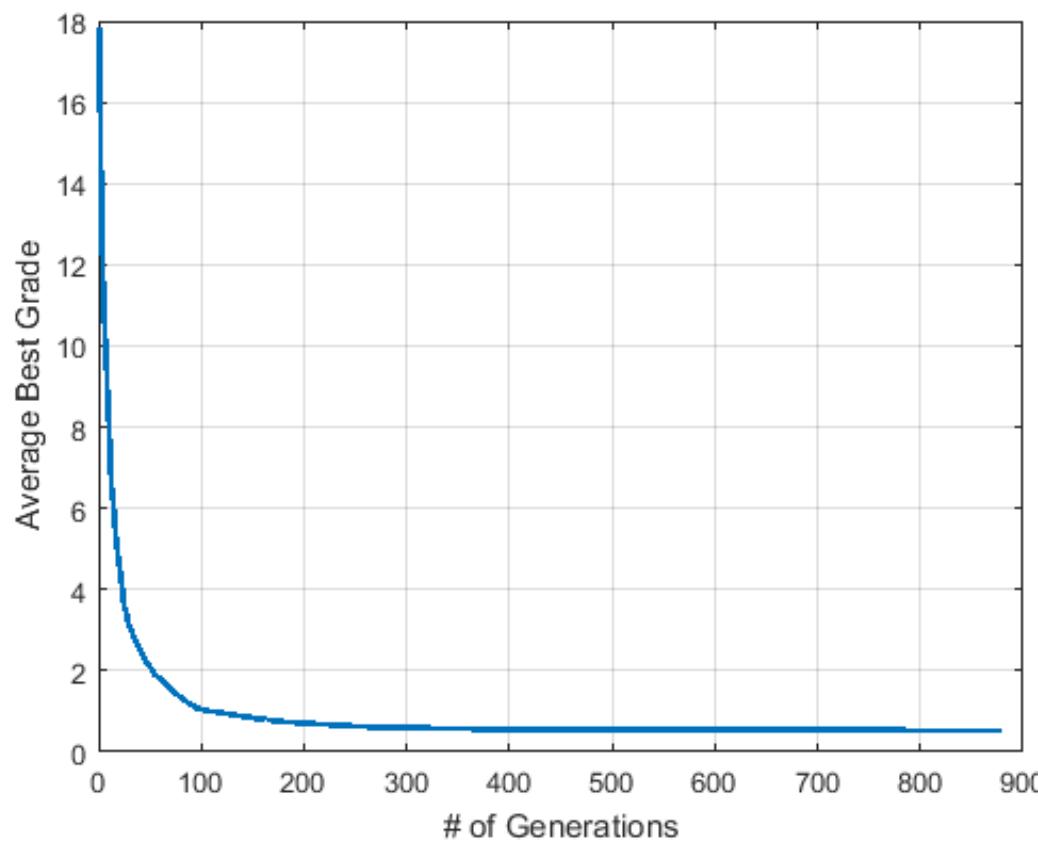
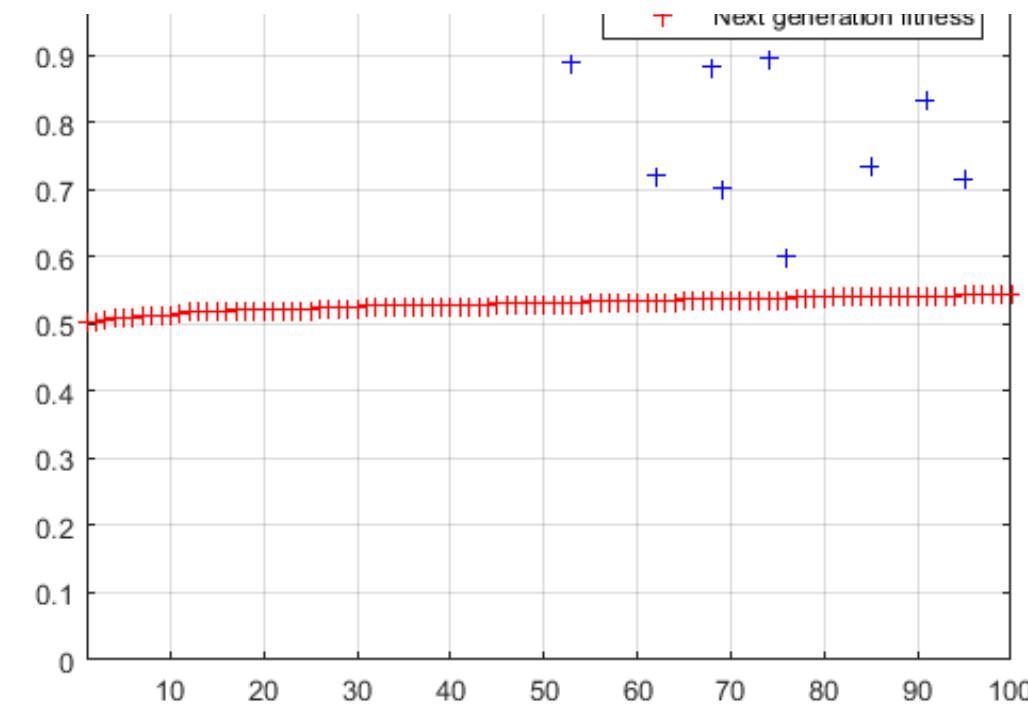
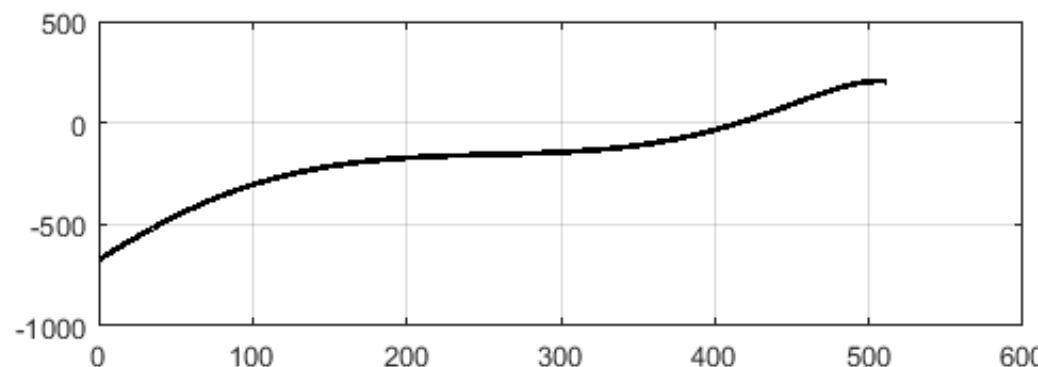
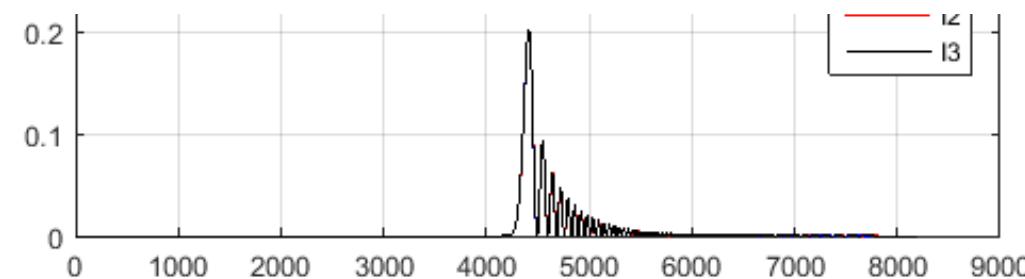






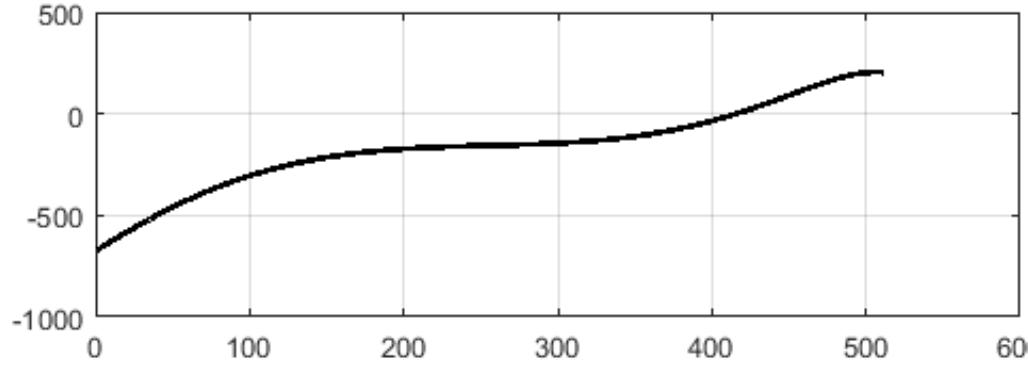
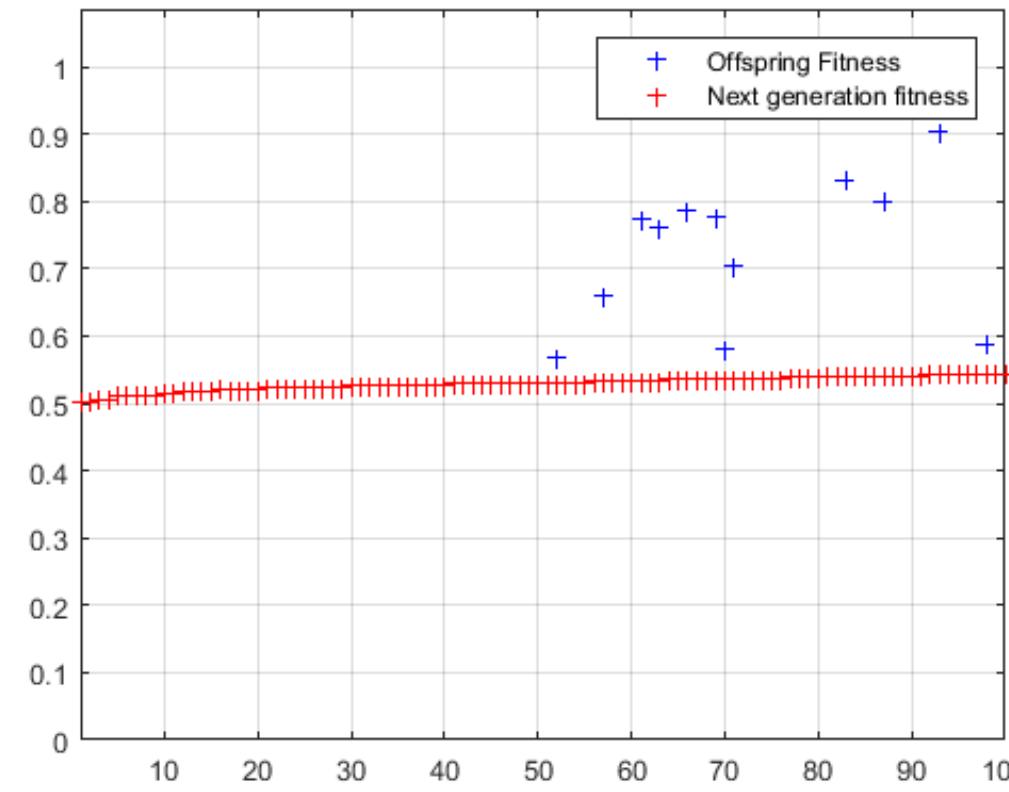
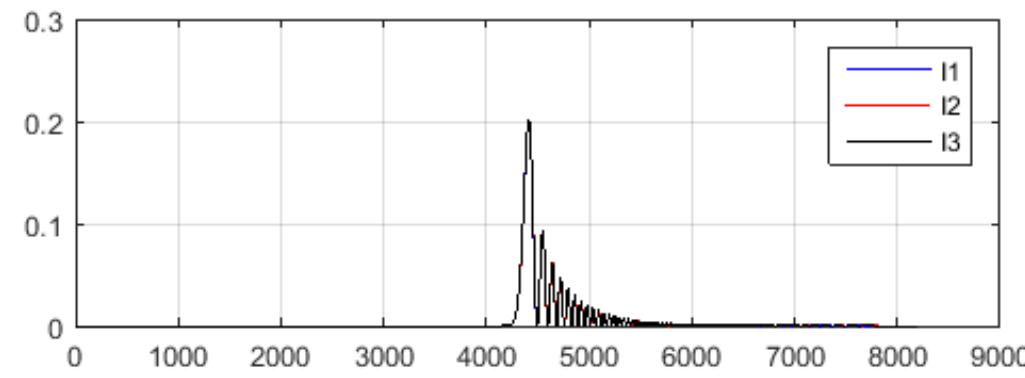
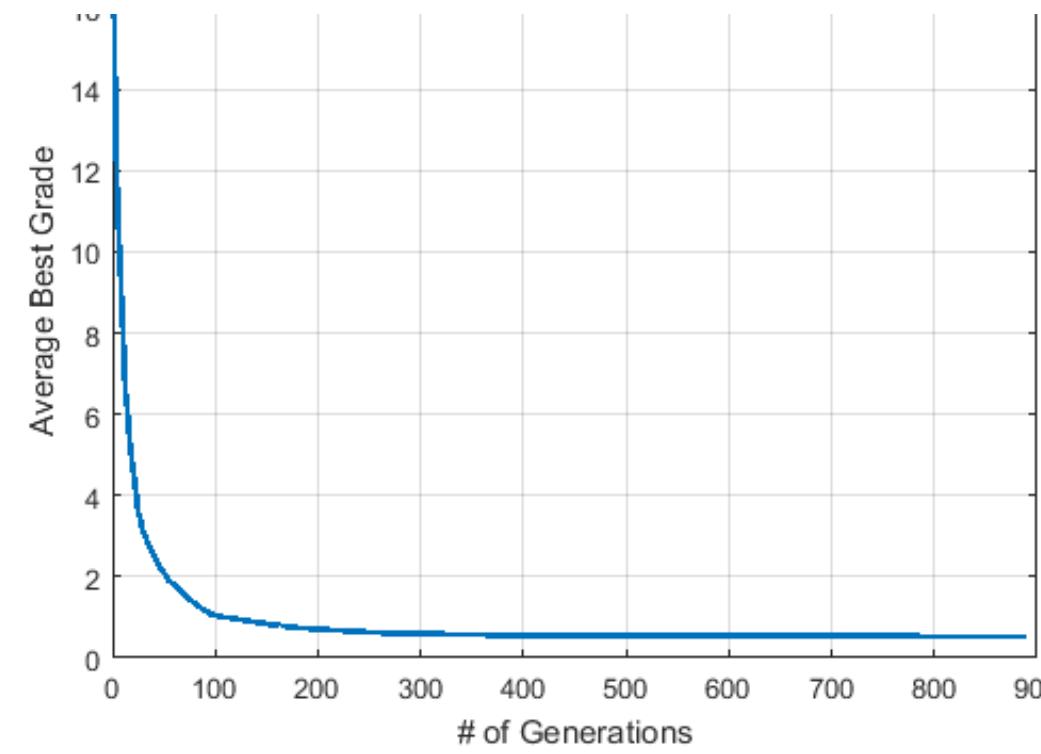
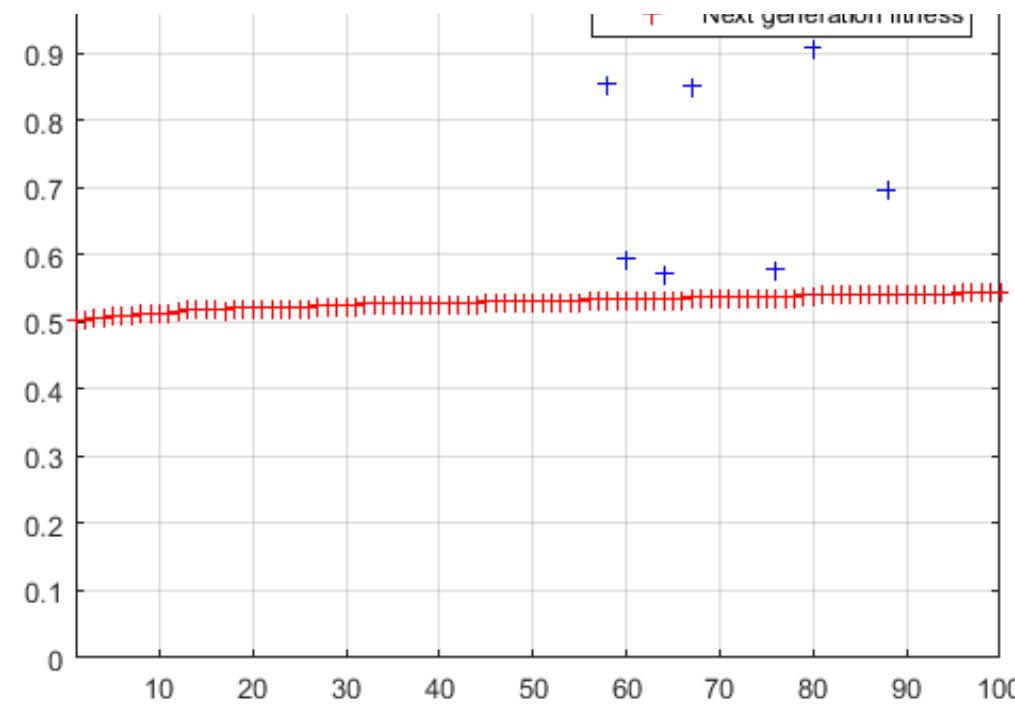


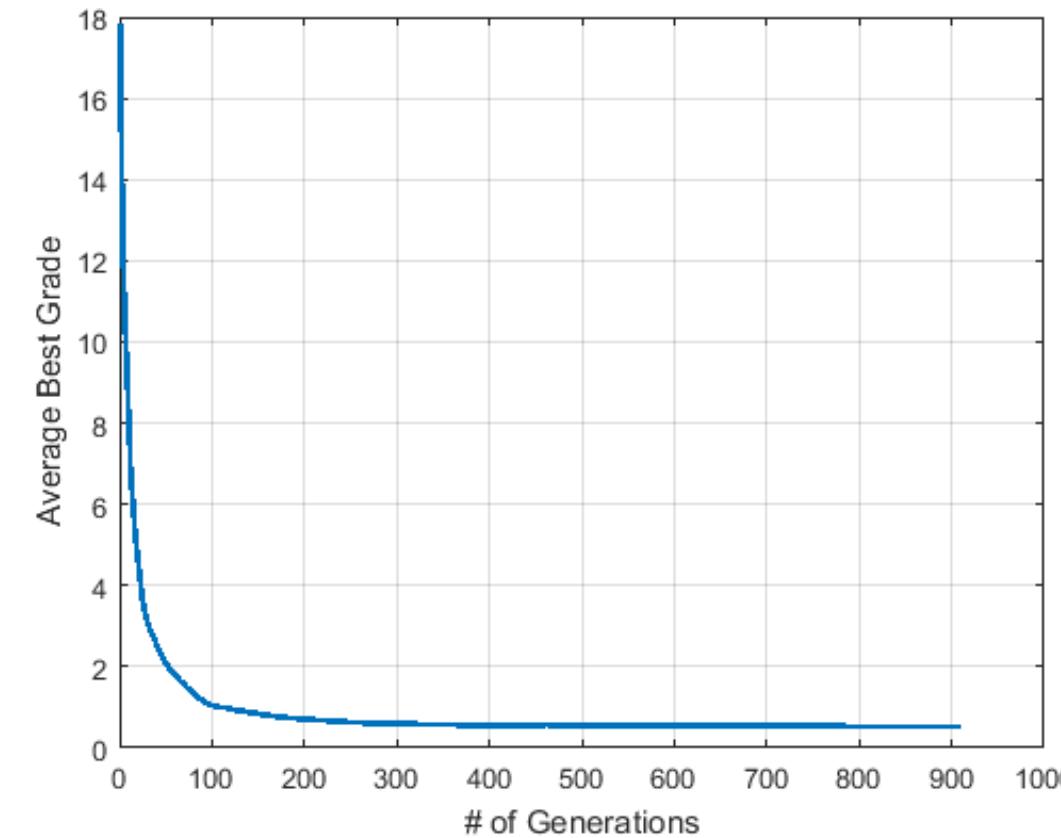
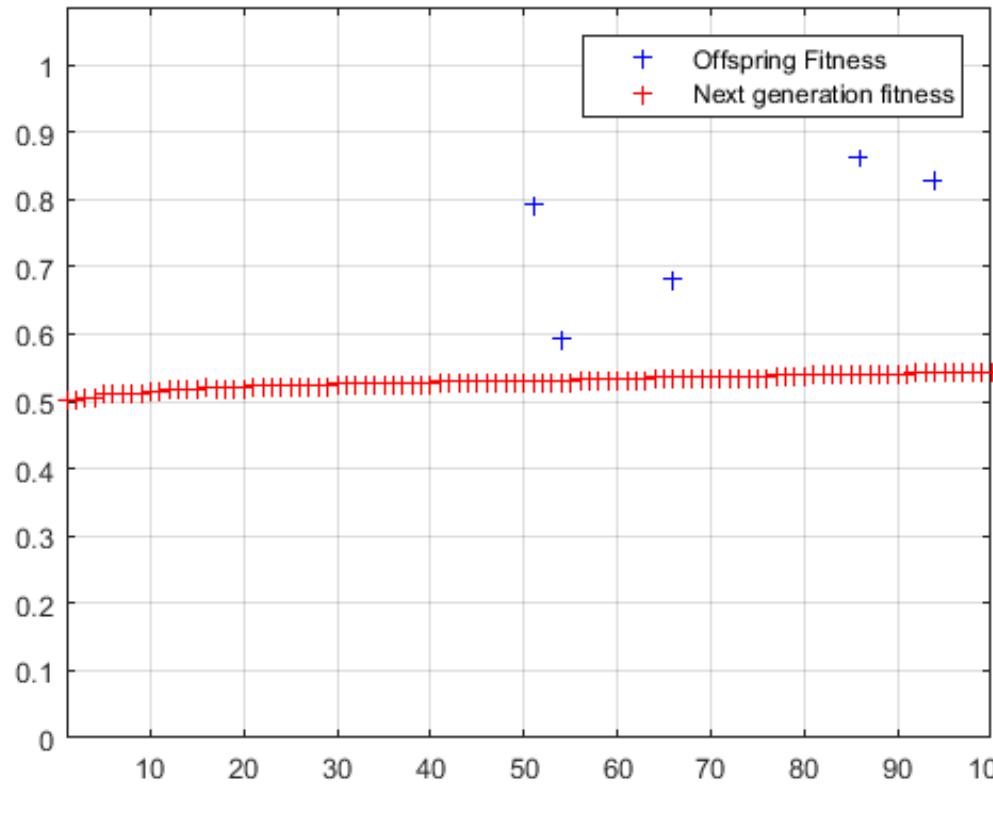
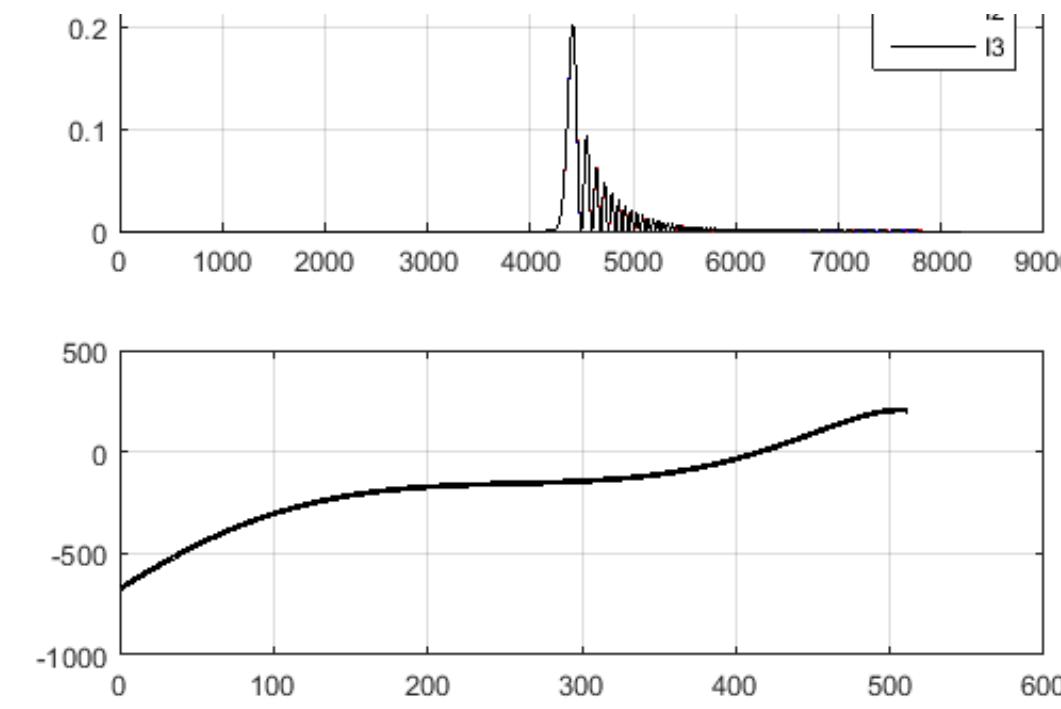
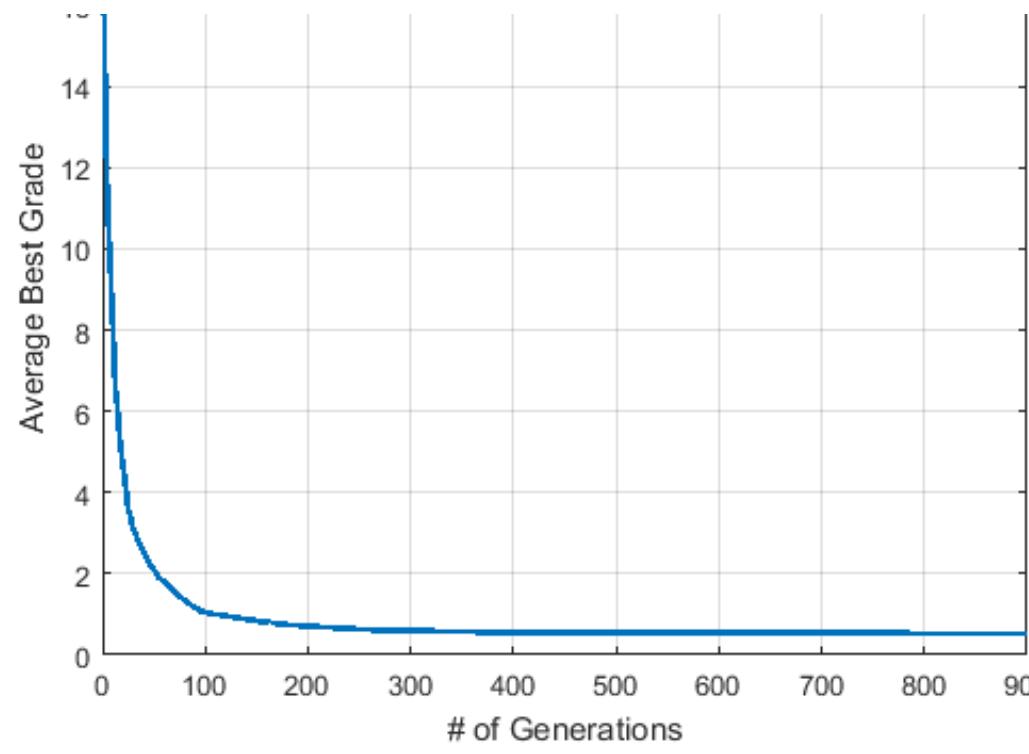


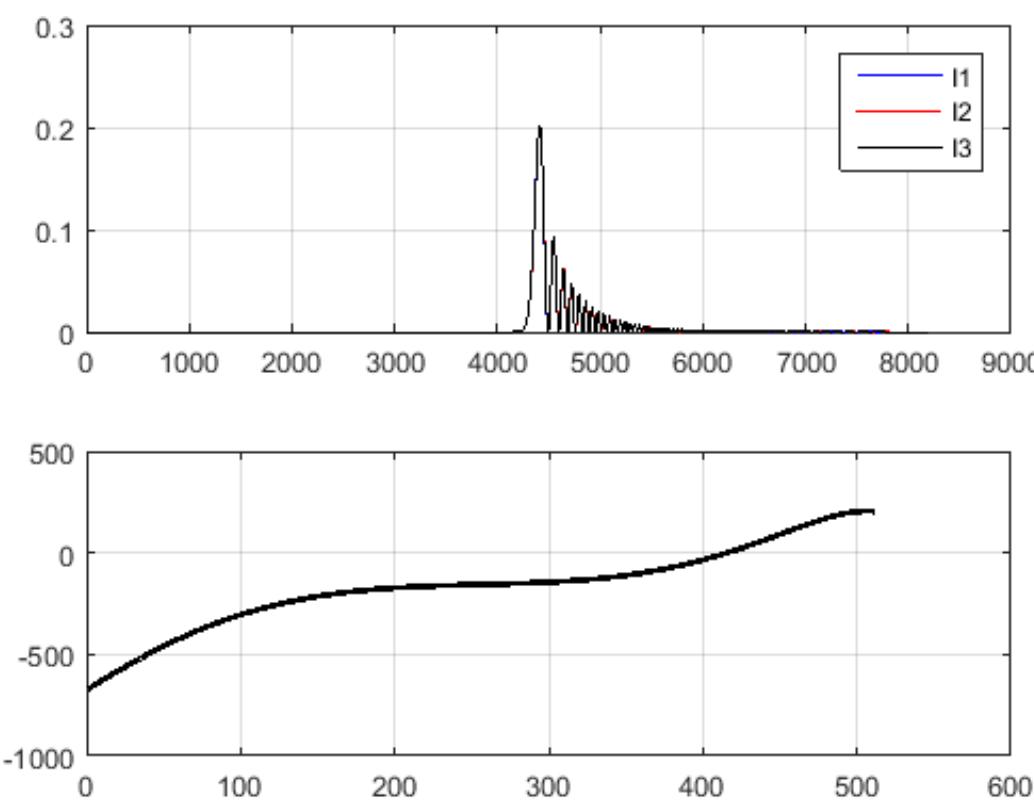
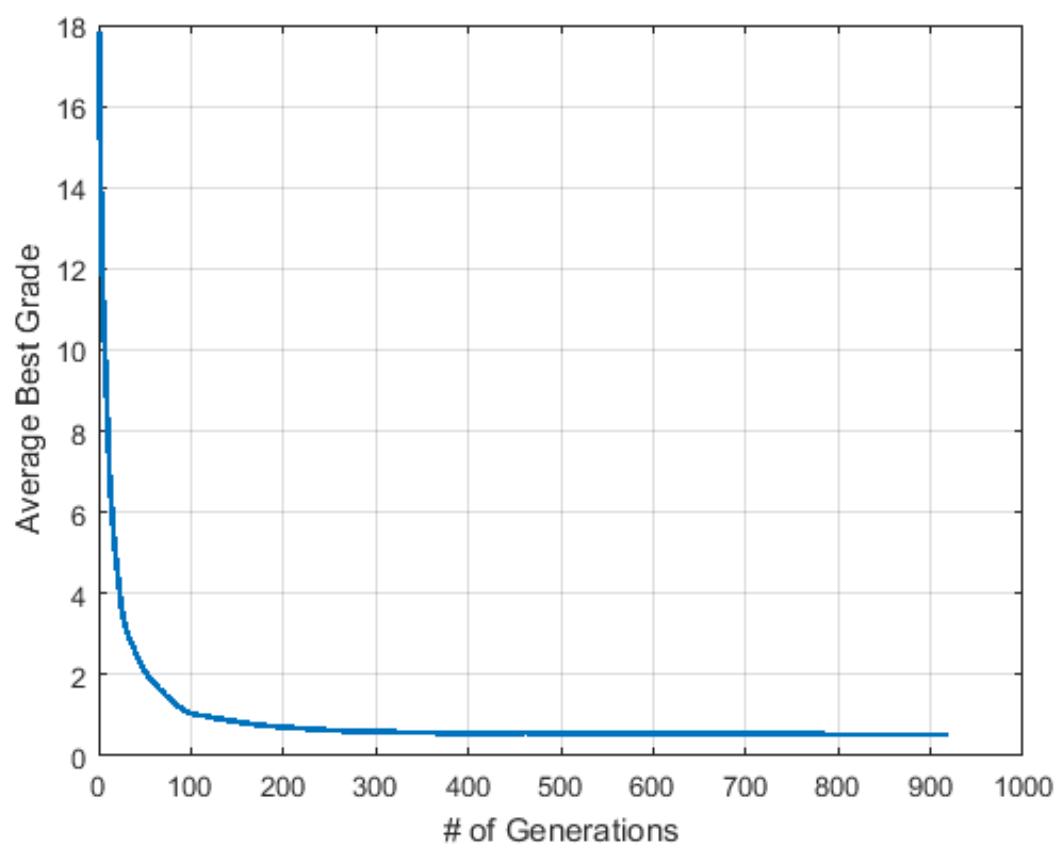
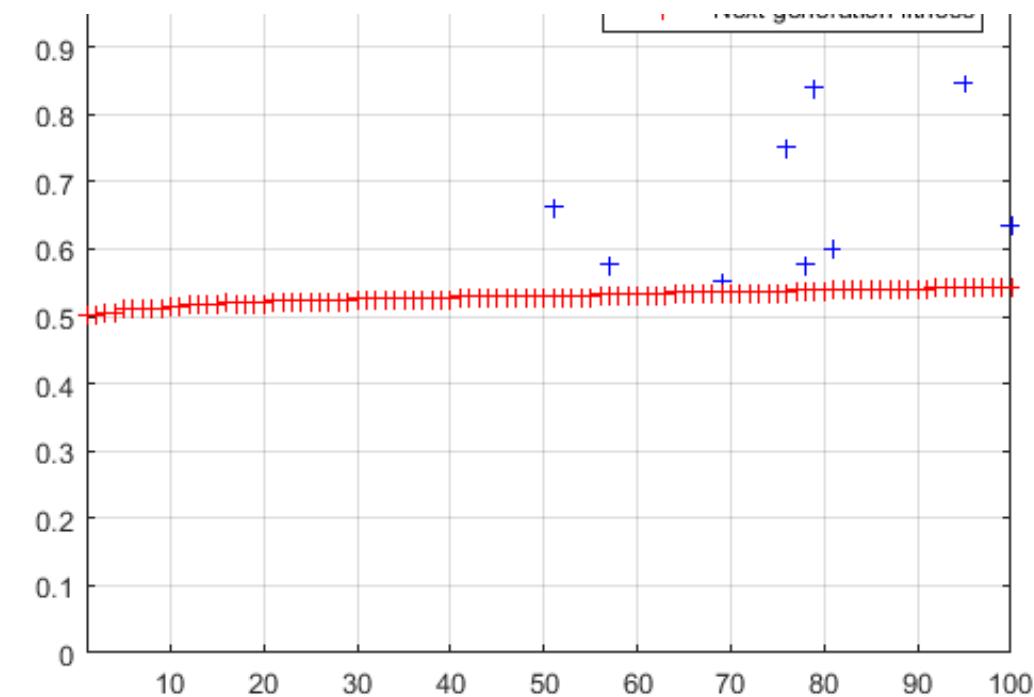
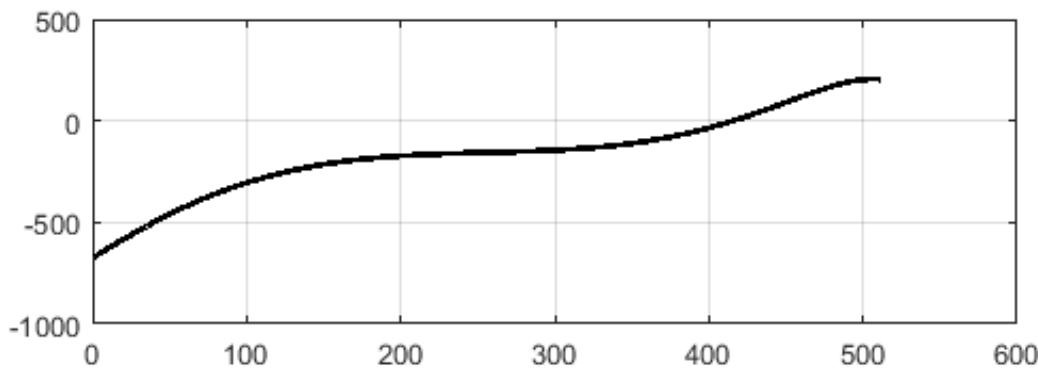
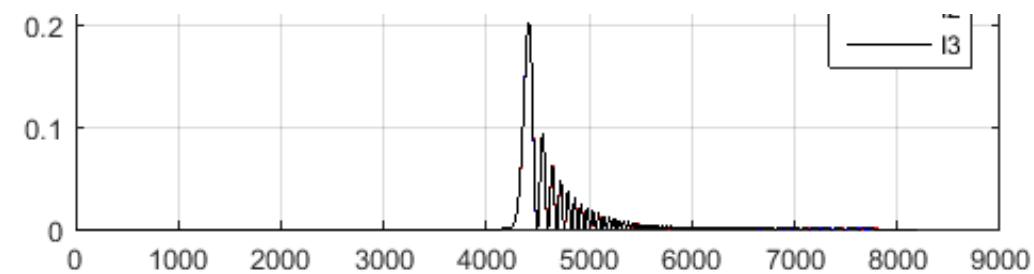


Legend:  
+ Offspring Fitness  
+ Next generation fitness



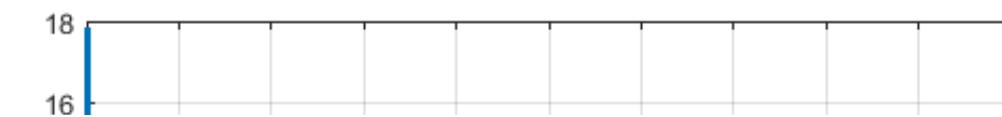


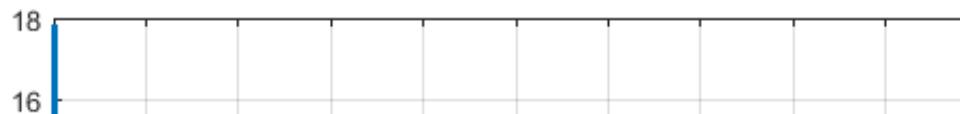
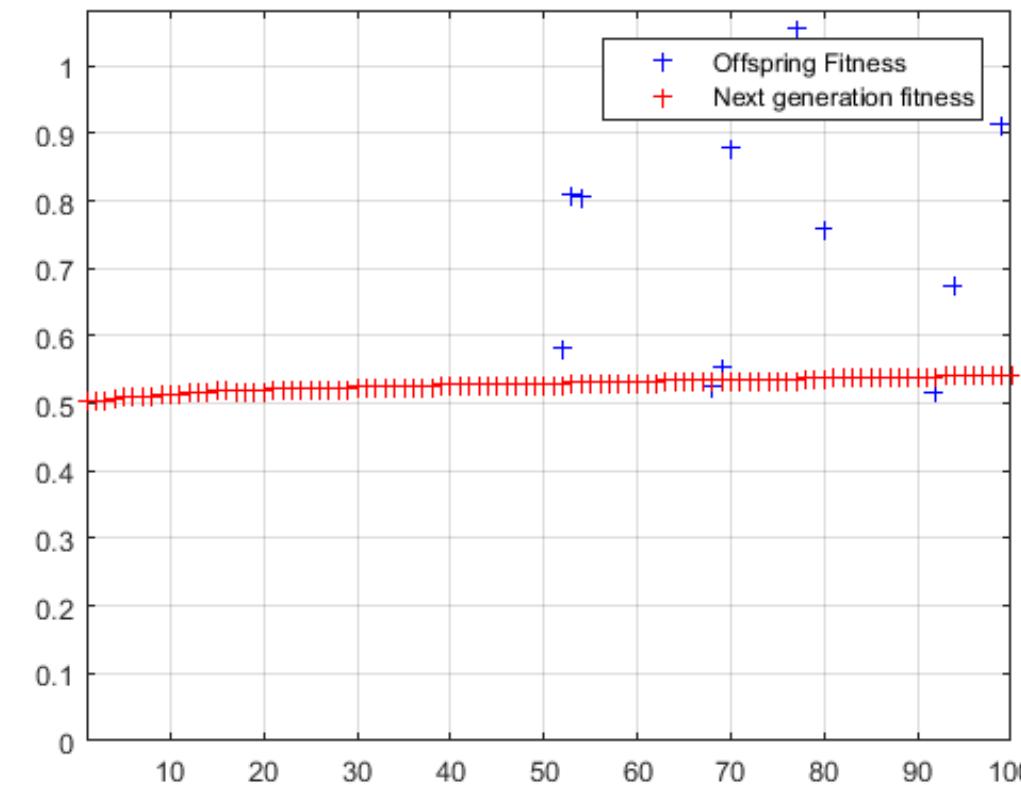
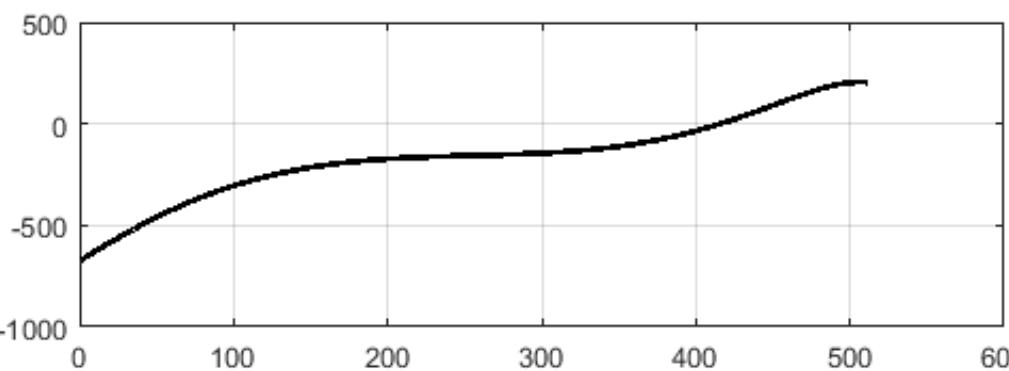
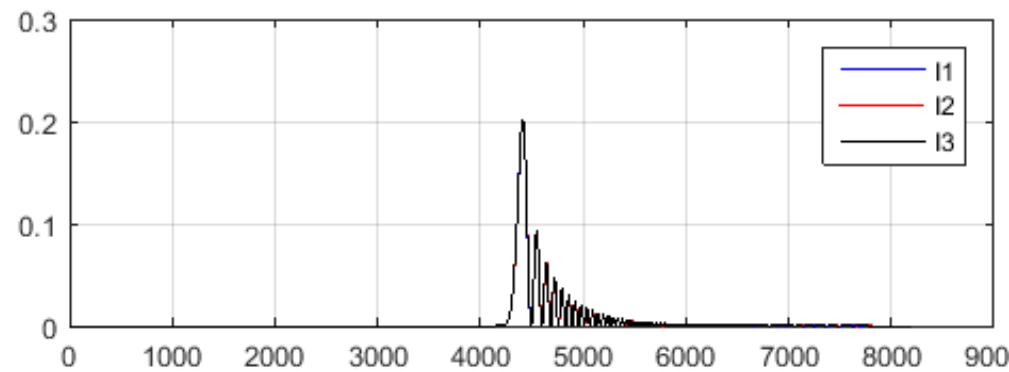
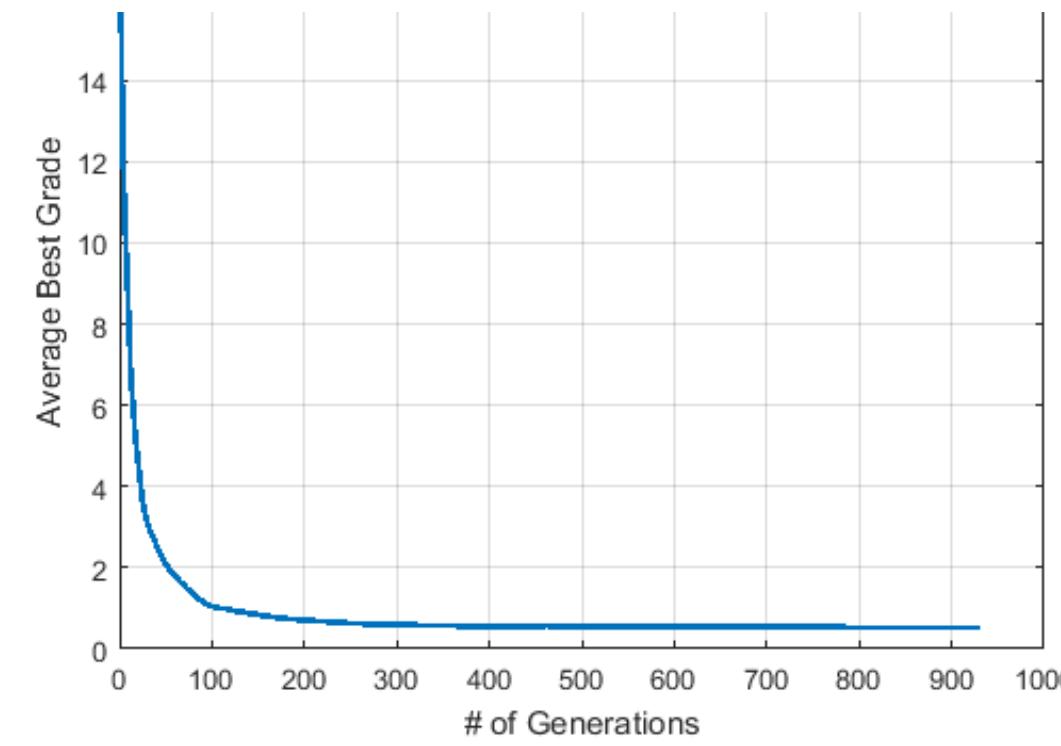
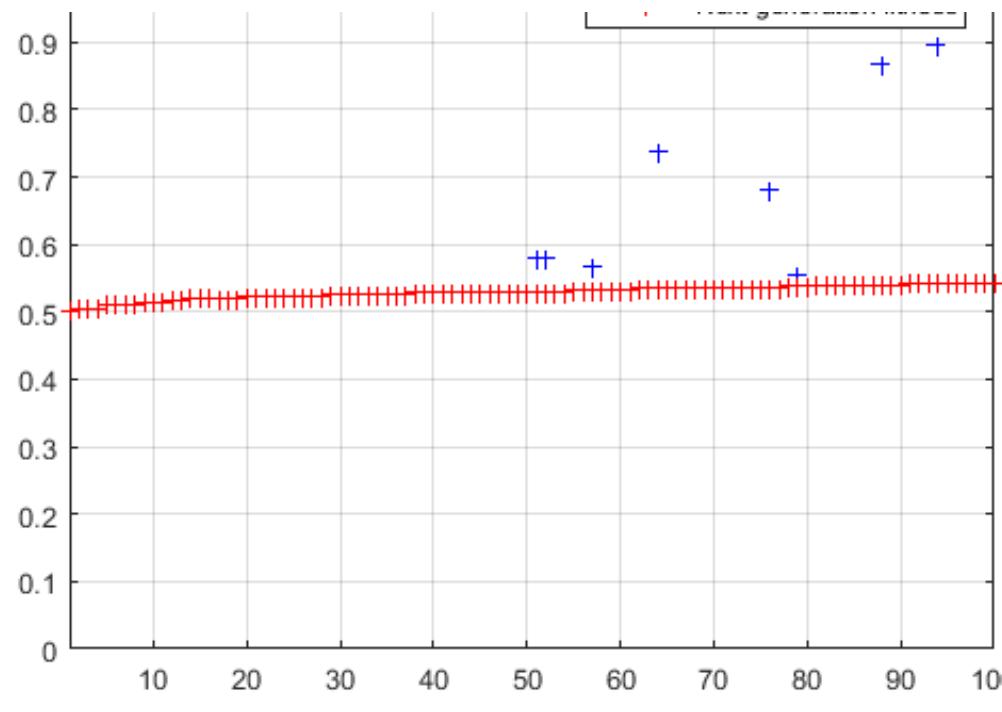


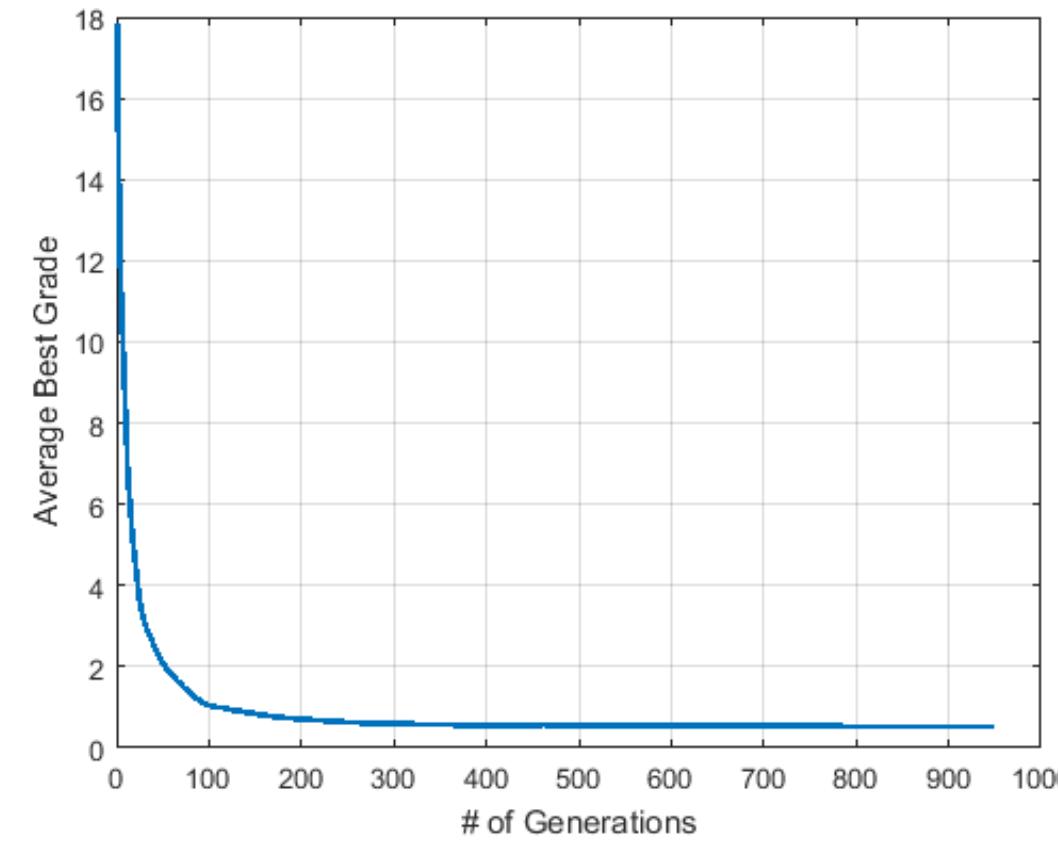
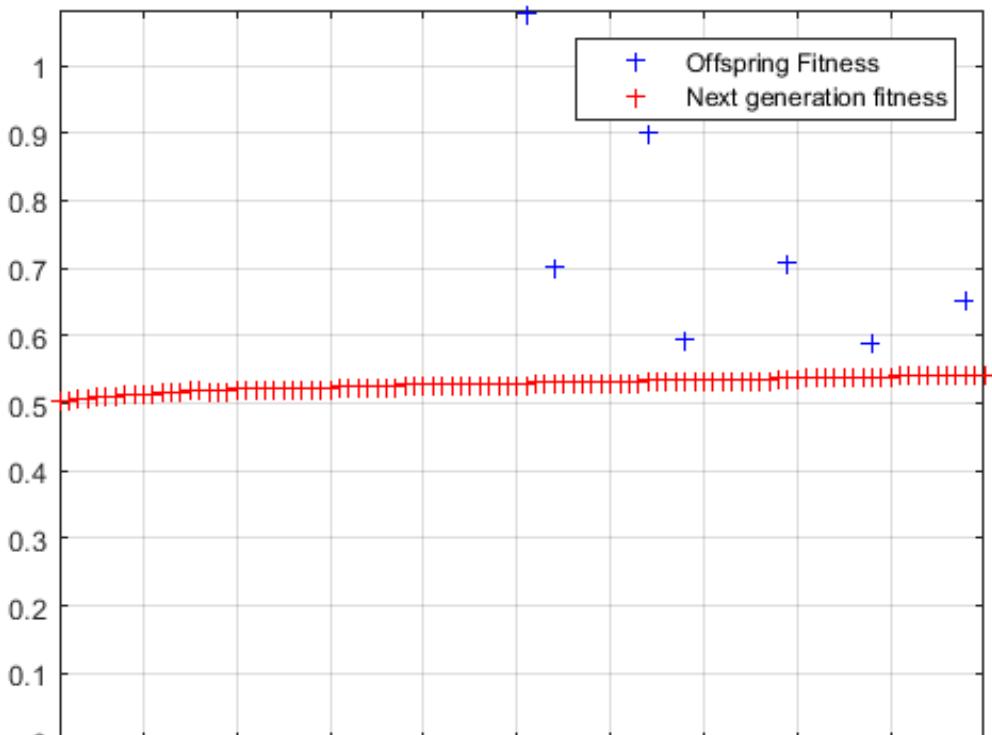
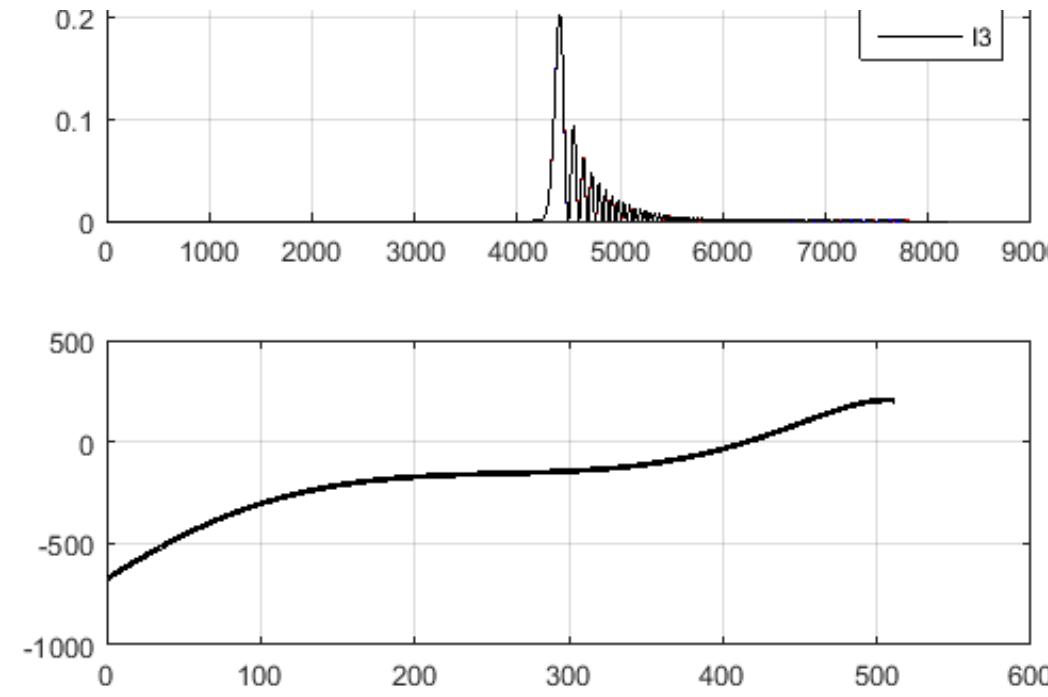
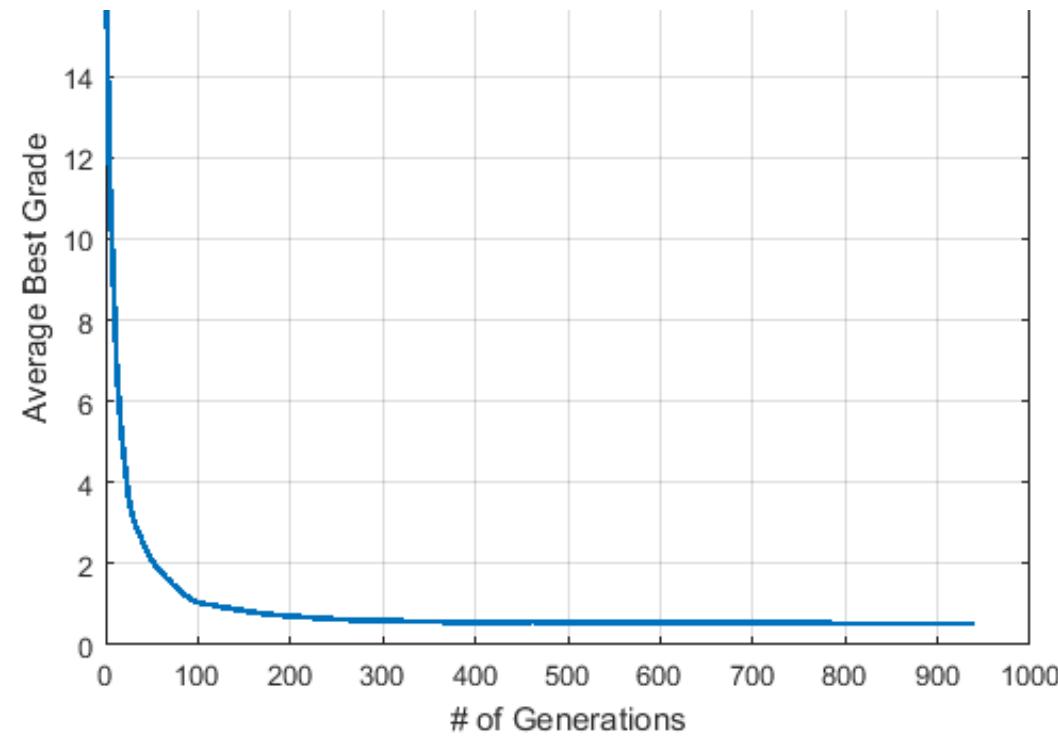


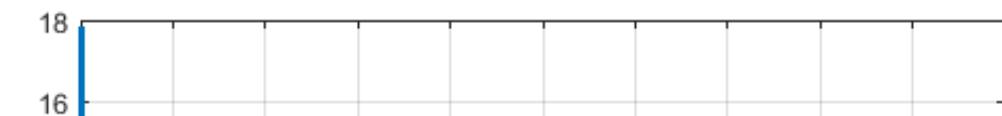
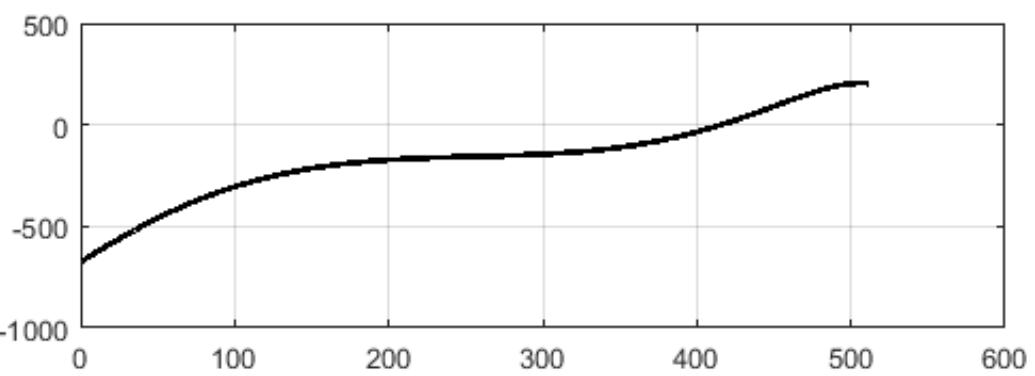
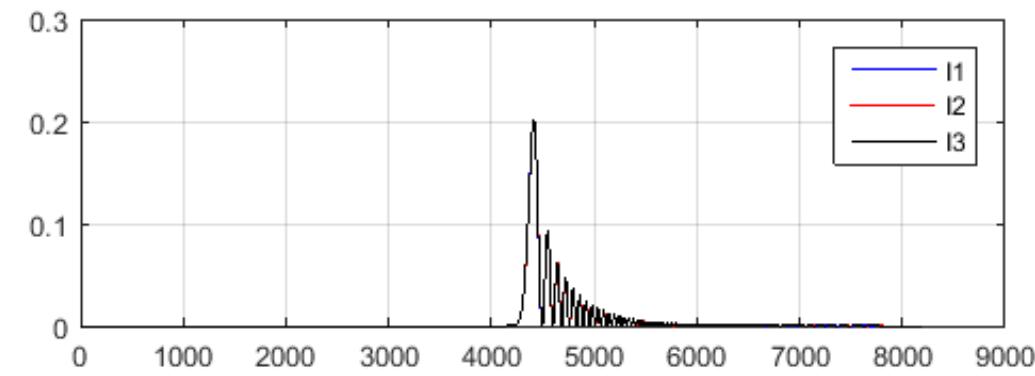
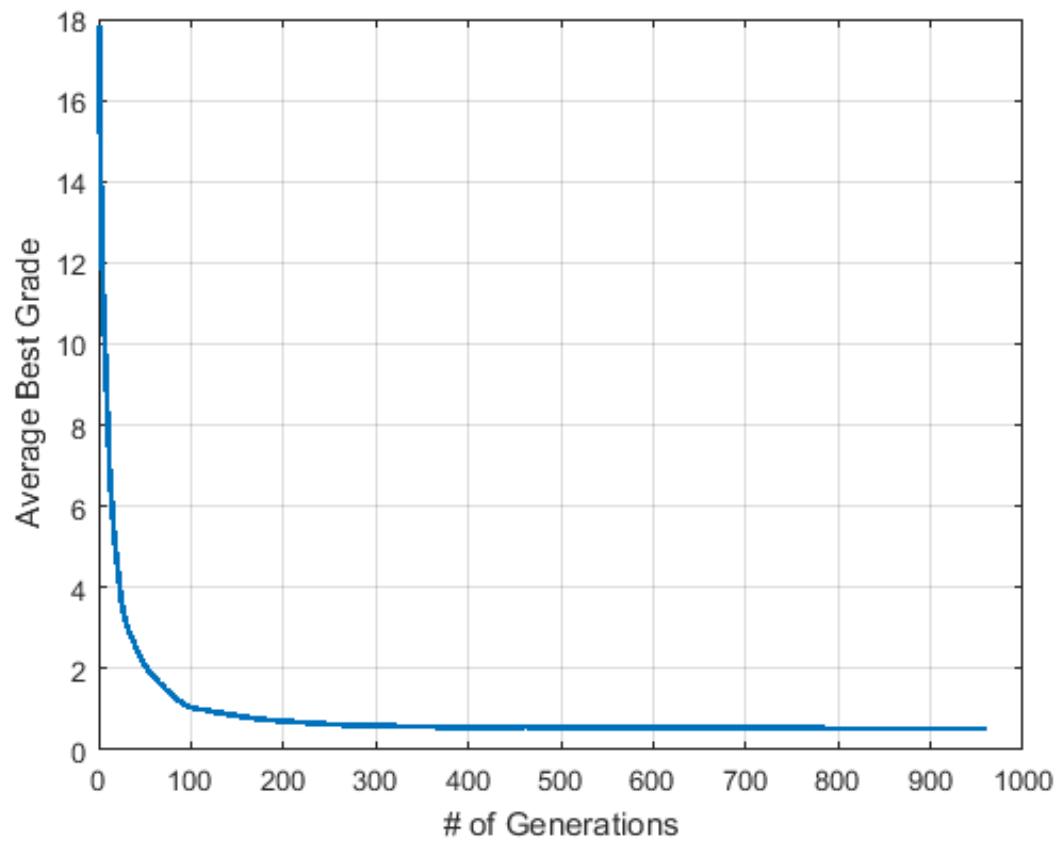
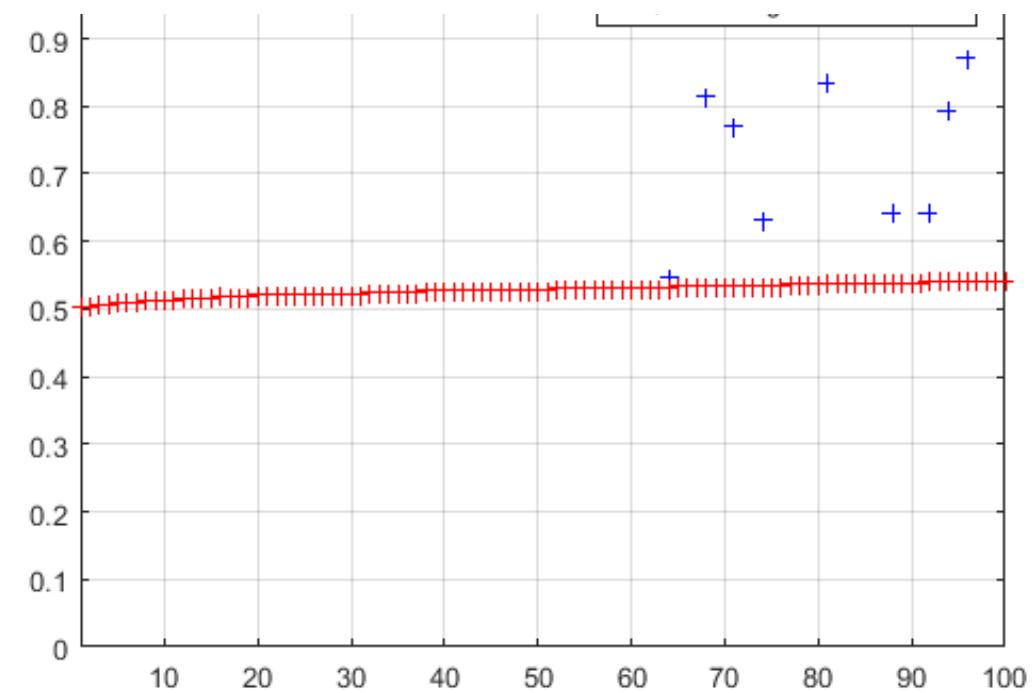
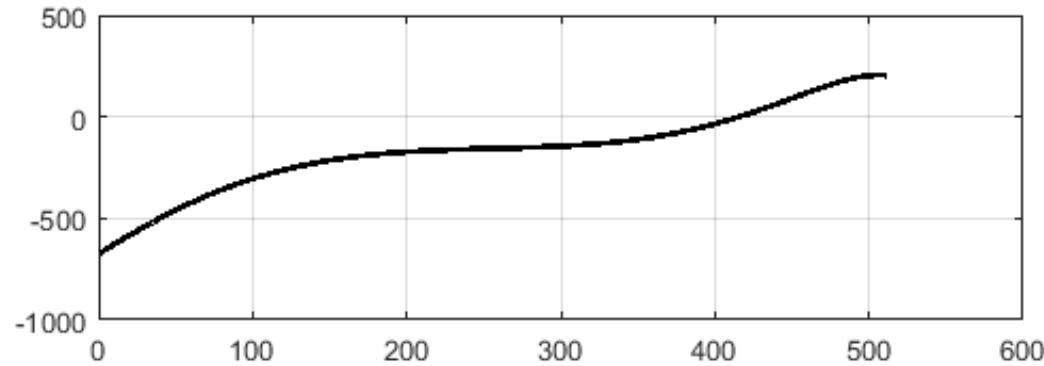
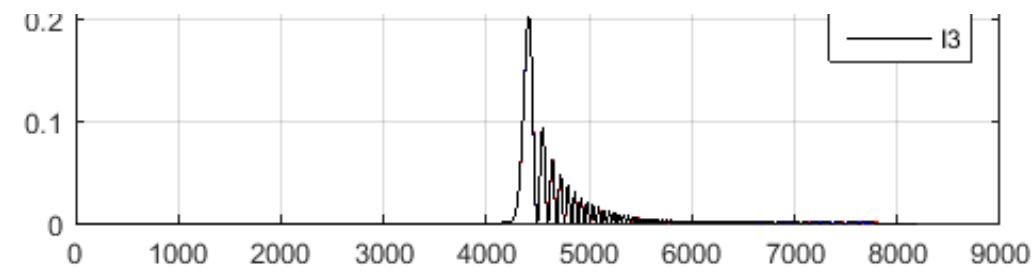
Legend:

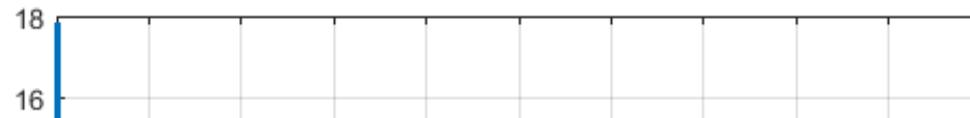
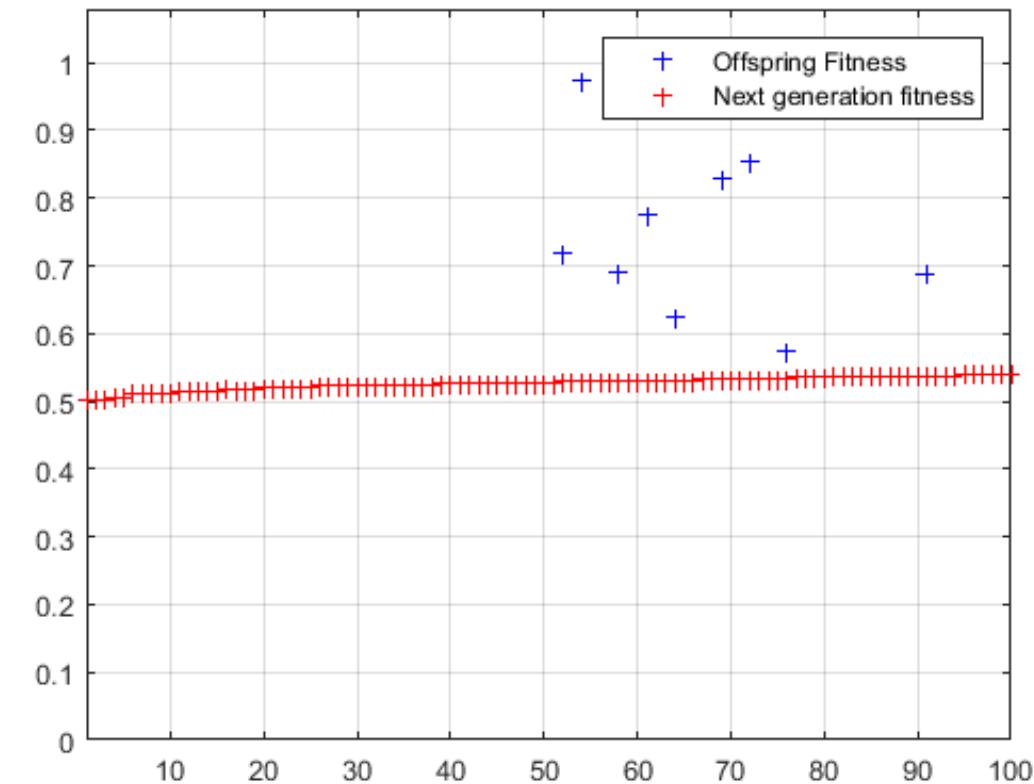
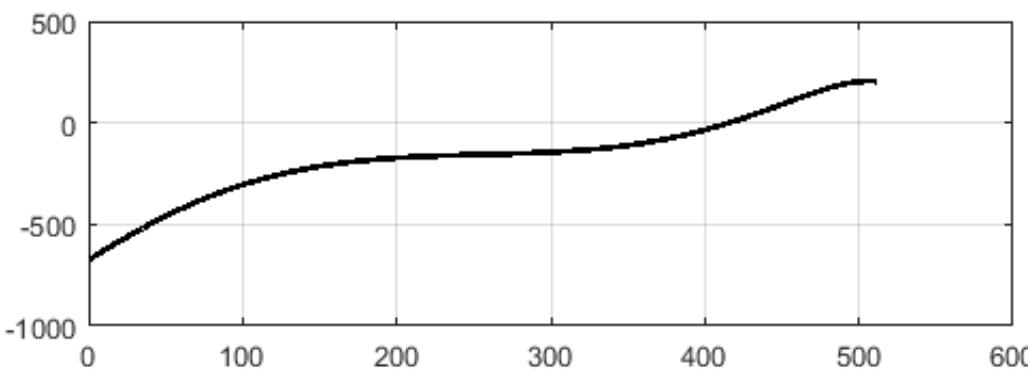
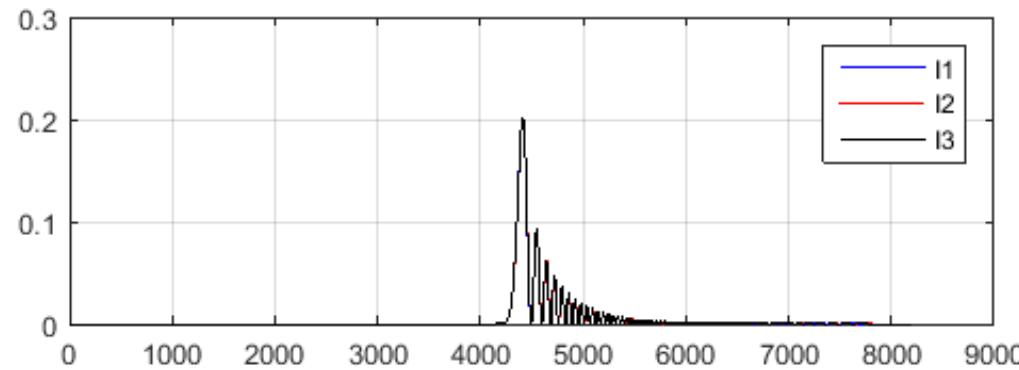
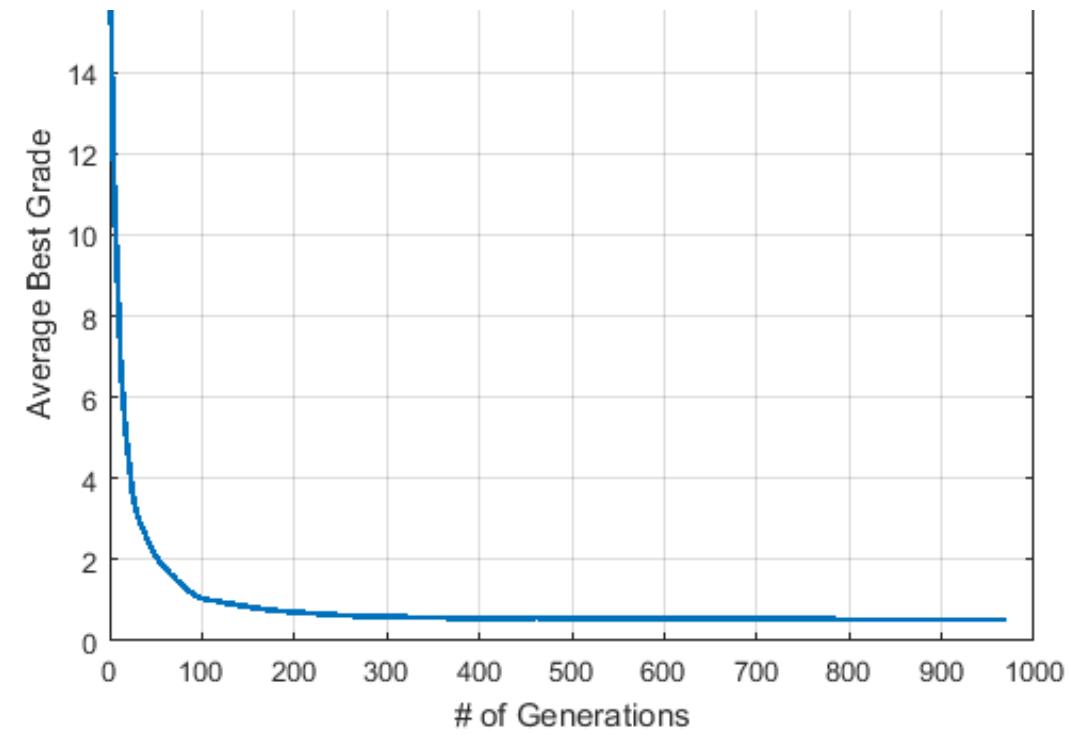
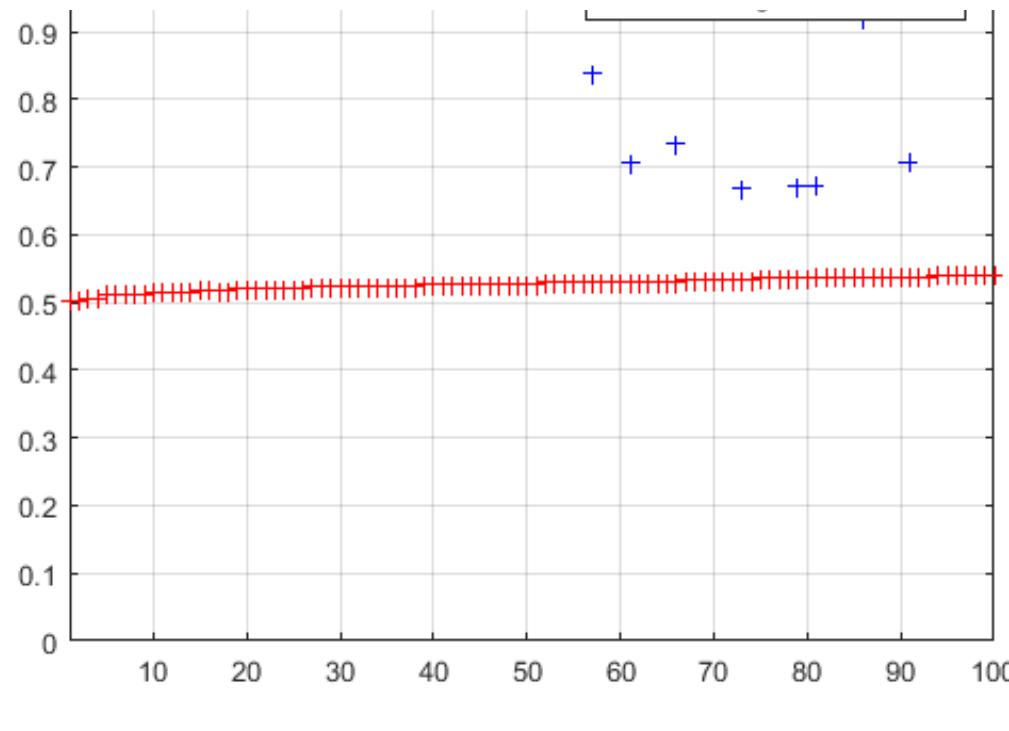
- Offspring Fitness (Blue plus sign)
- Next generation fitness (Red plus sign)

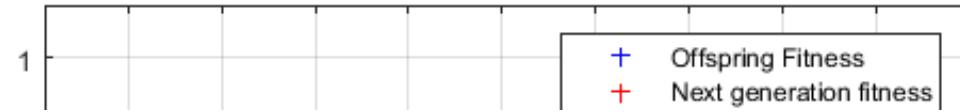
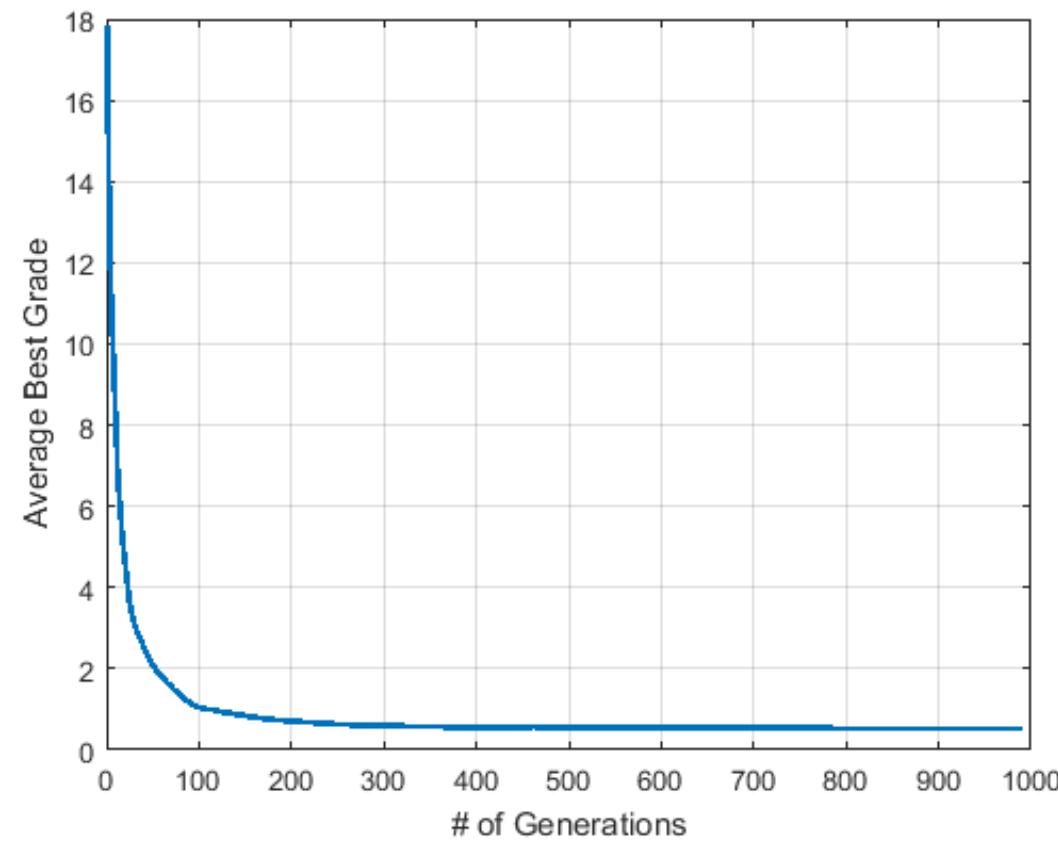
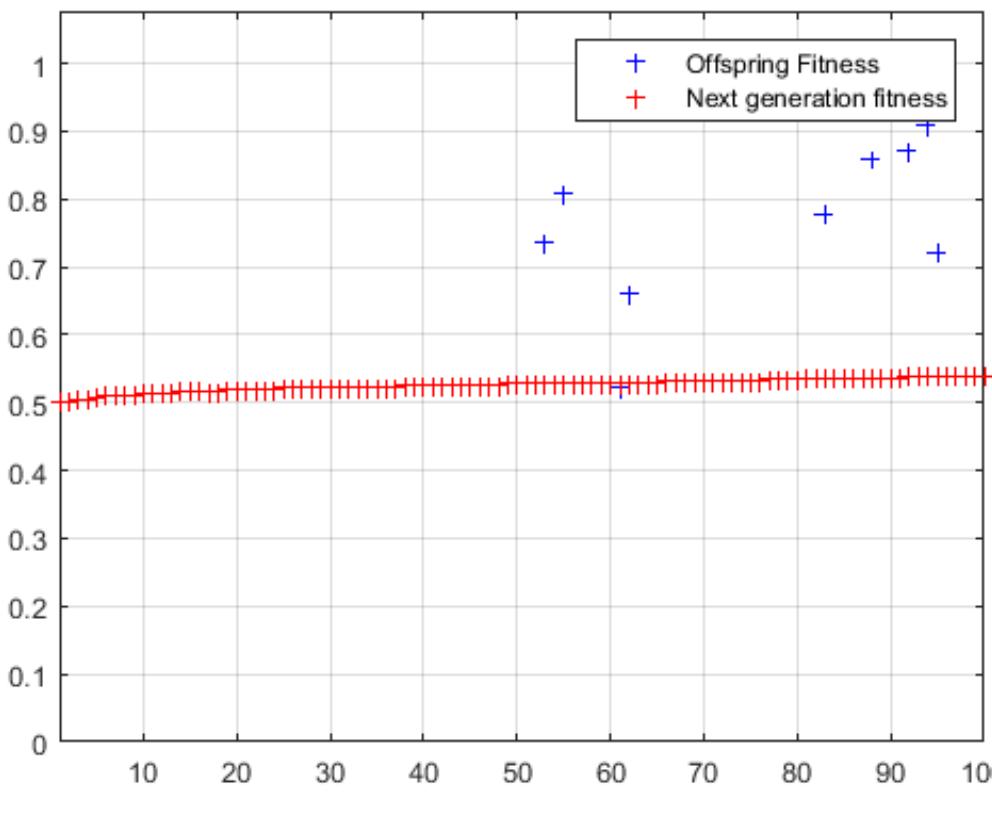
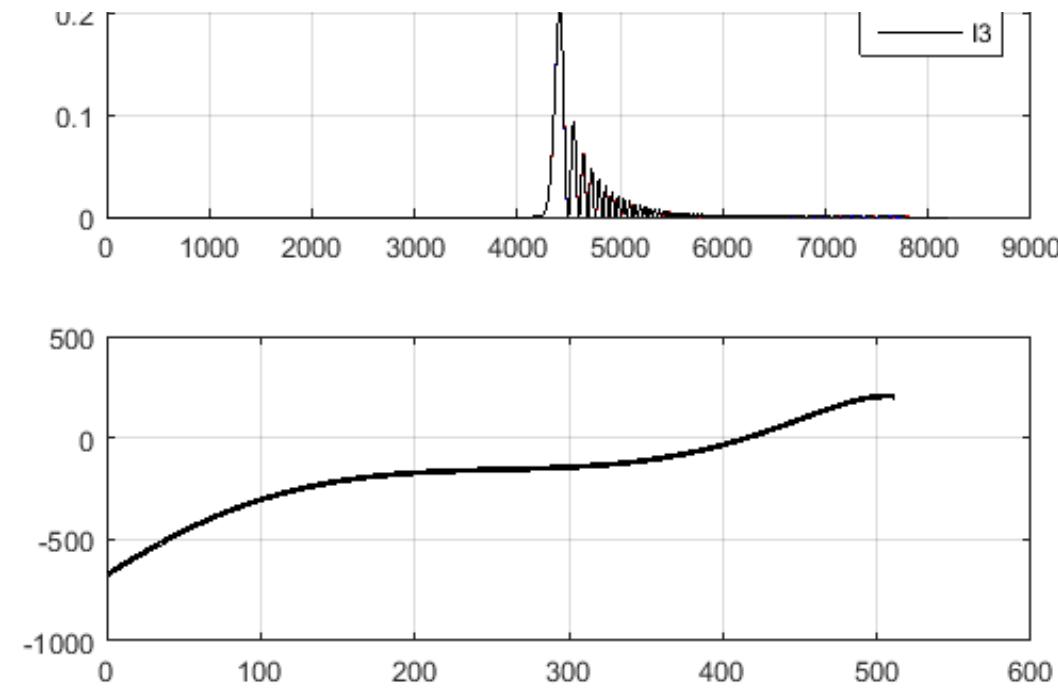
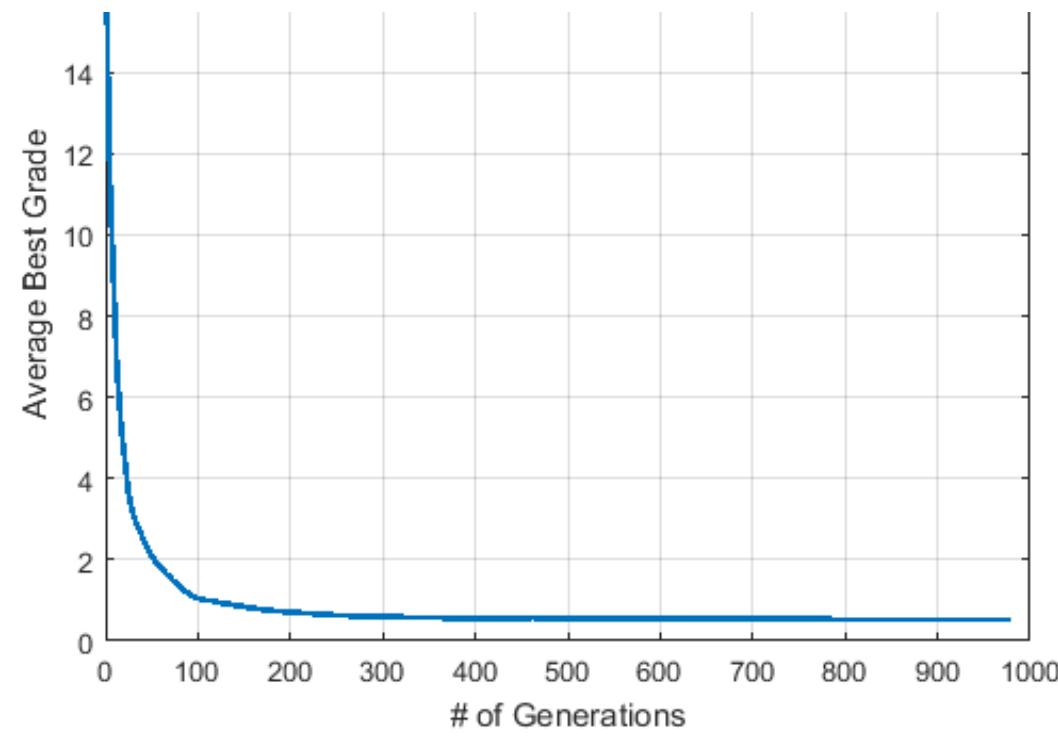


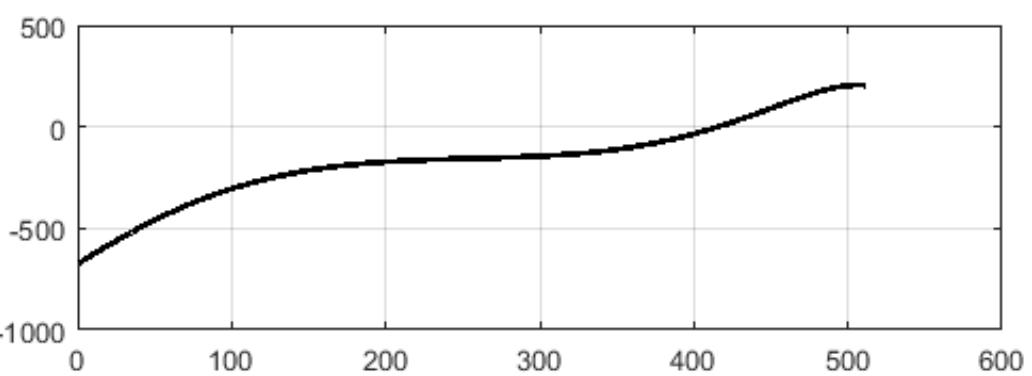
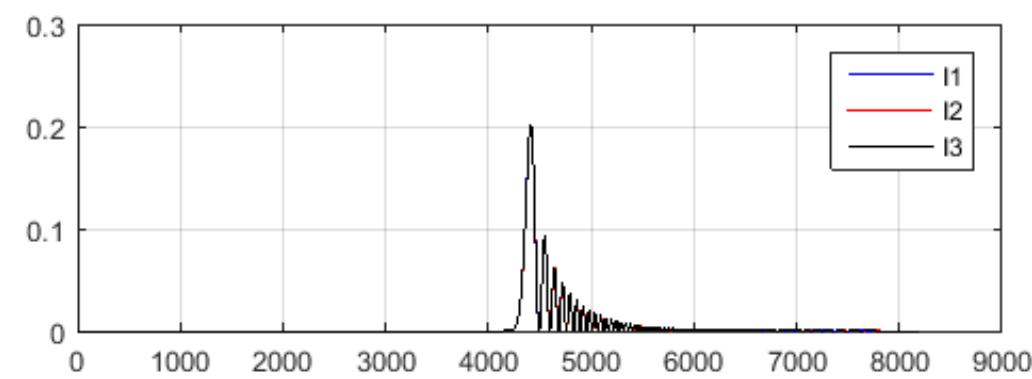
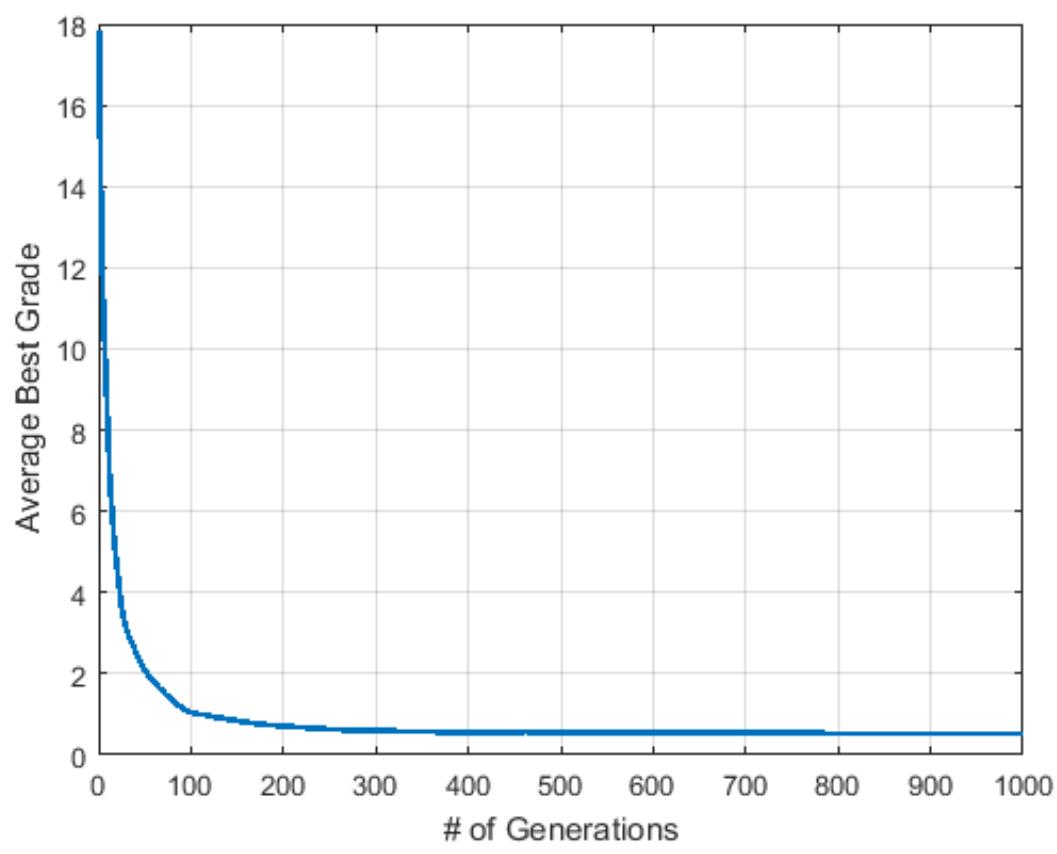
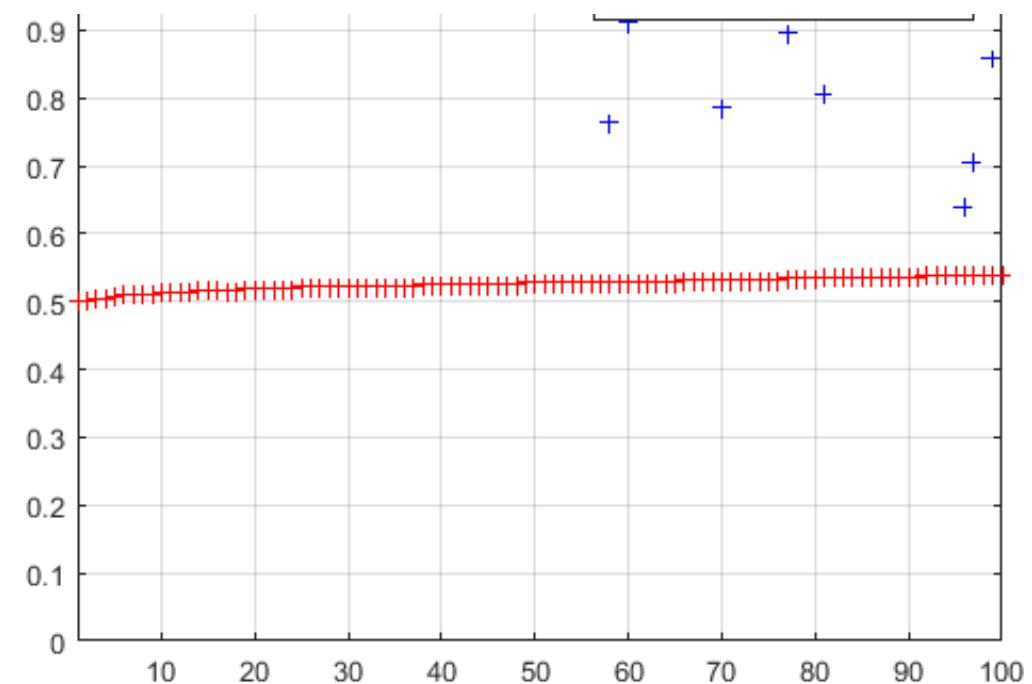
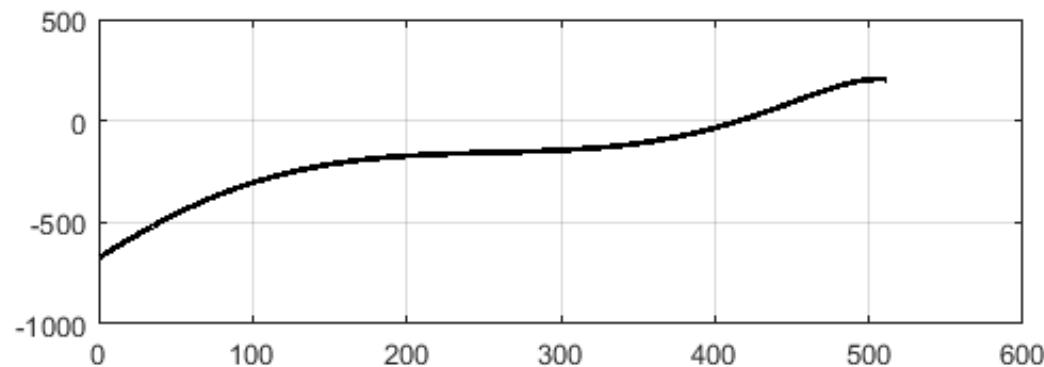
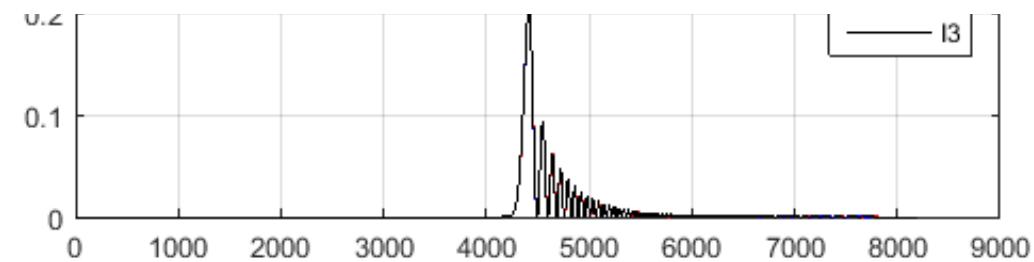


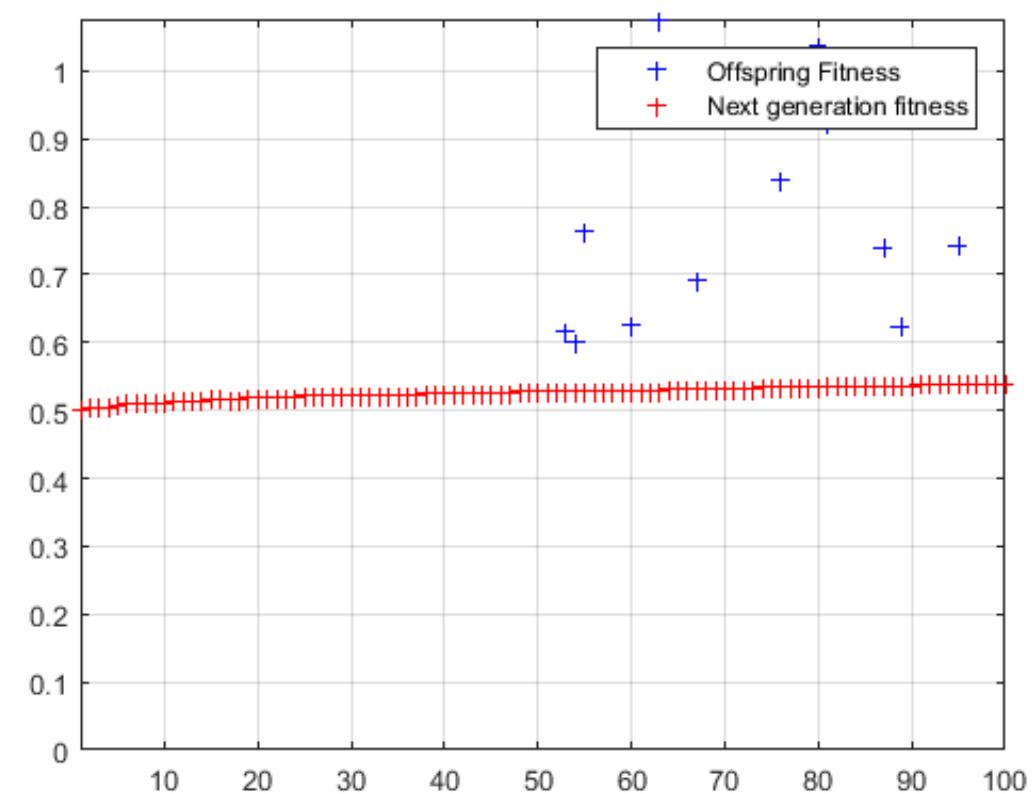
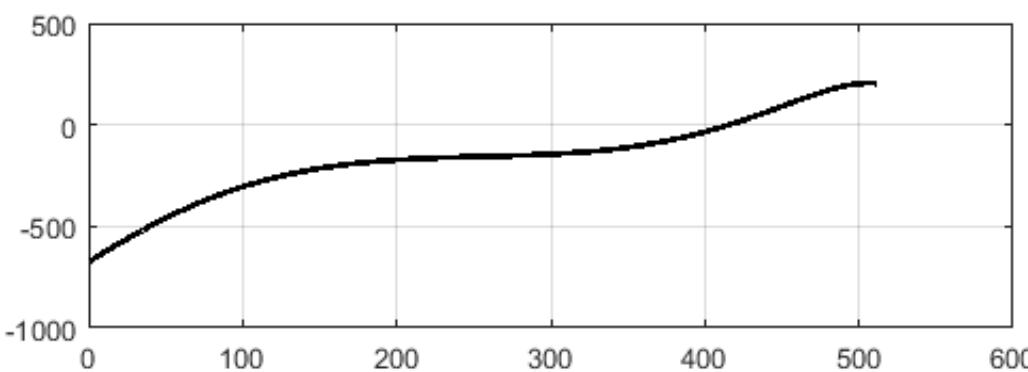
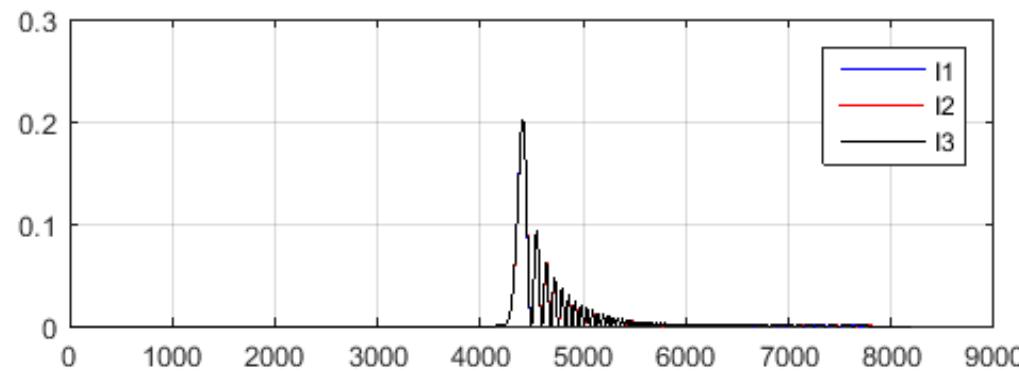
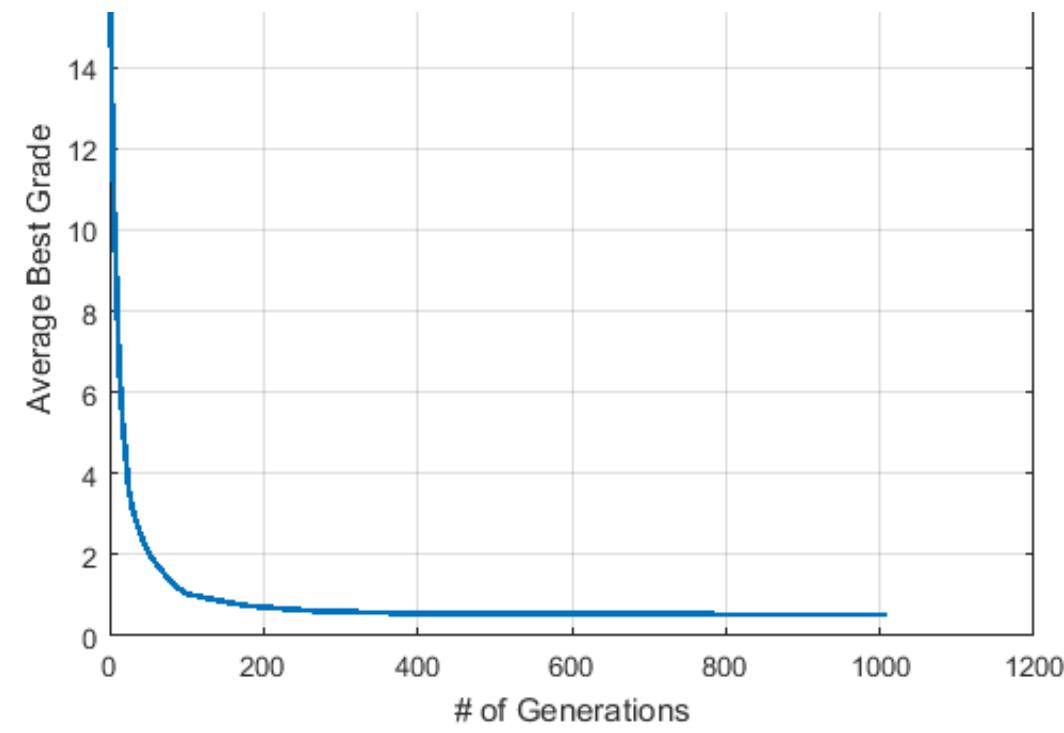
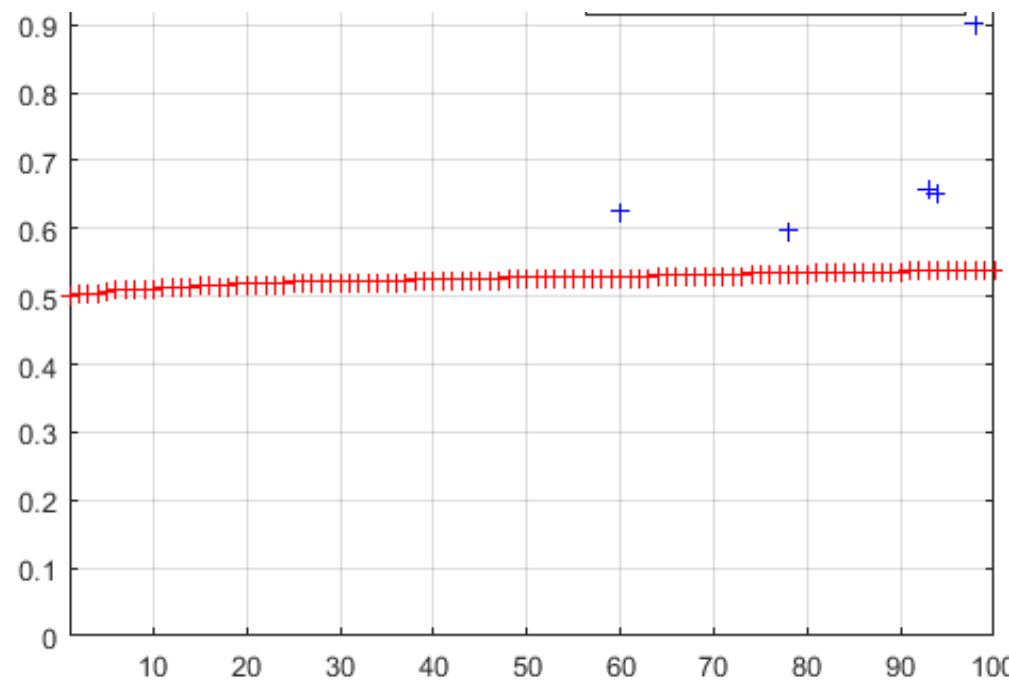


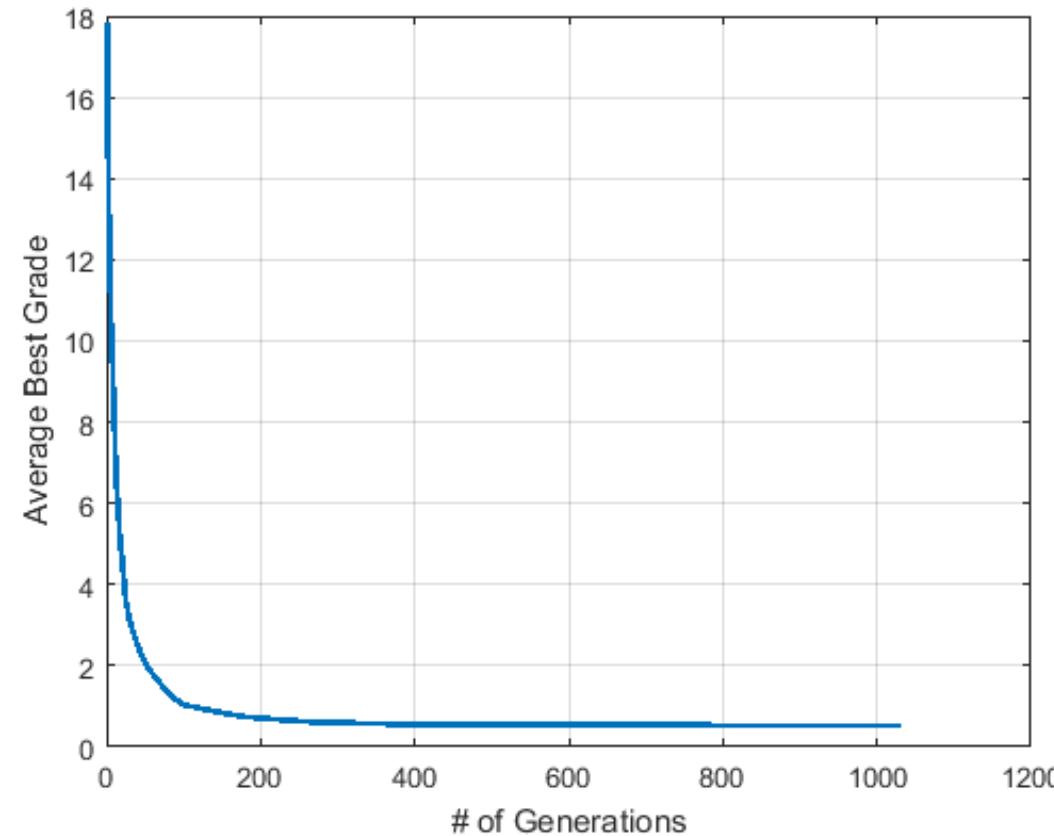
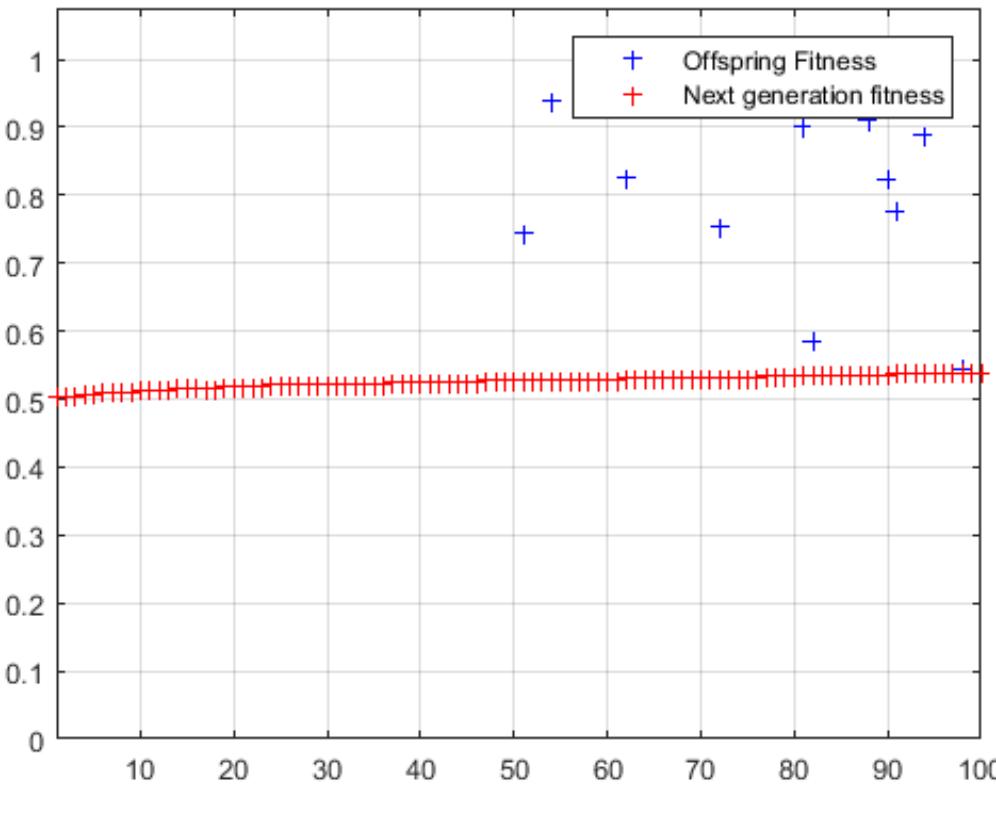
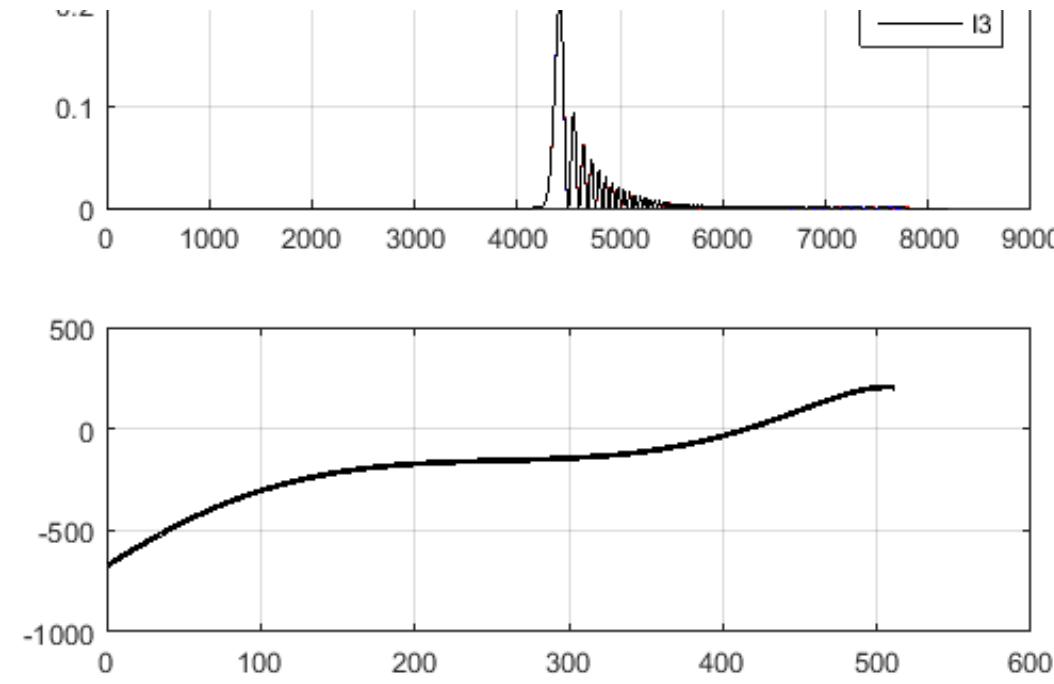
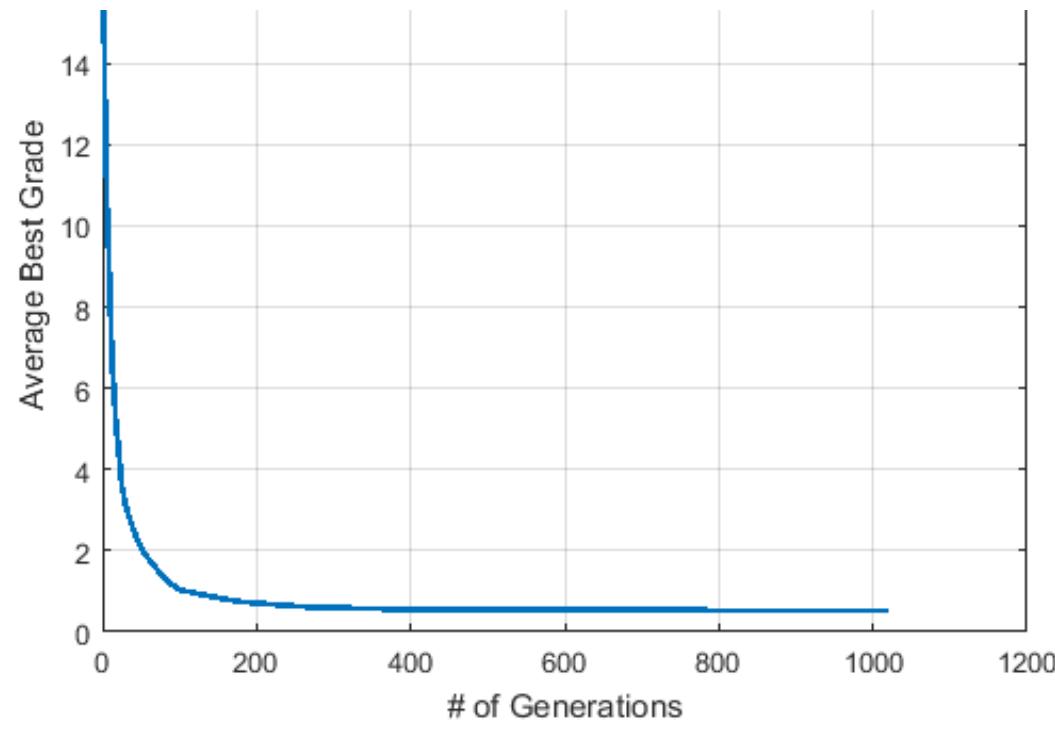


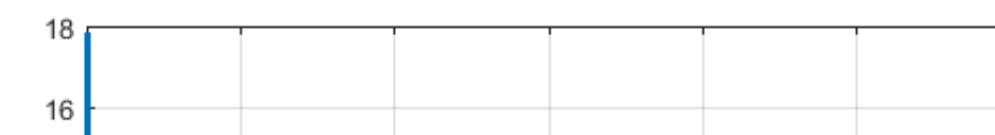
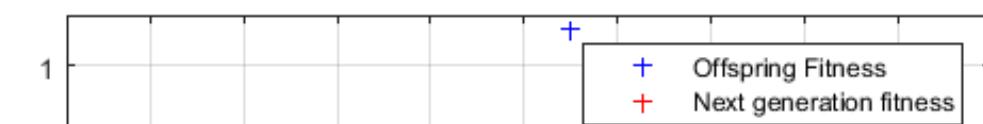
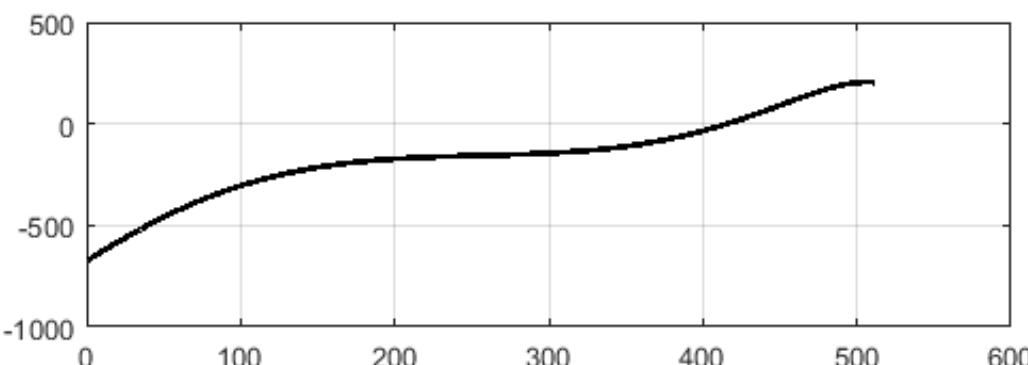
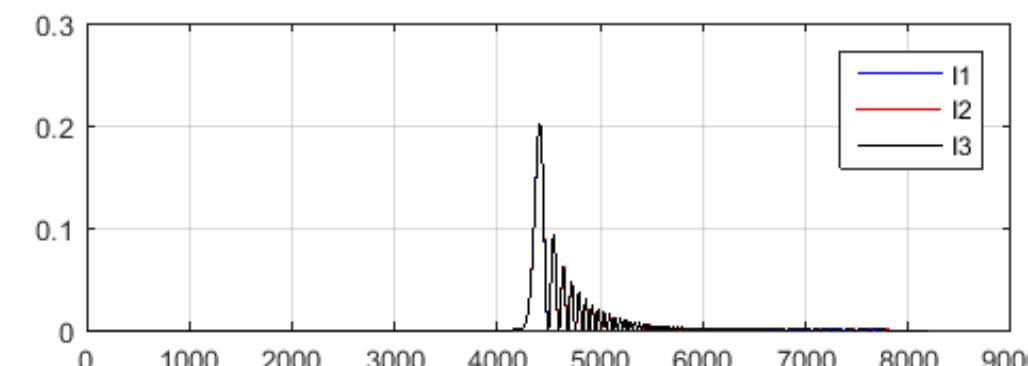
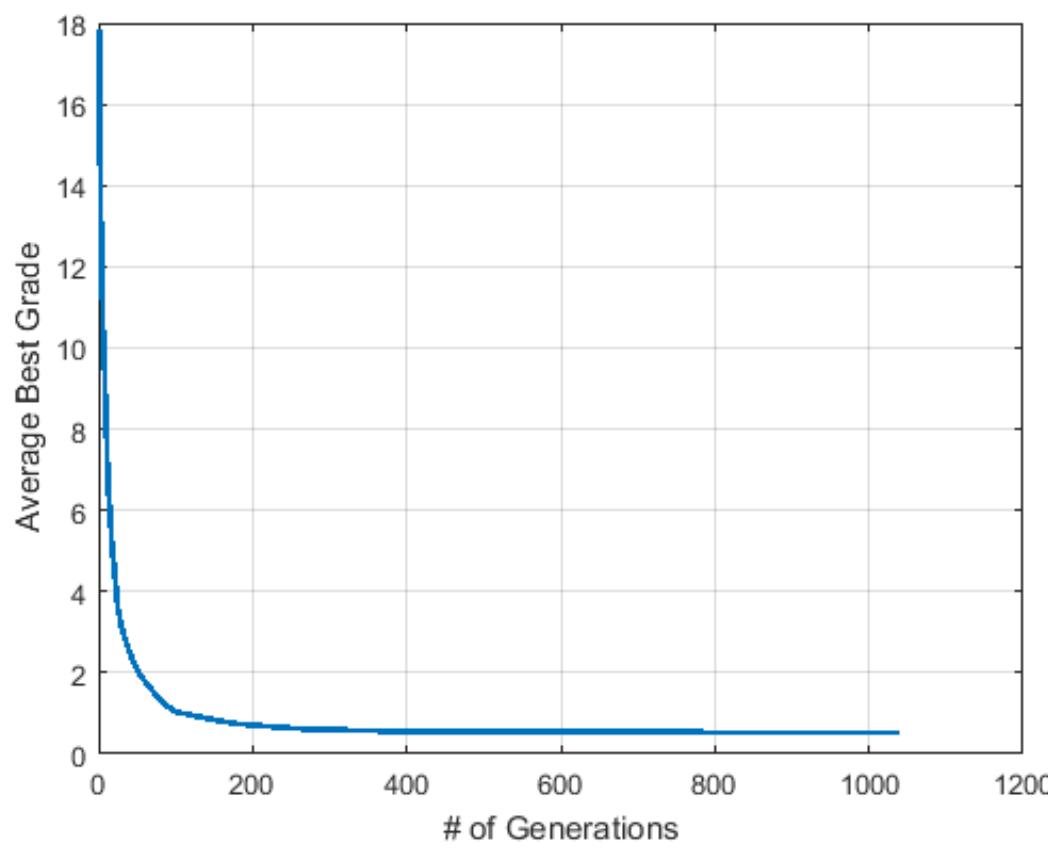
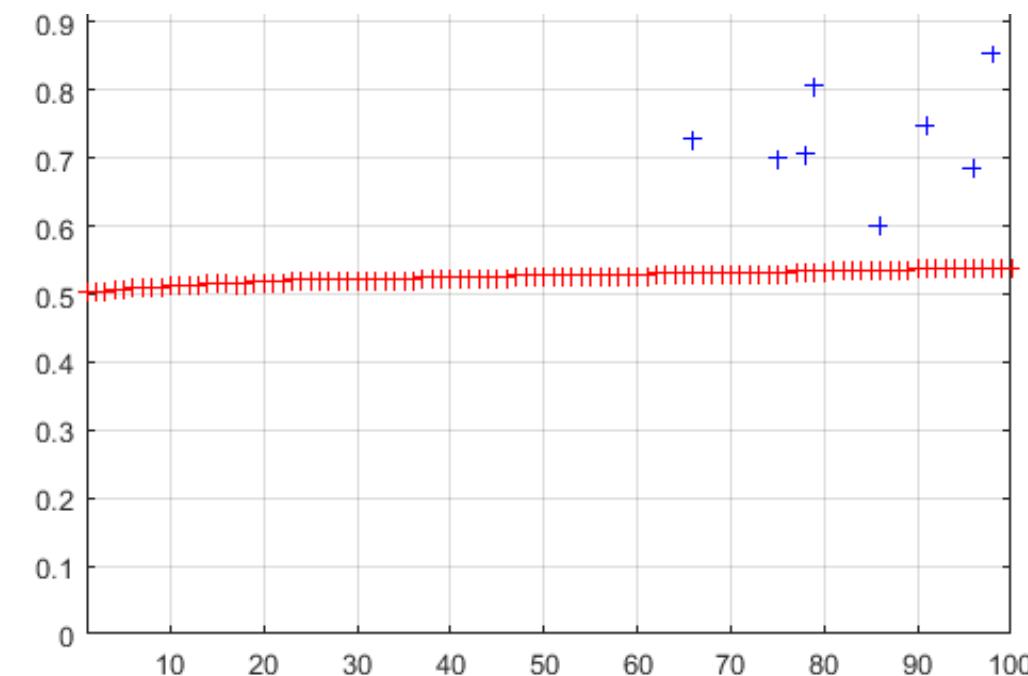
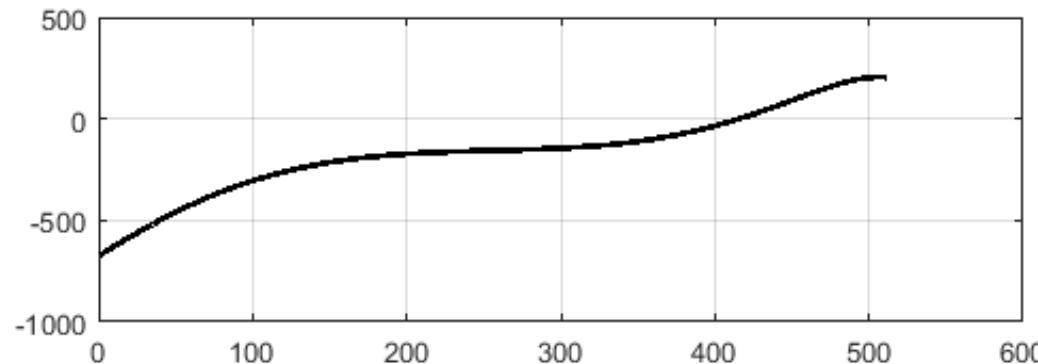
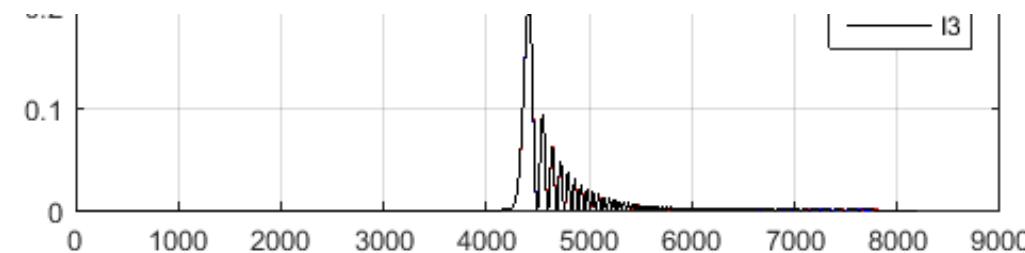


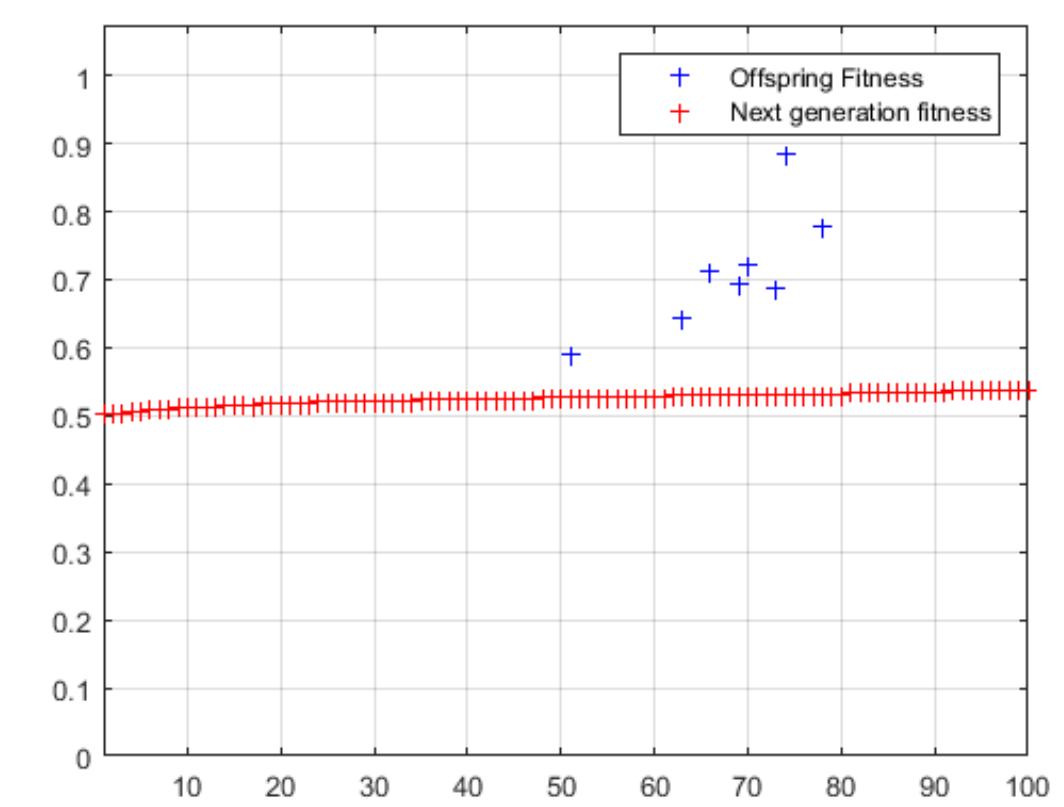
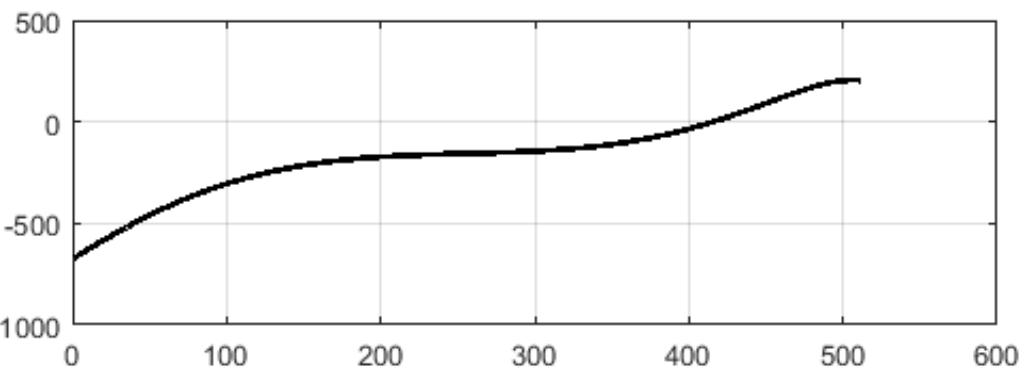
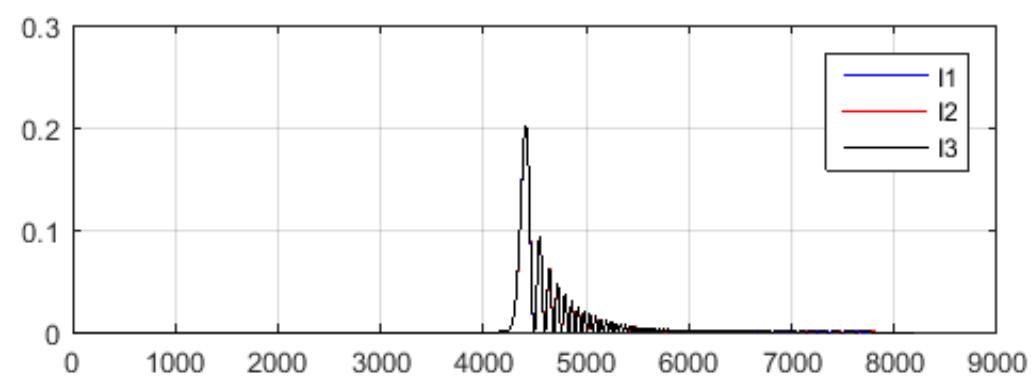
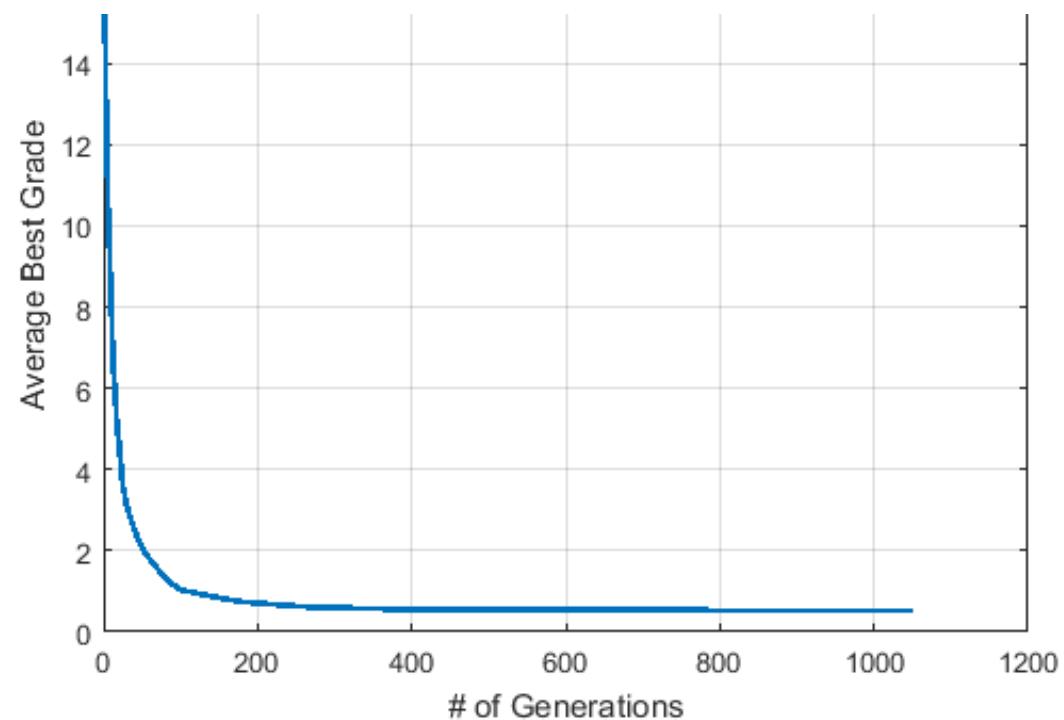
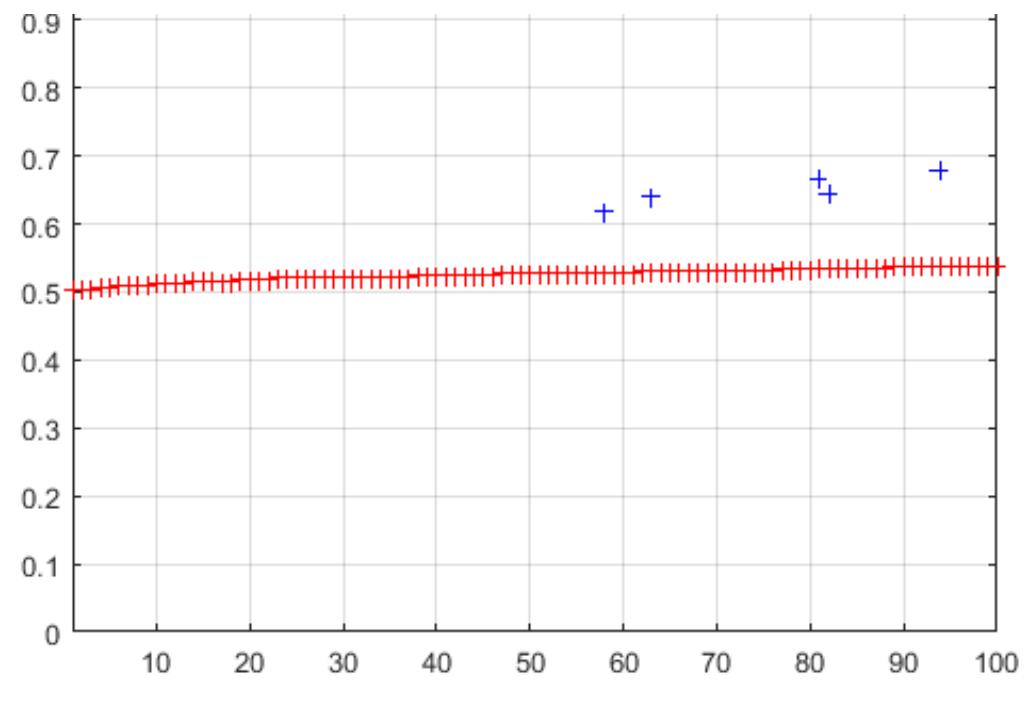


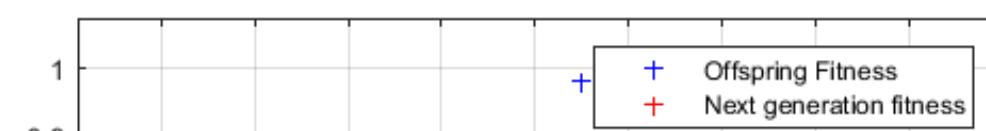
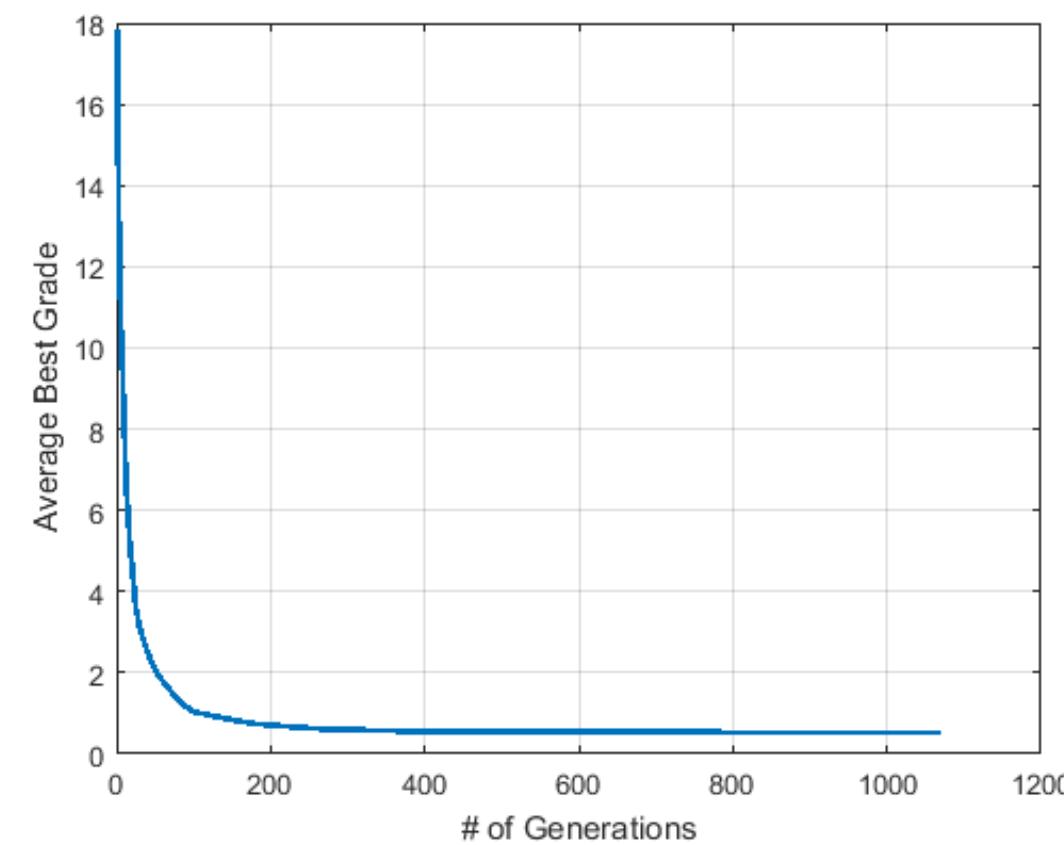
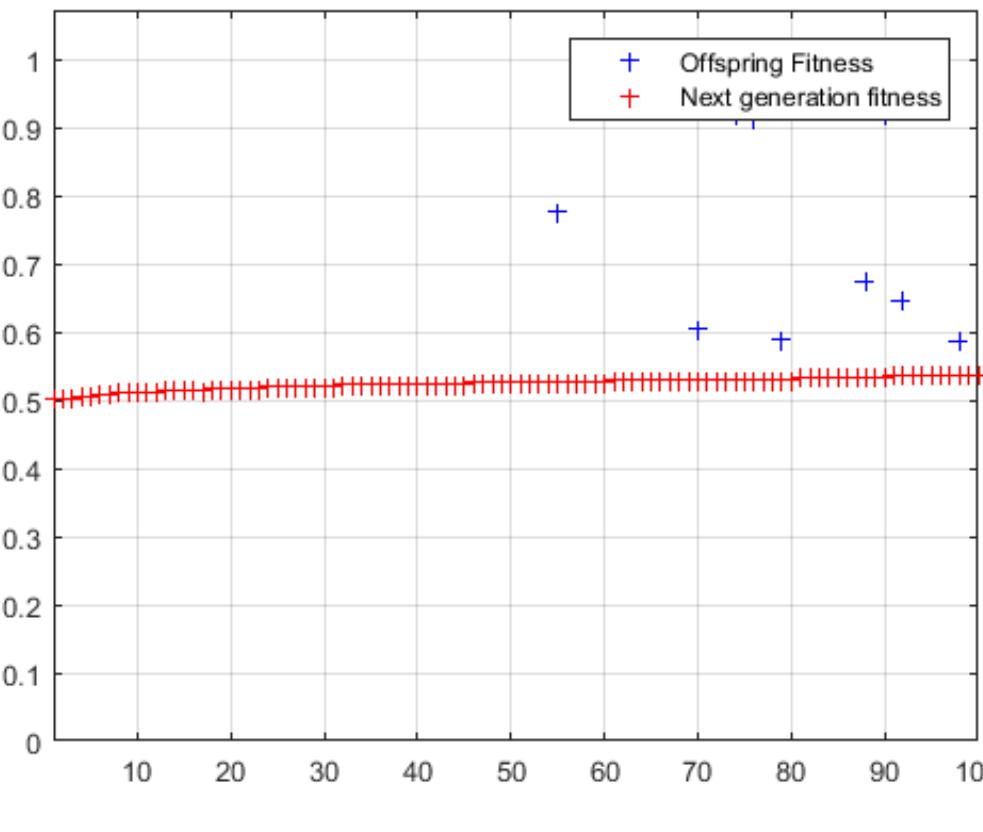
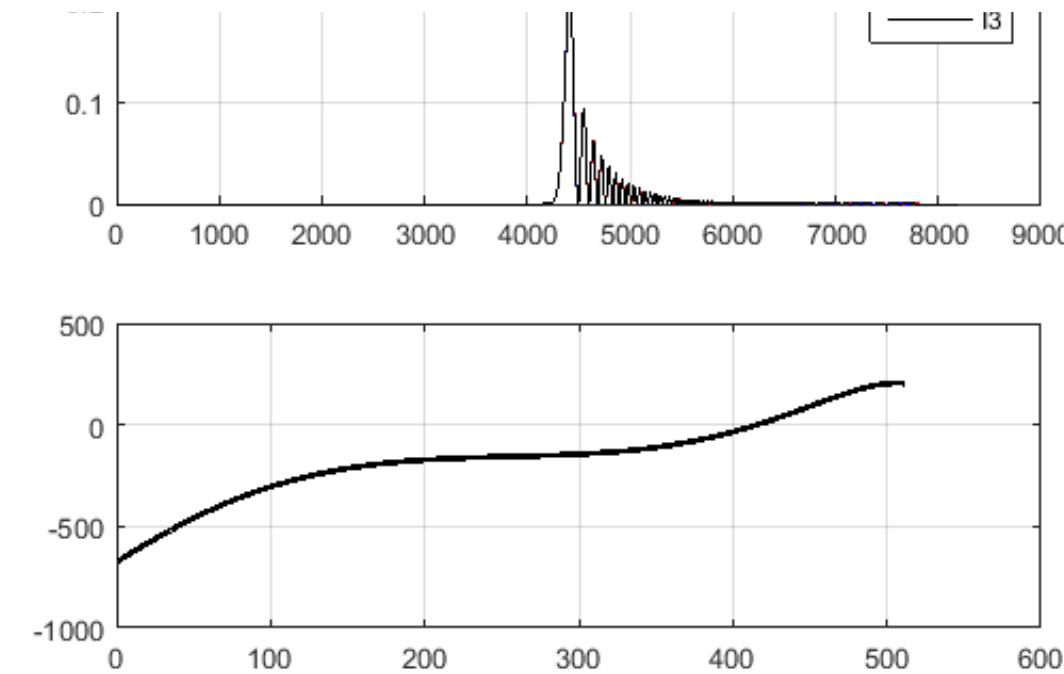
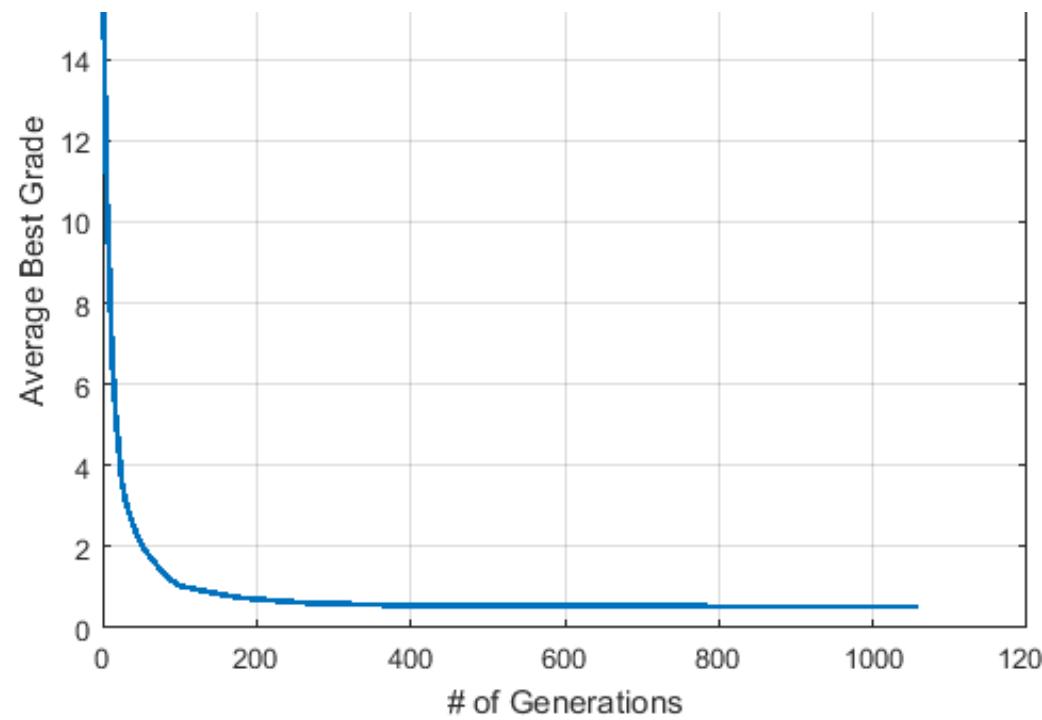


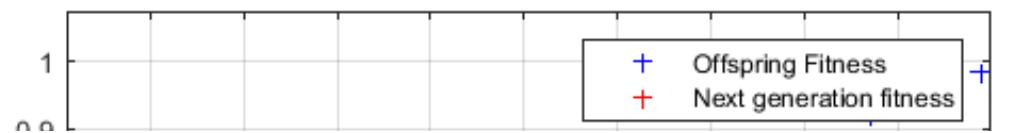
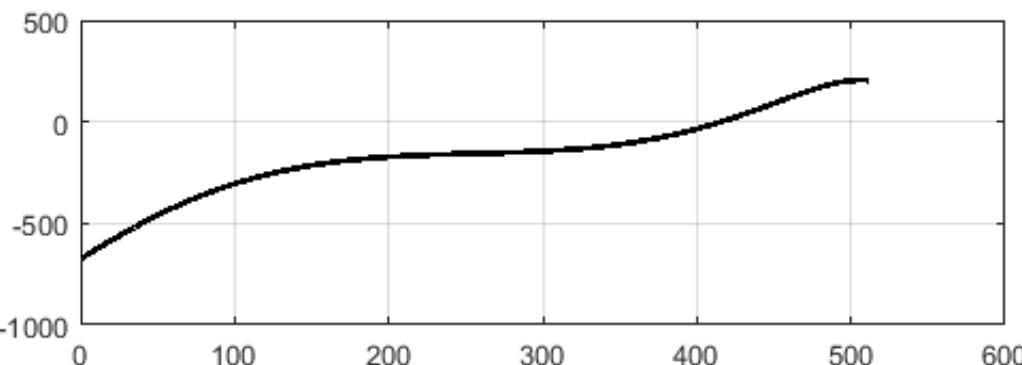
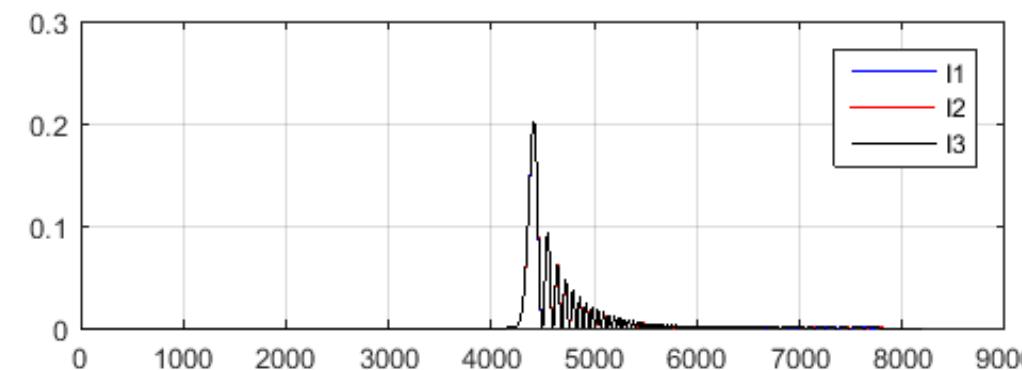
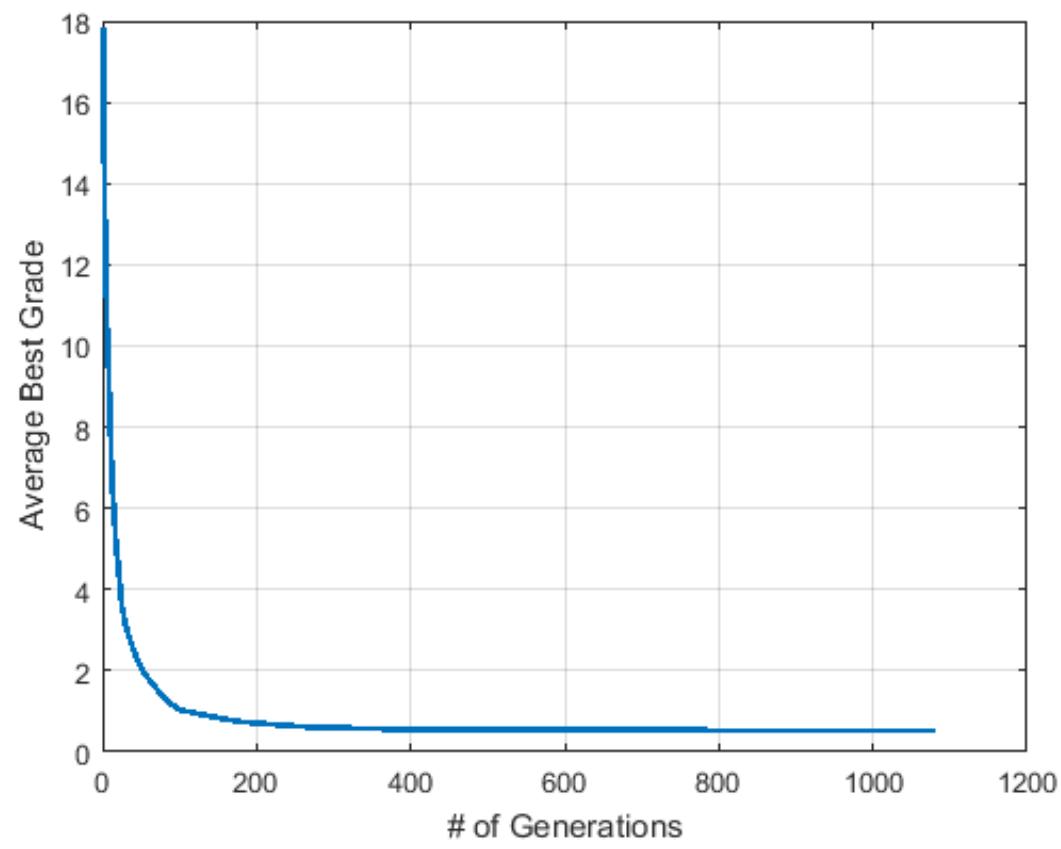
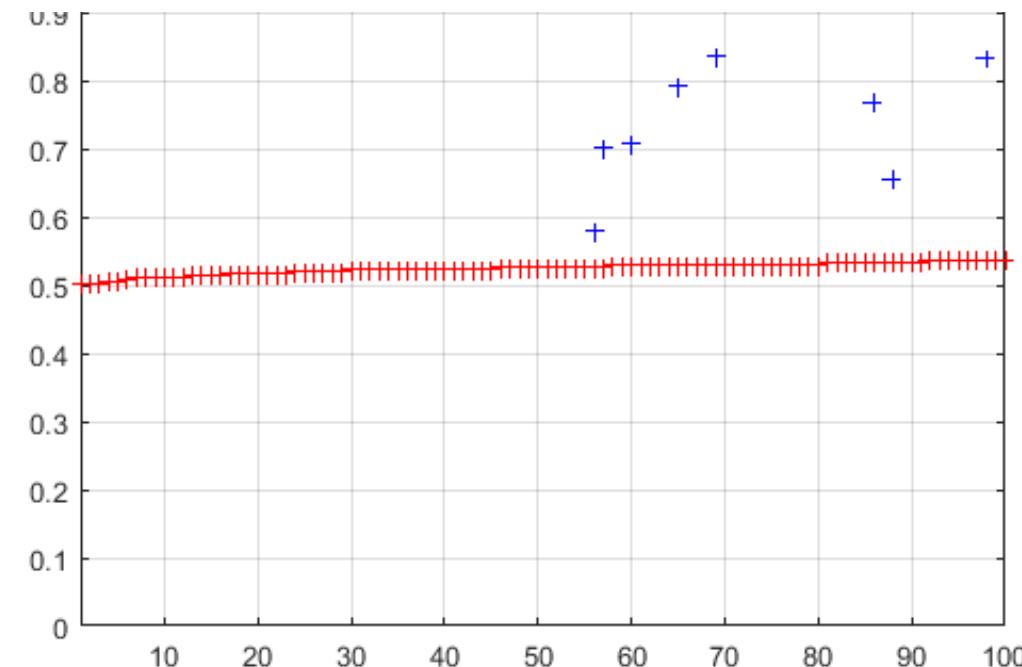
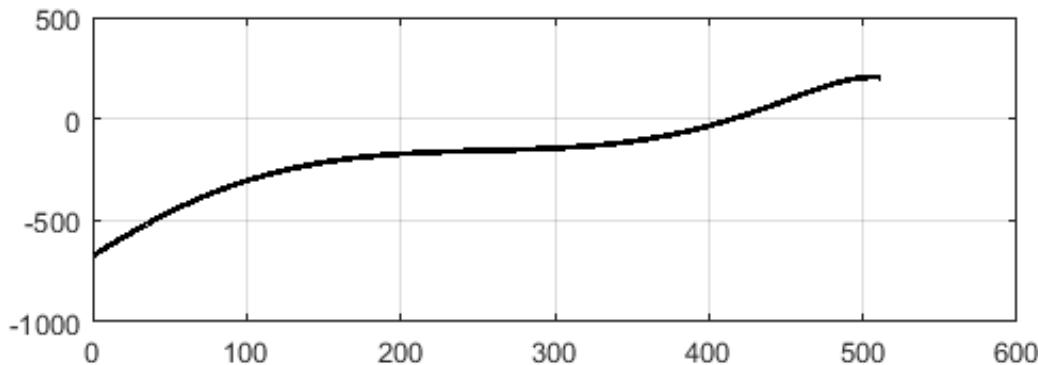
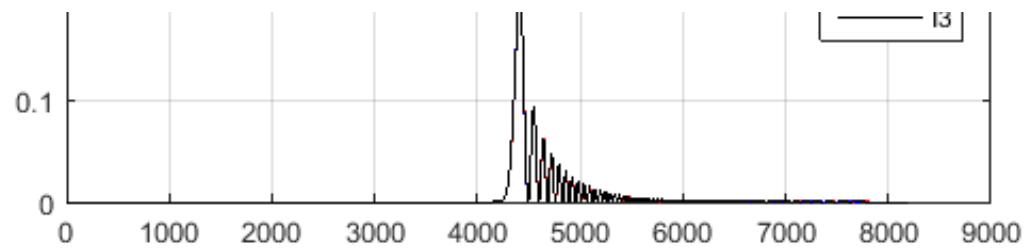


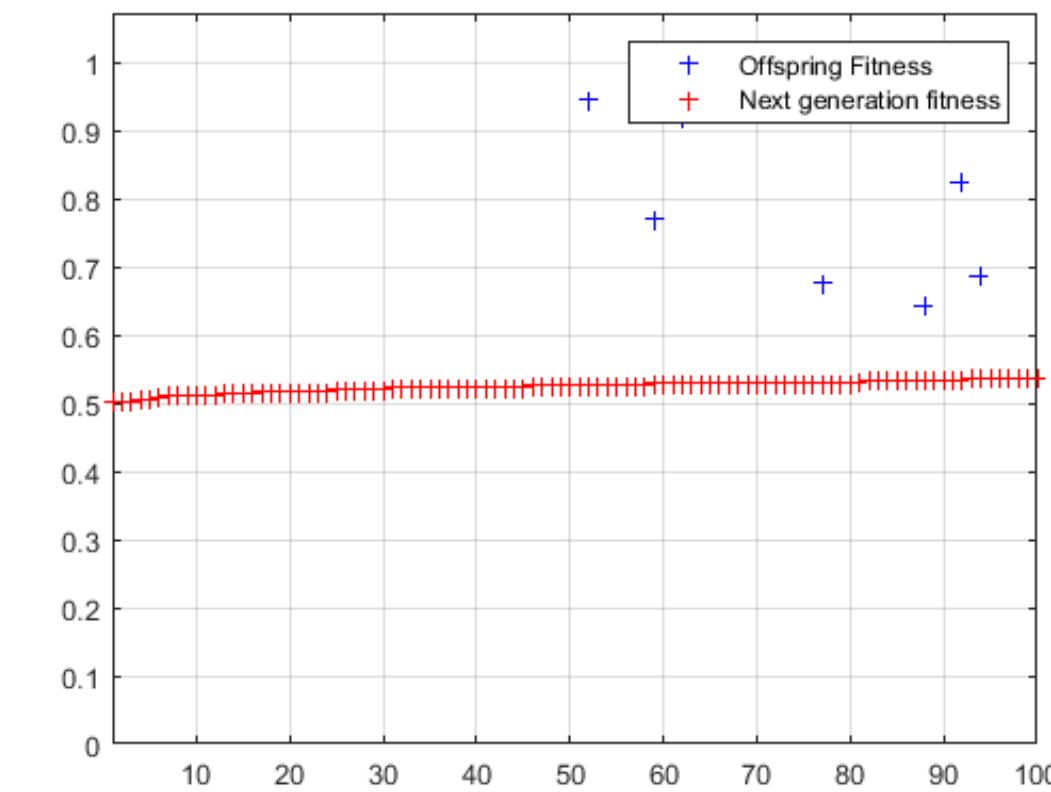
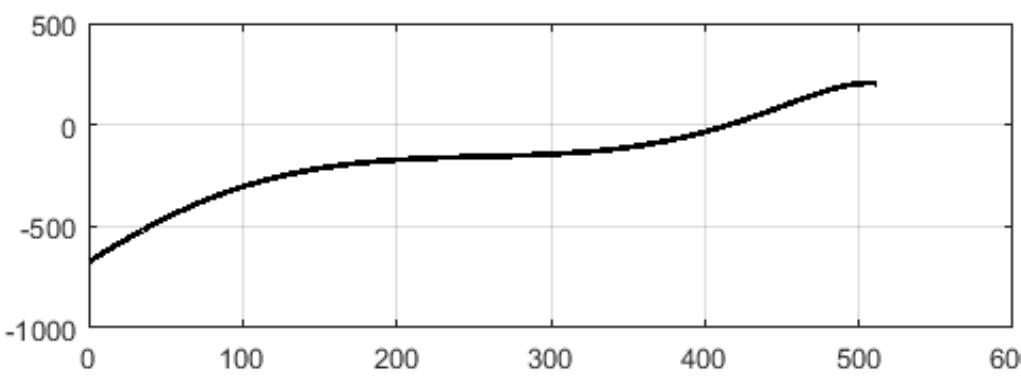
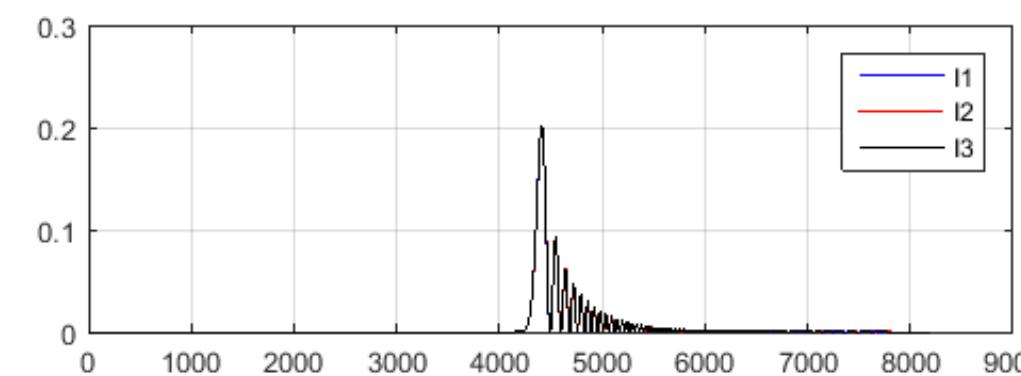
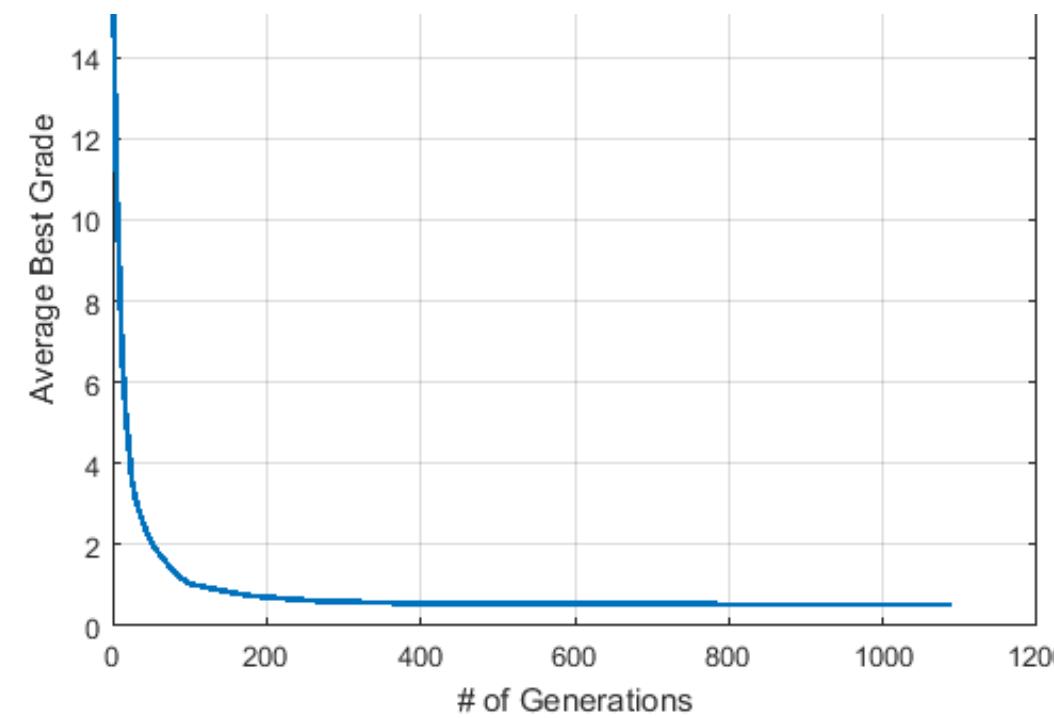
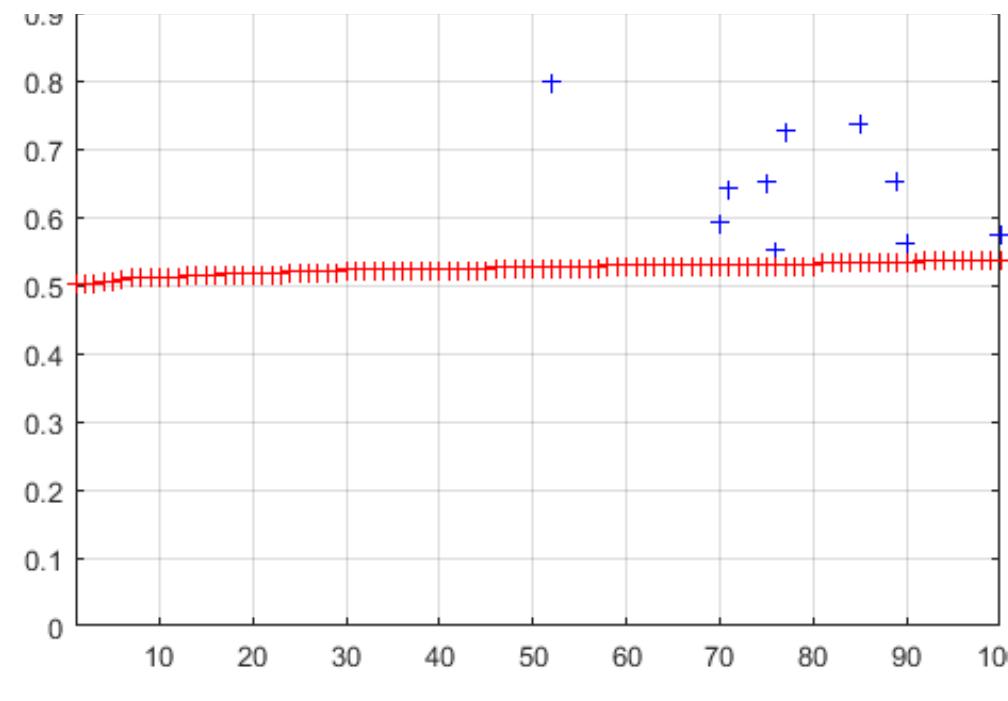


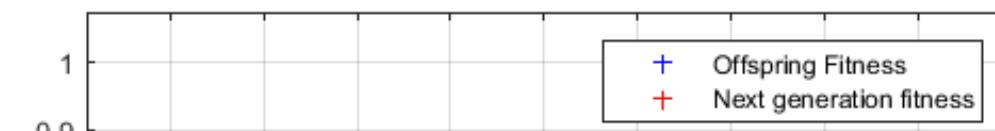
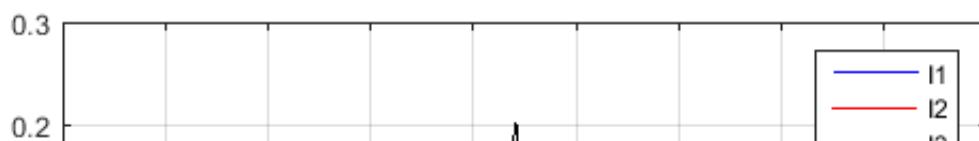
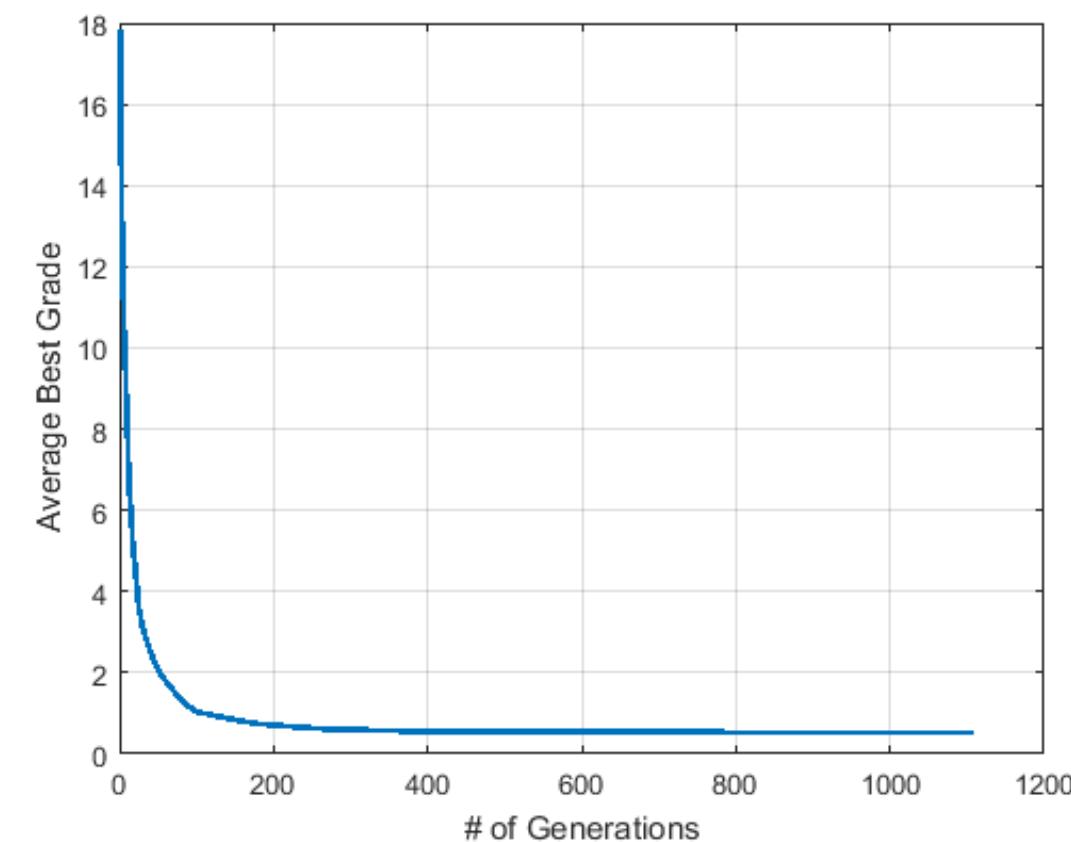
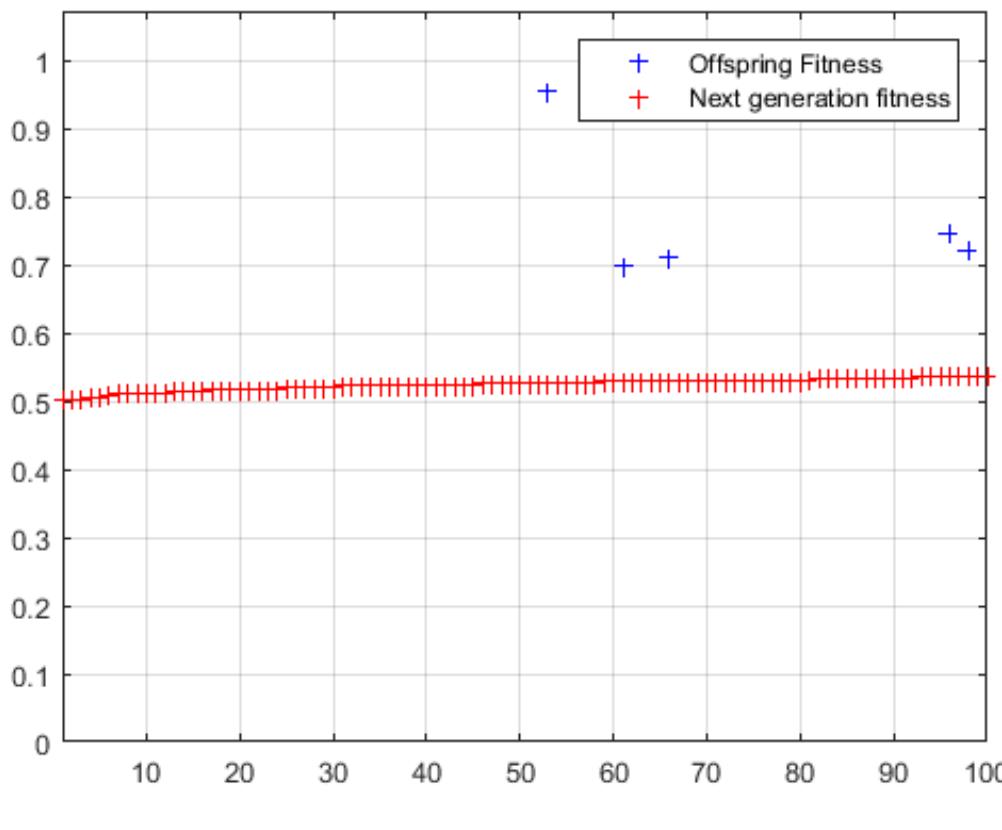
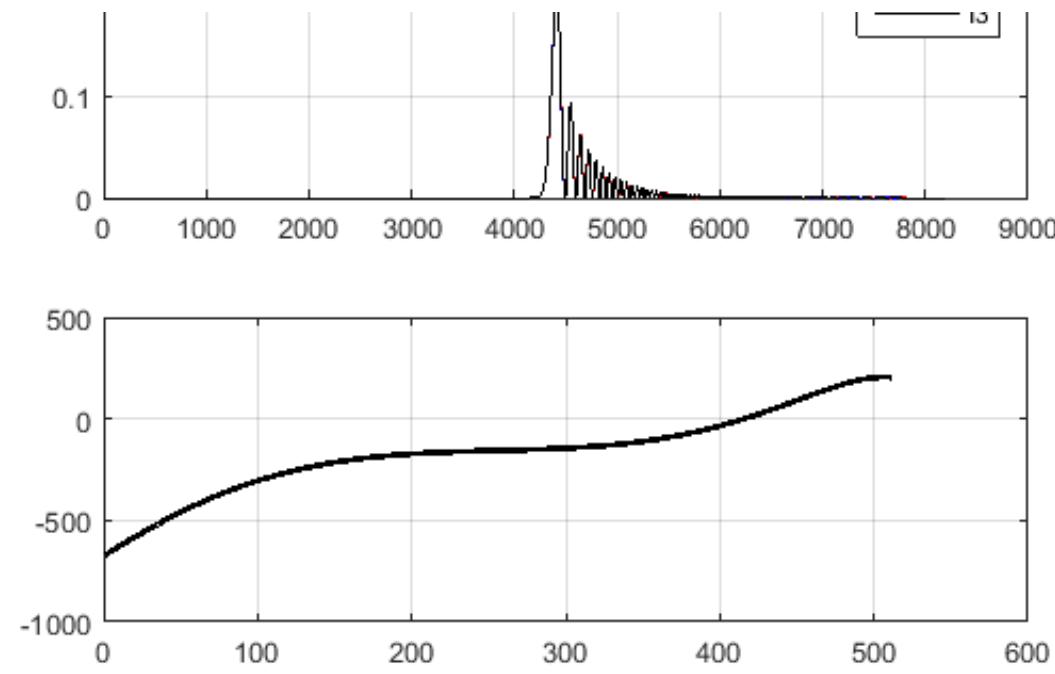
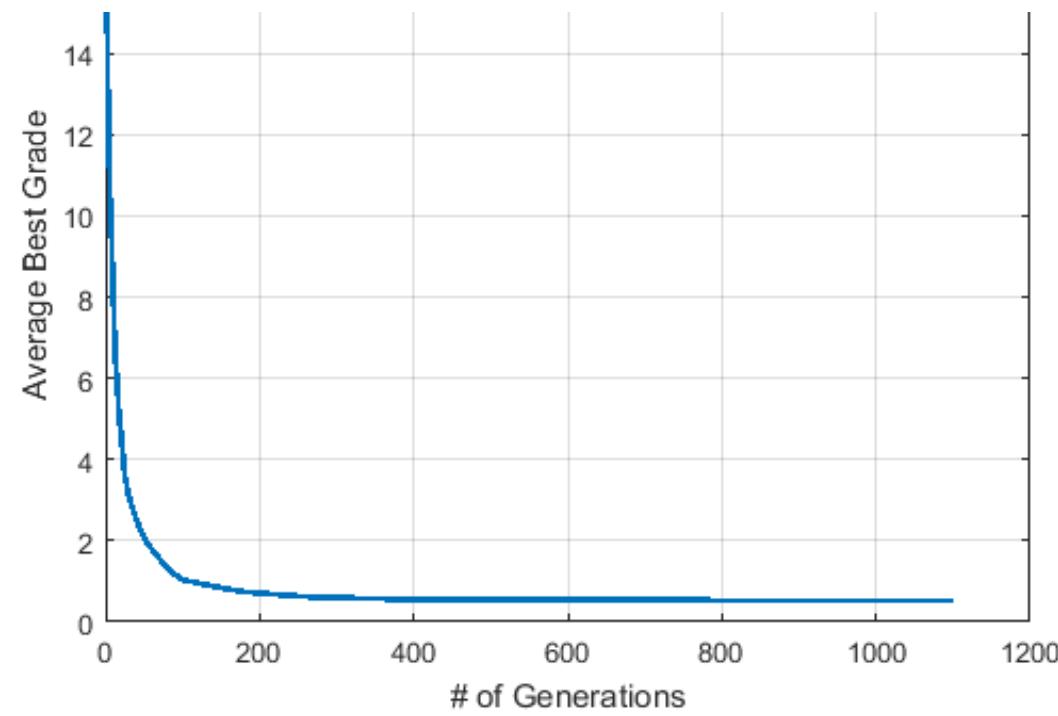


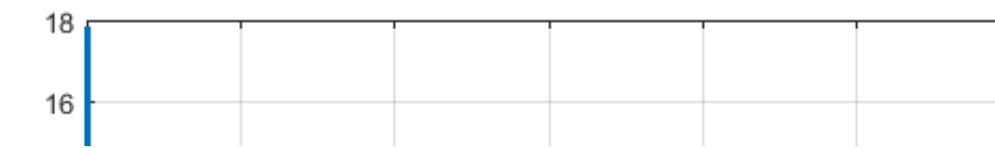
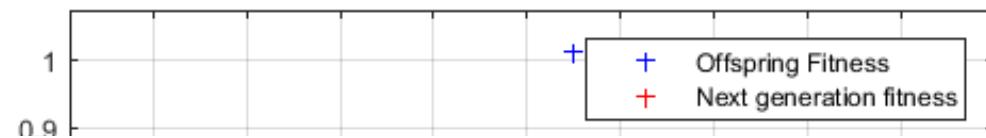
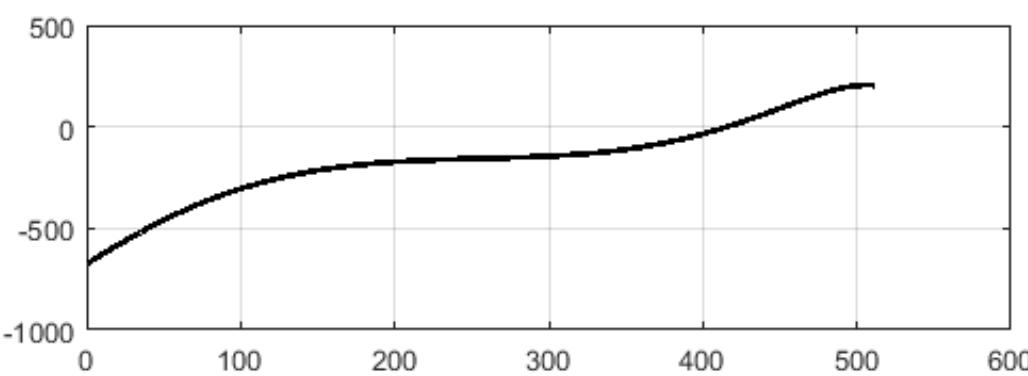
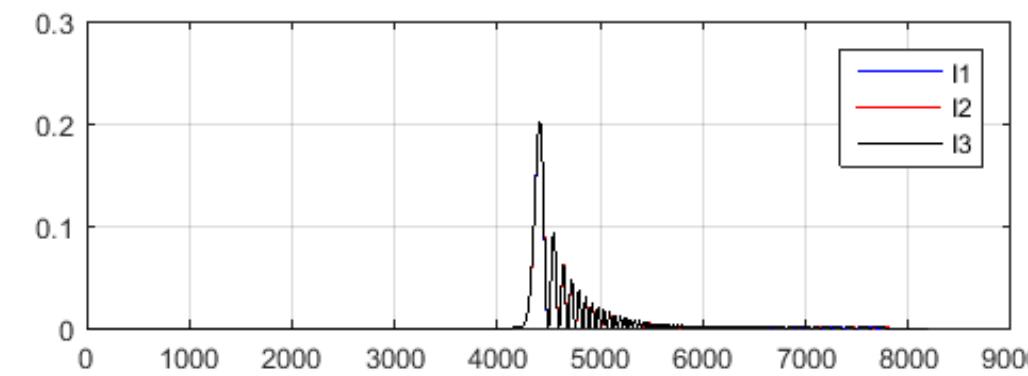
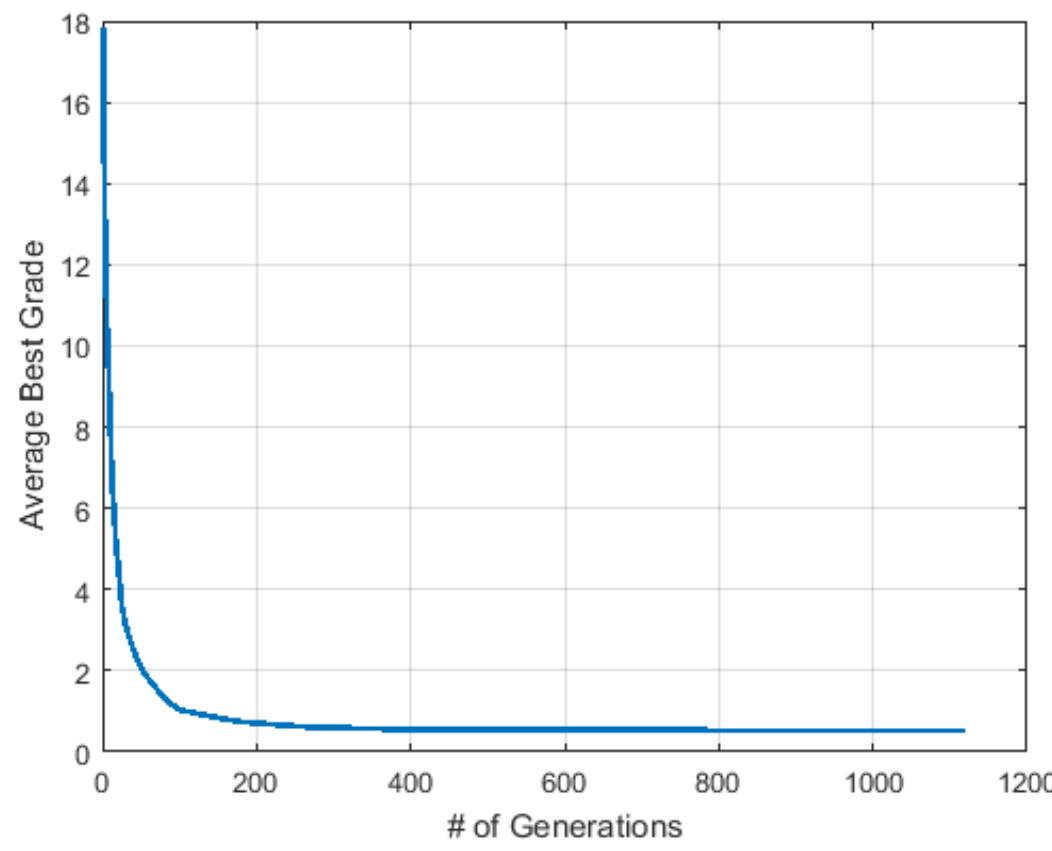
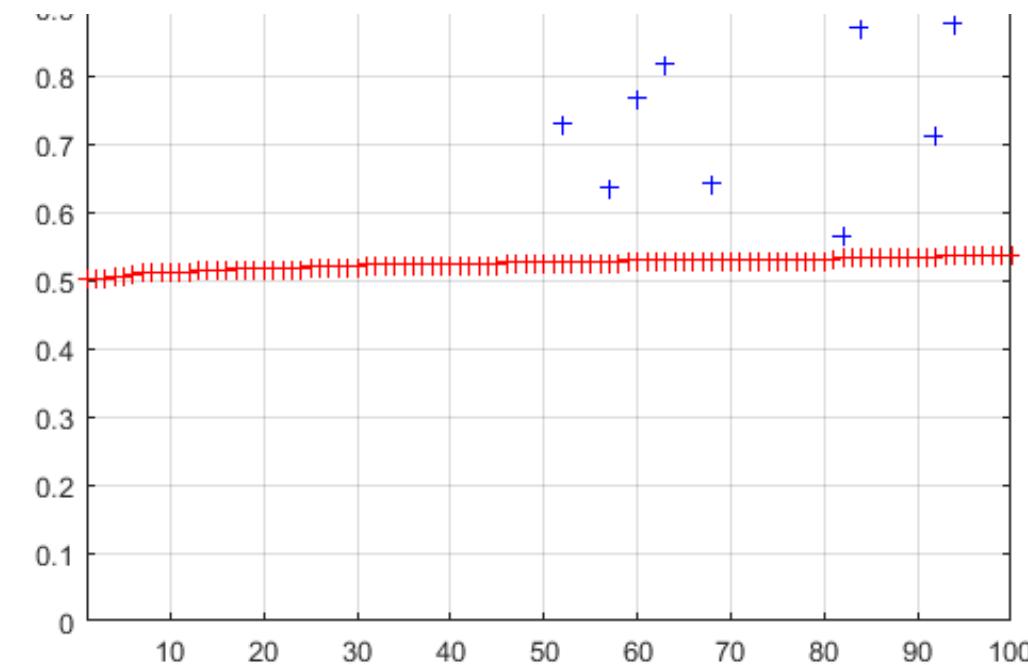
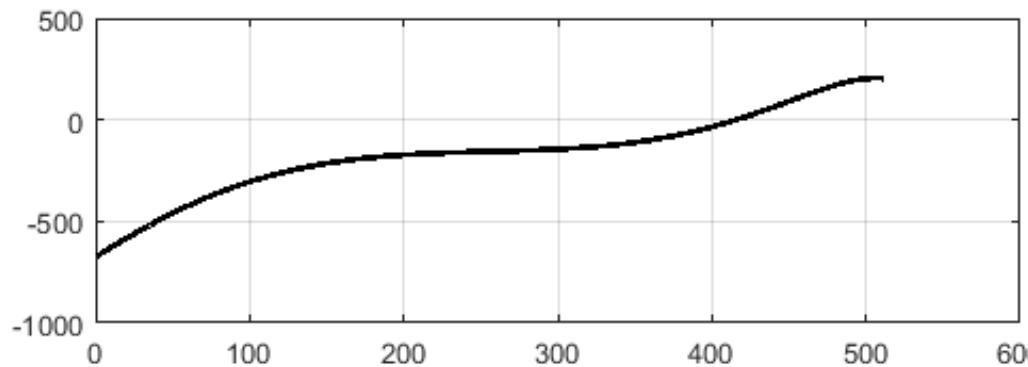
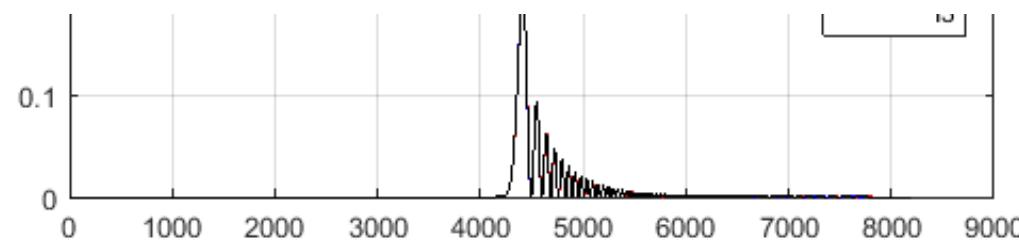


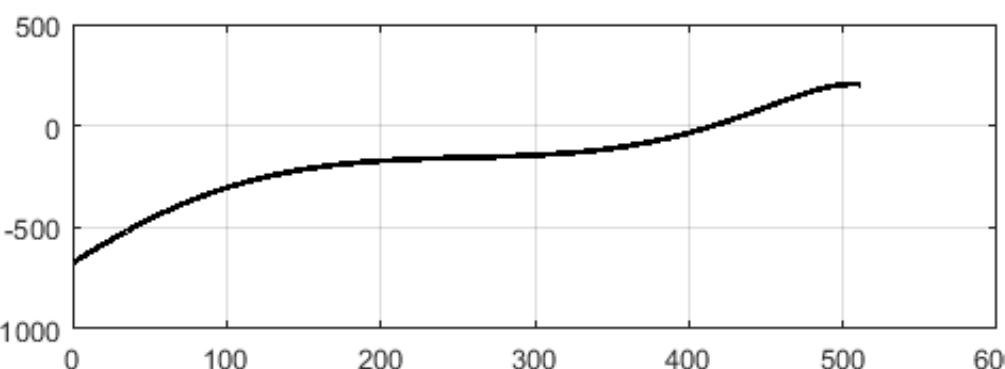
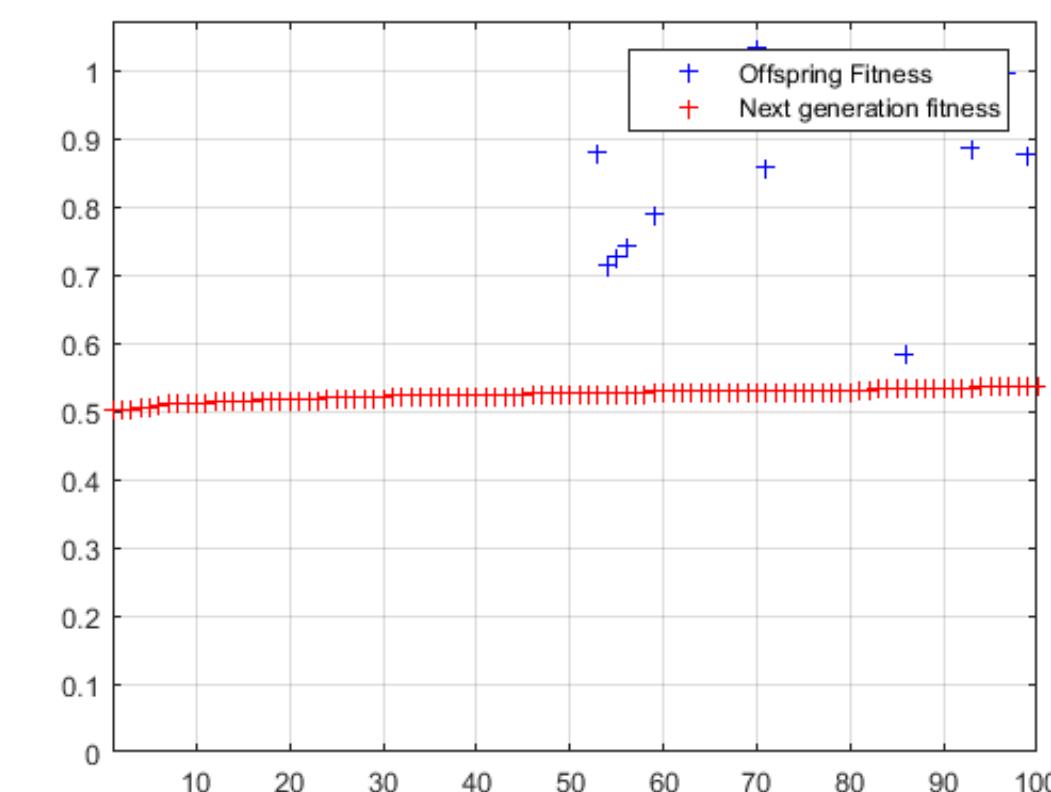
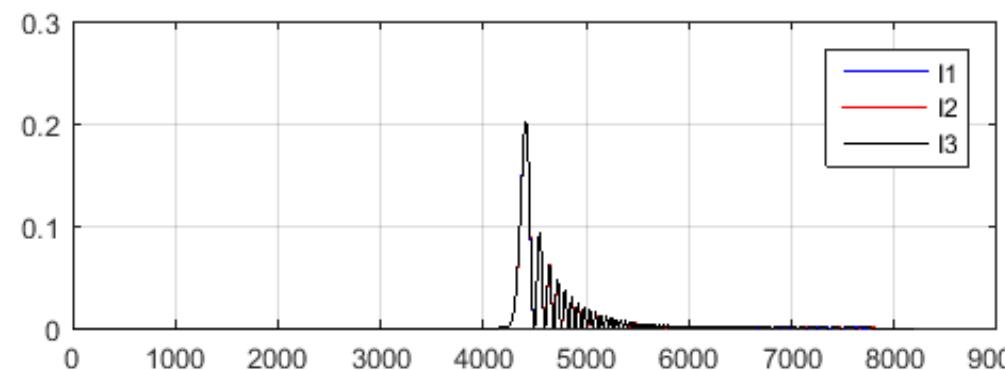
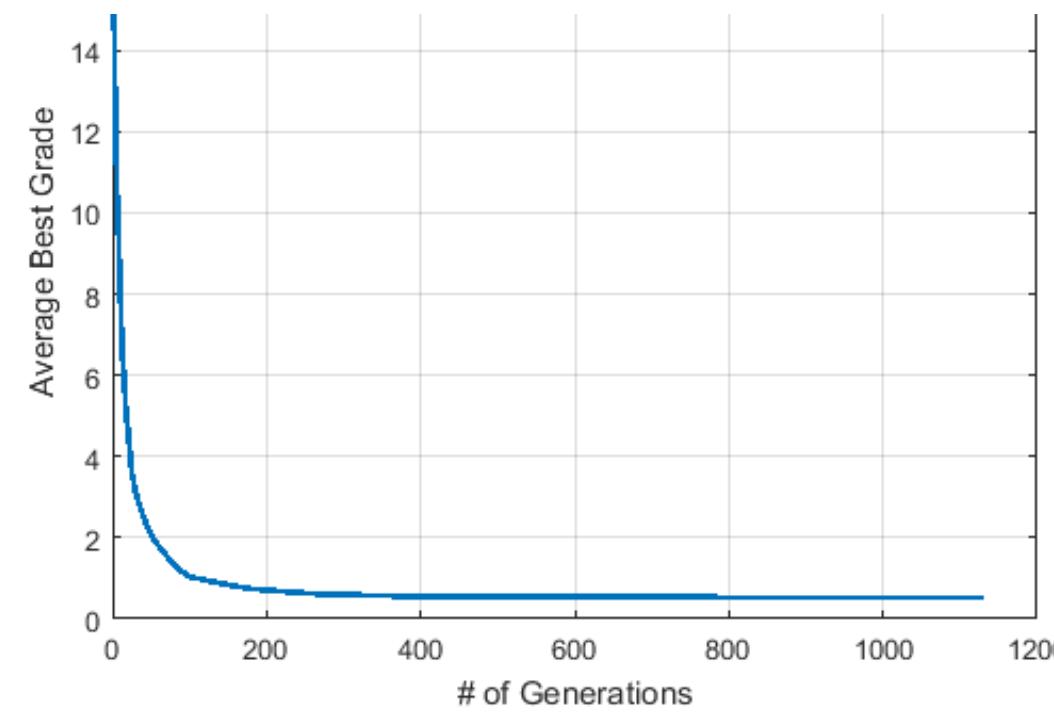
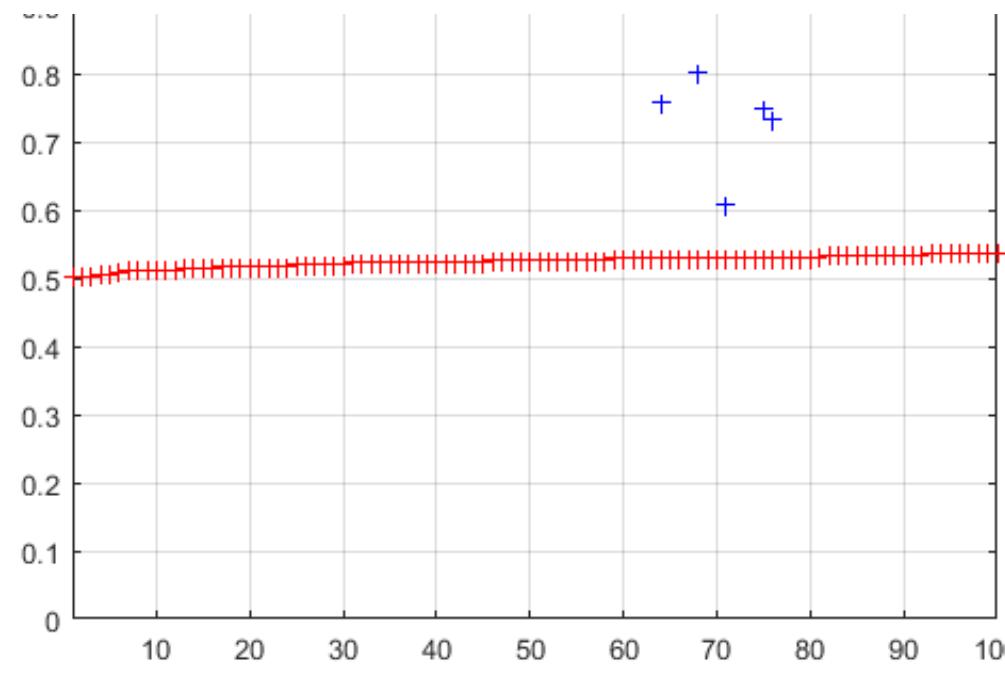


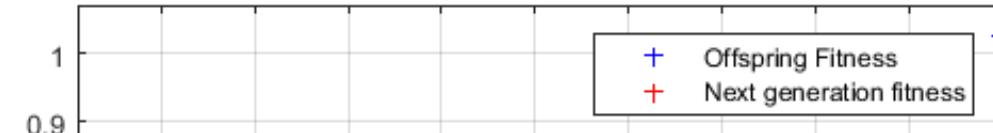
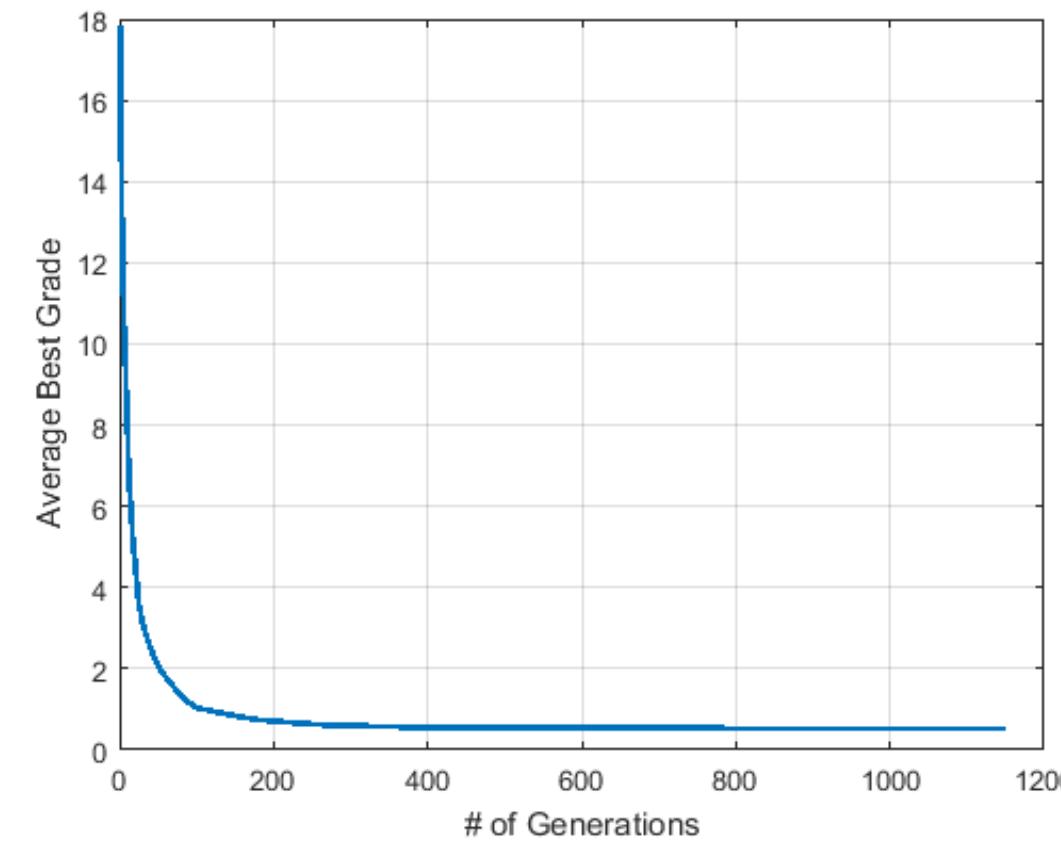
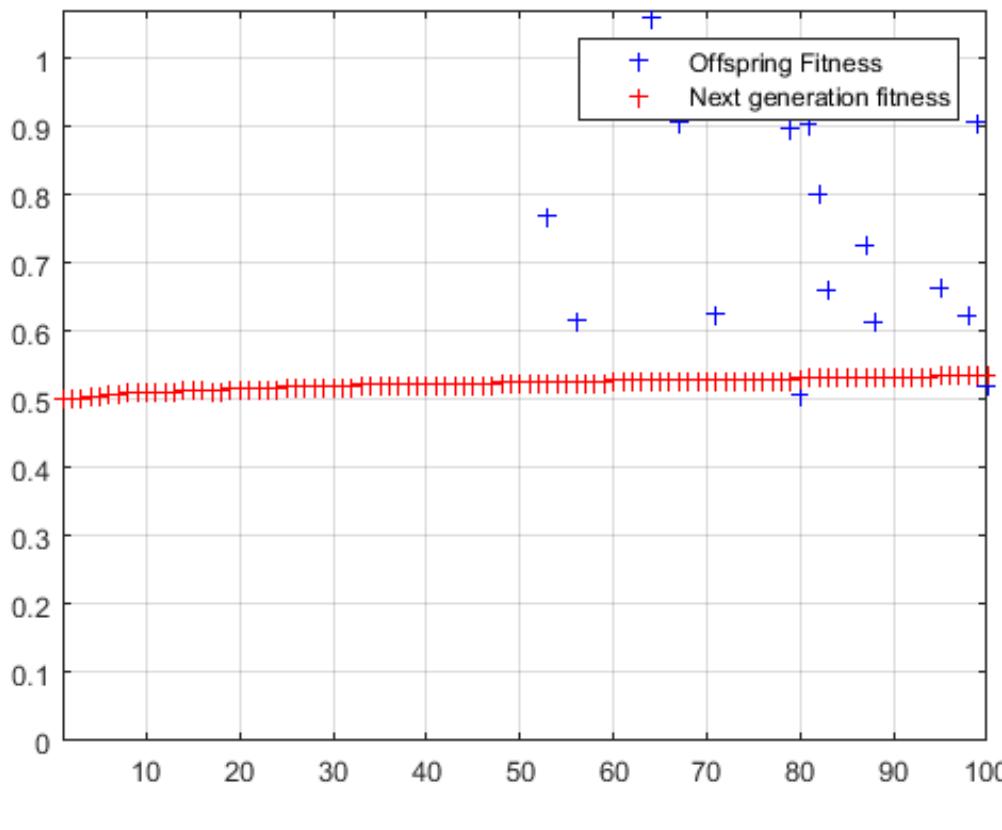
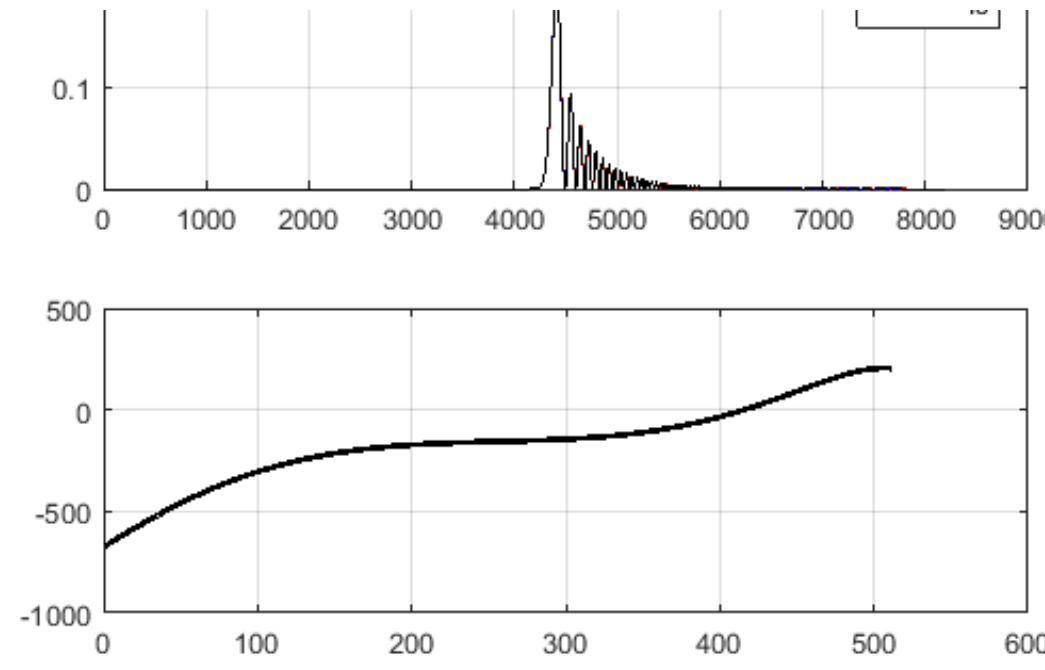
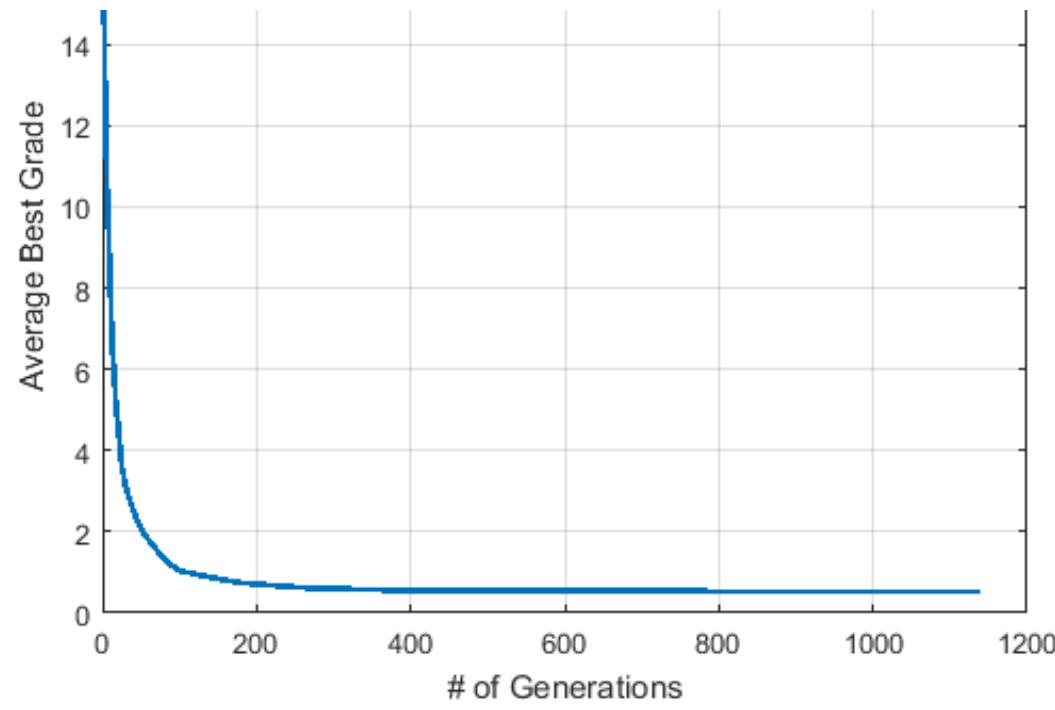


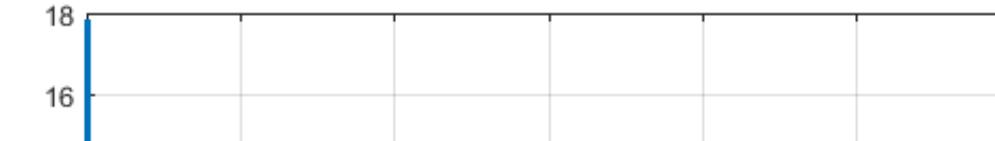
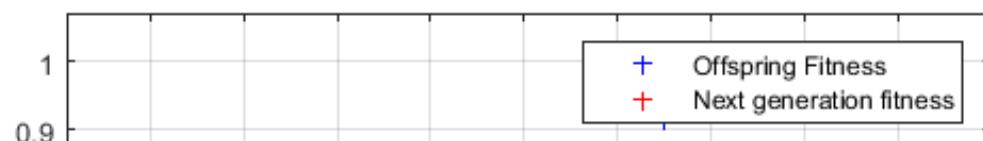
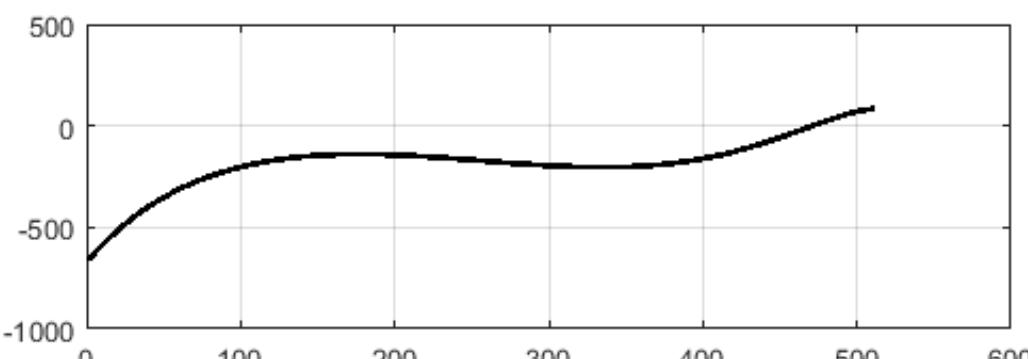
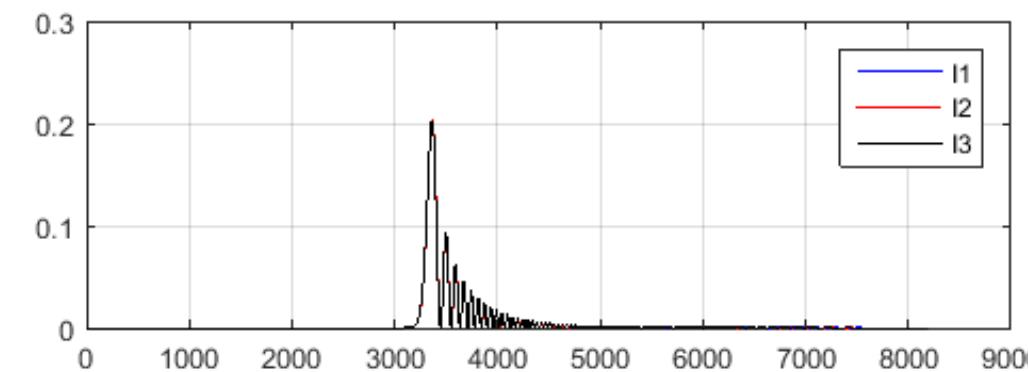
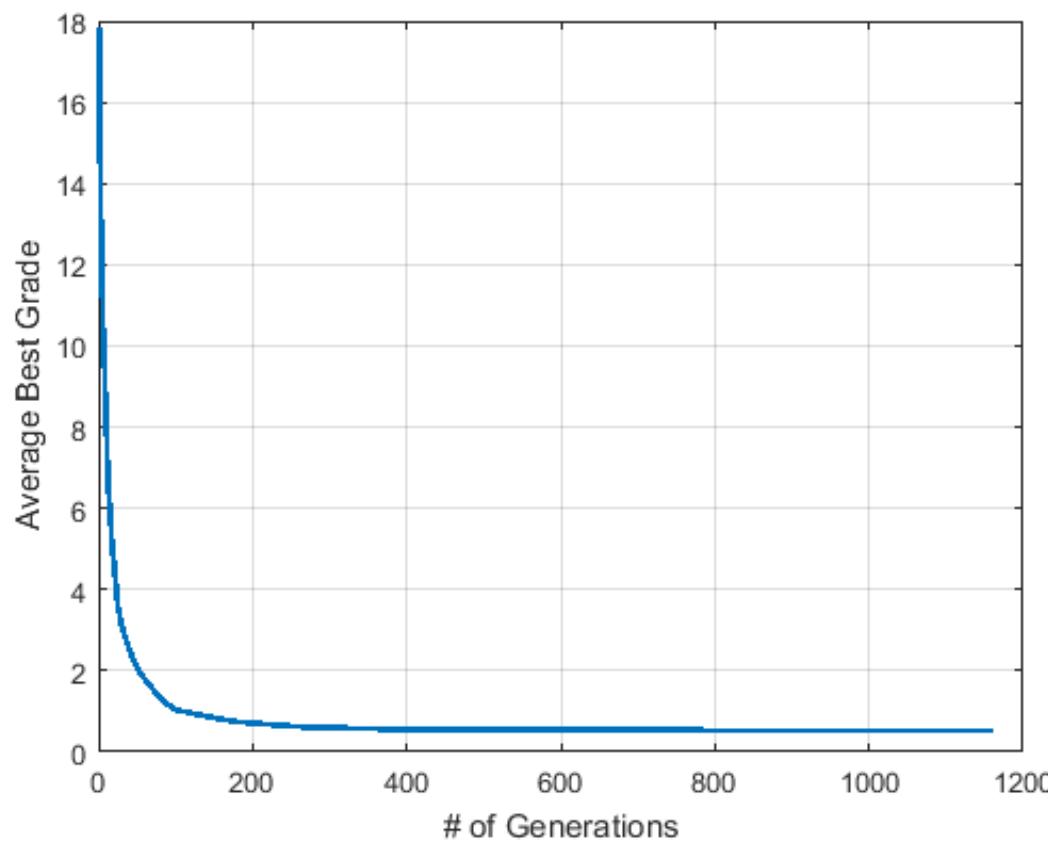
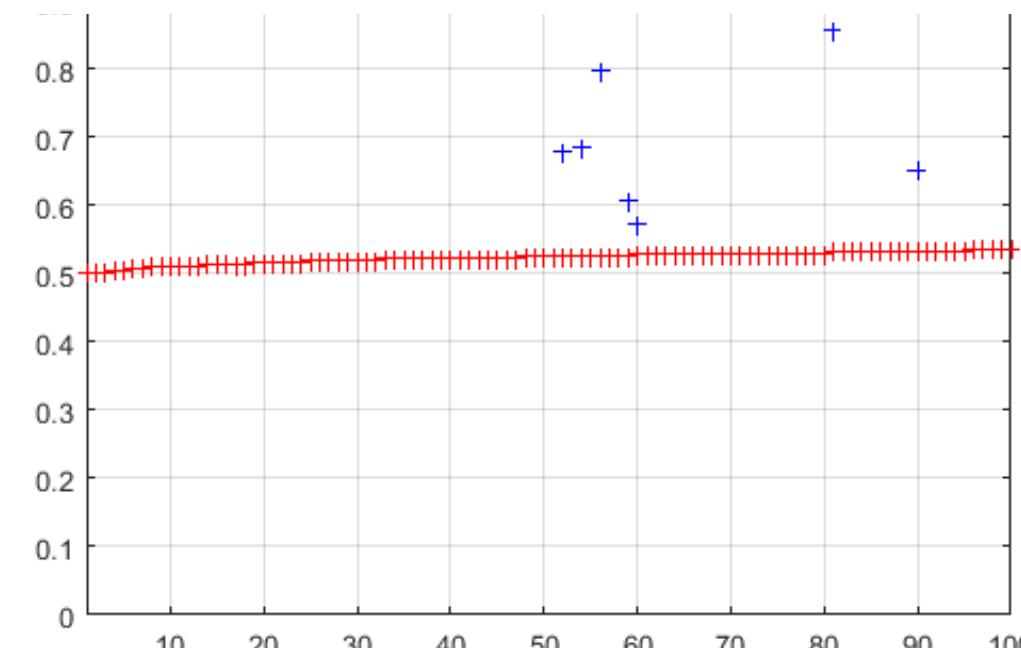
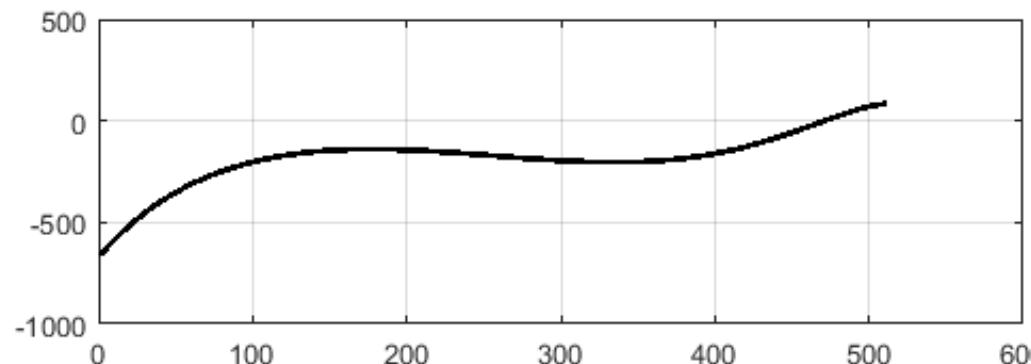
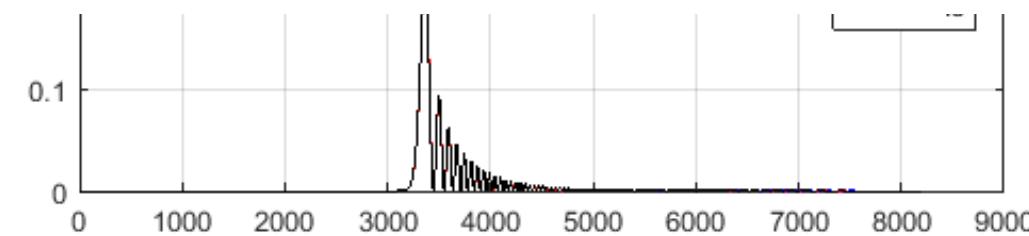


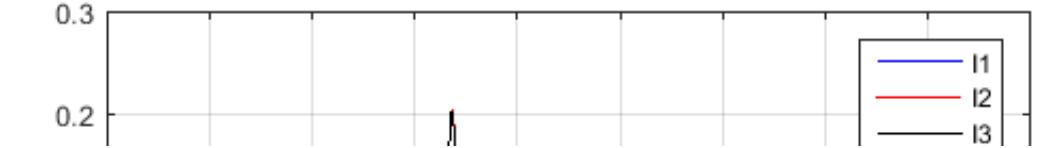
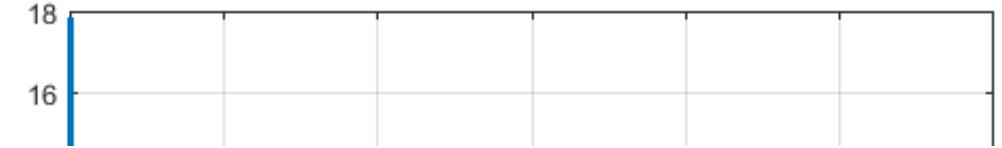
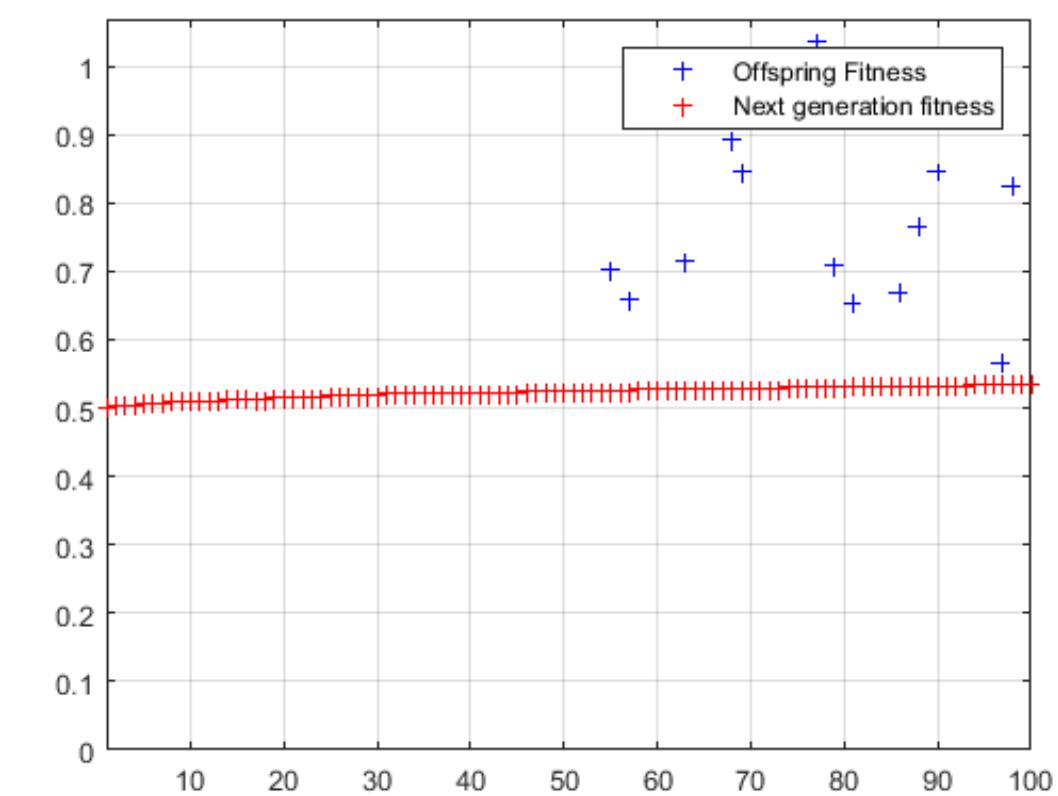
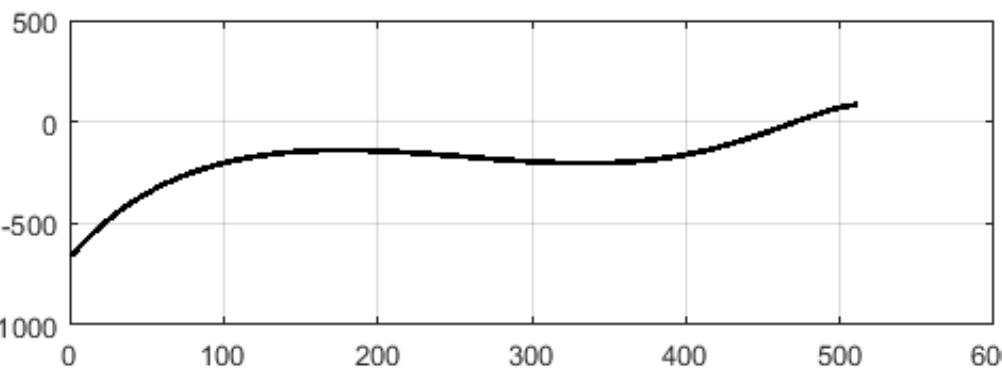
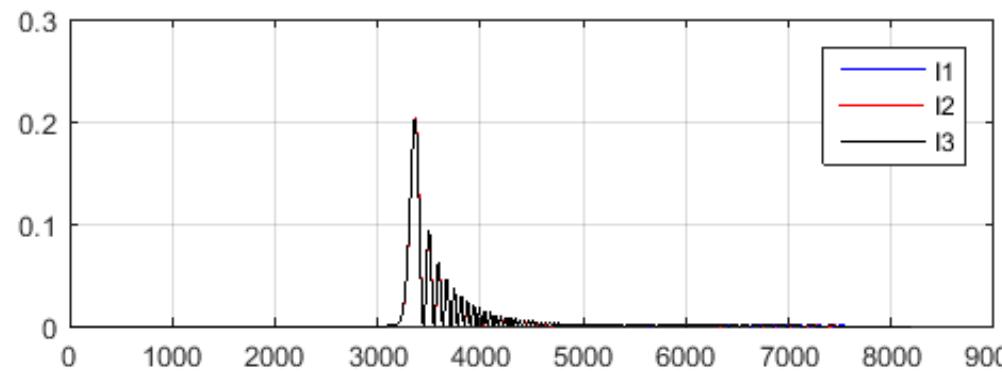
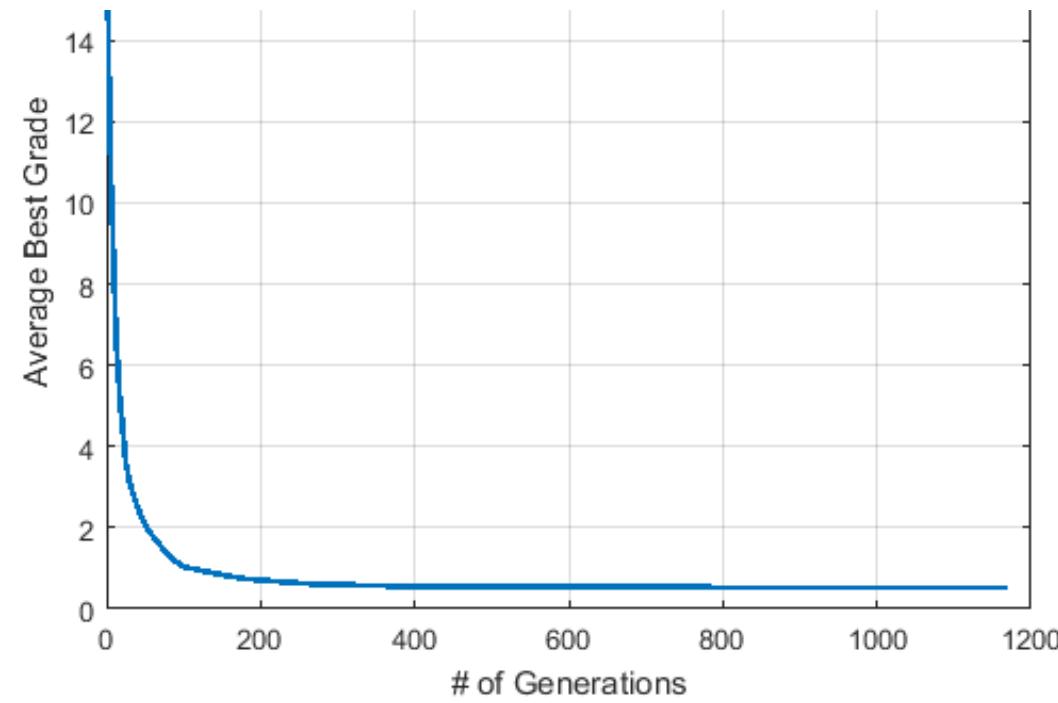
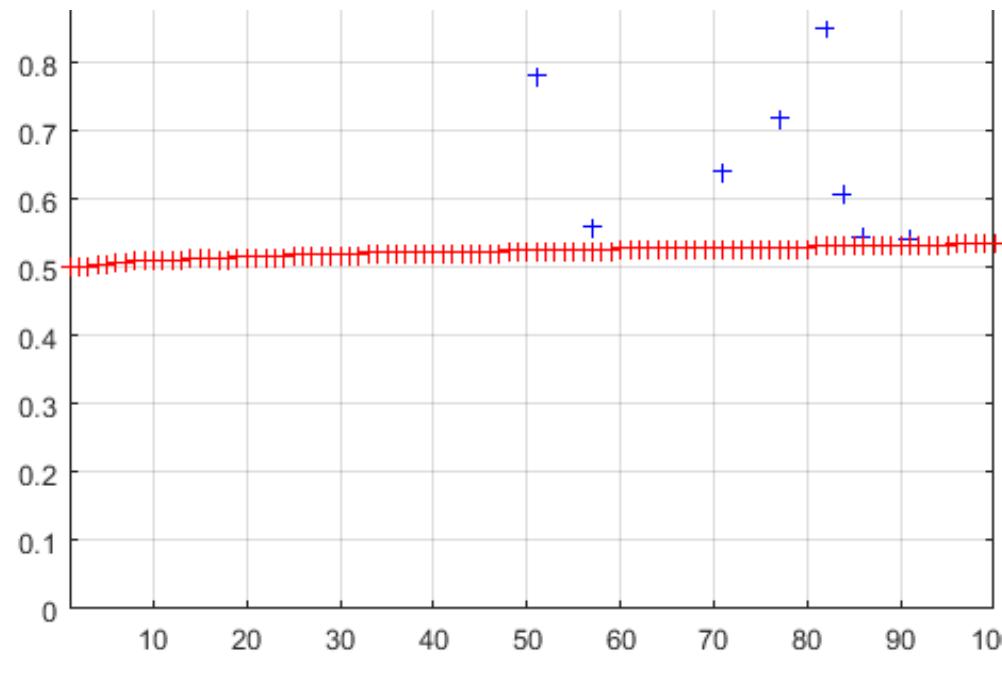


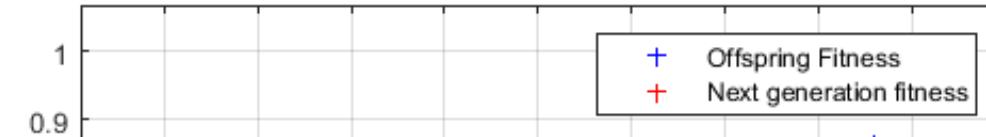
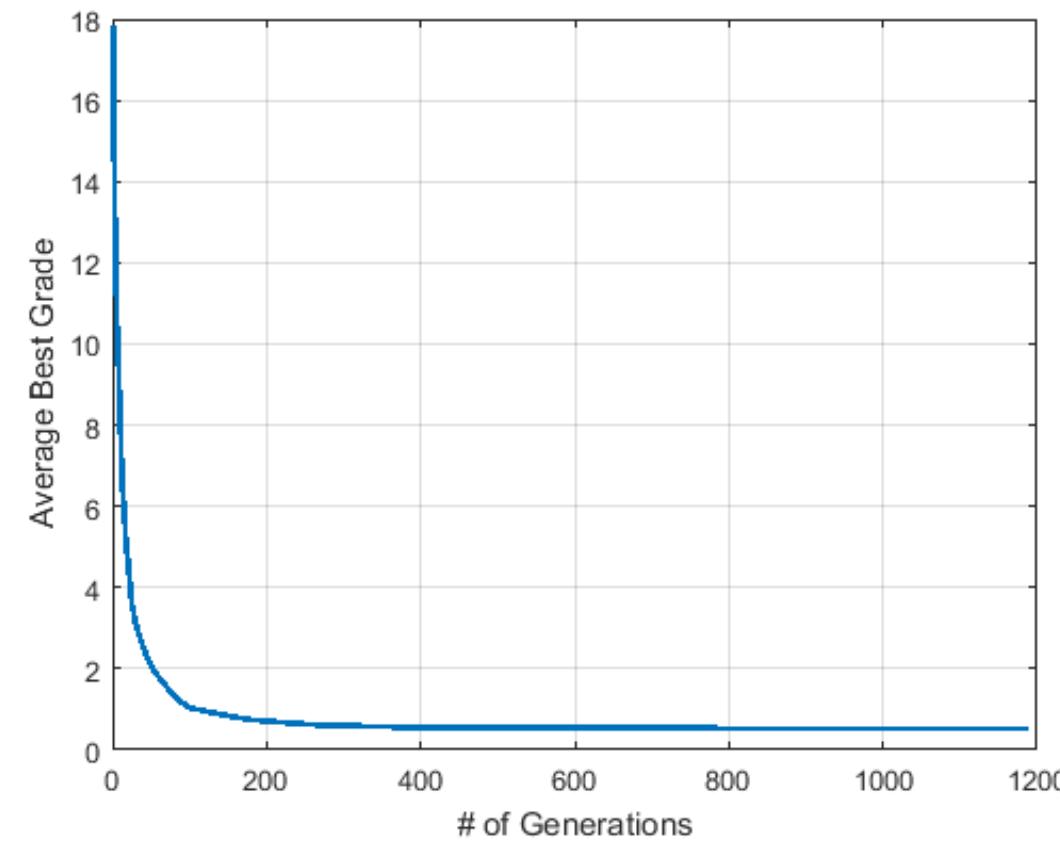
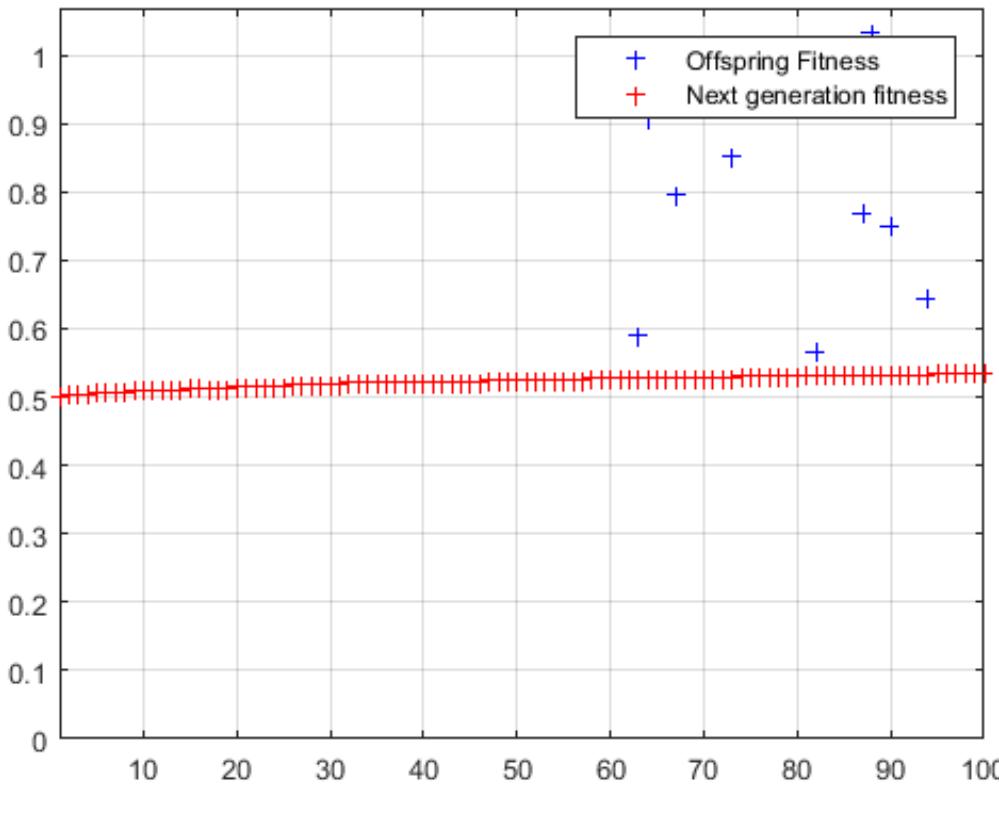
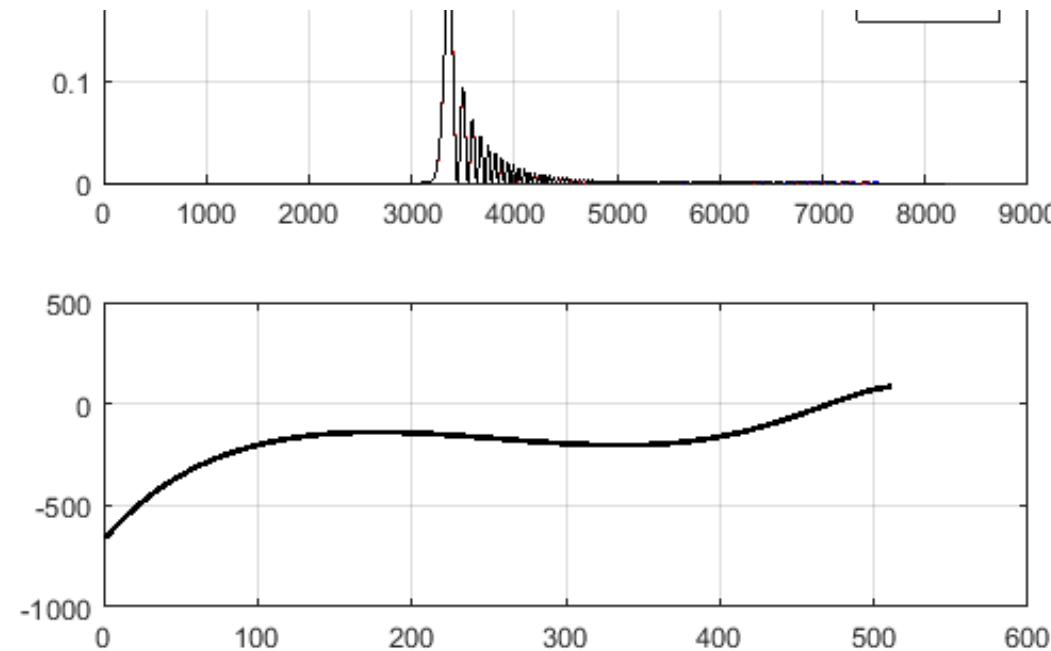
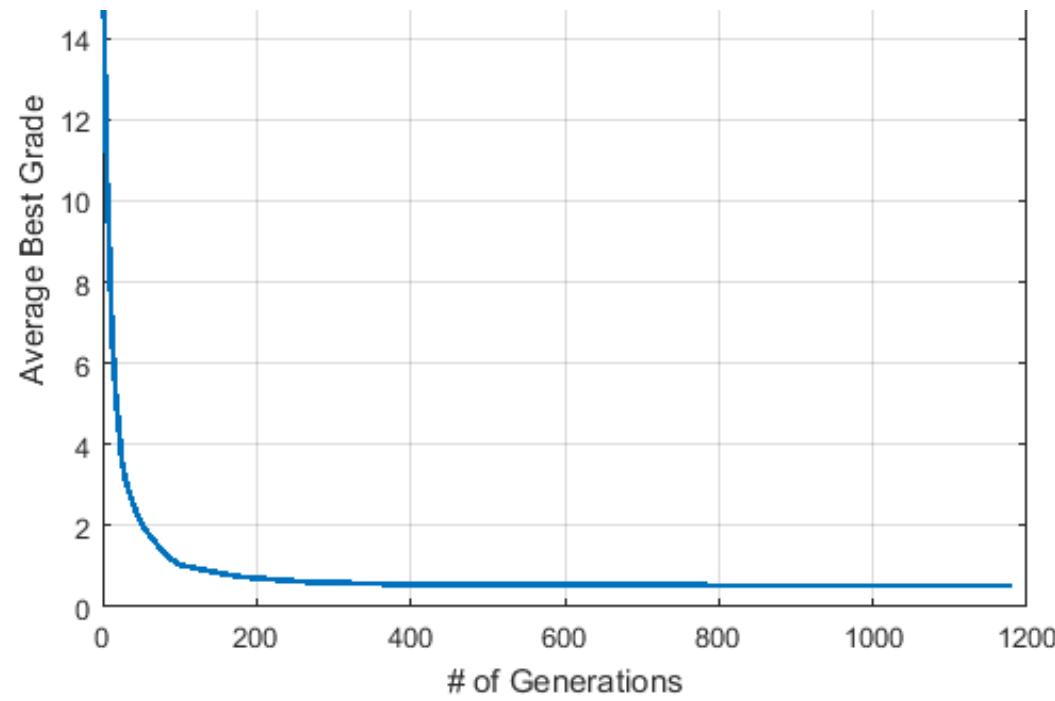


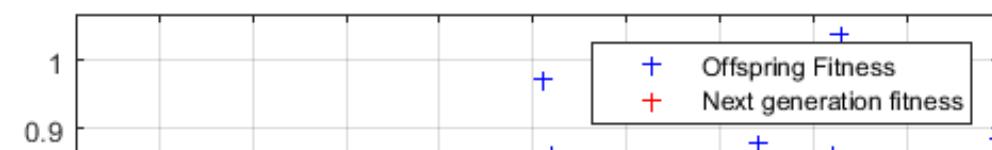
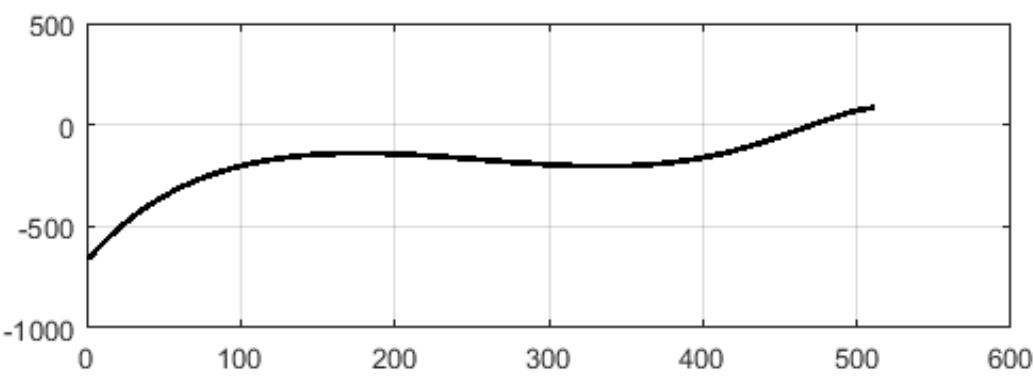
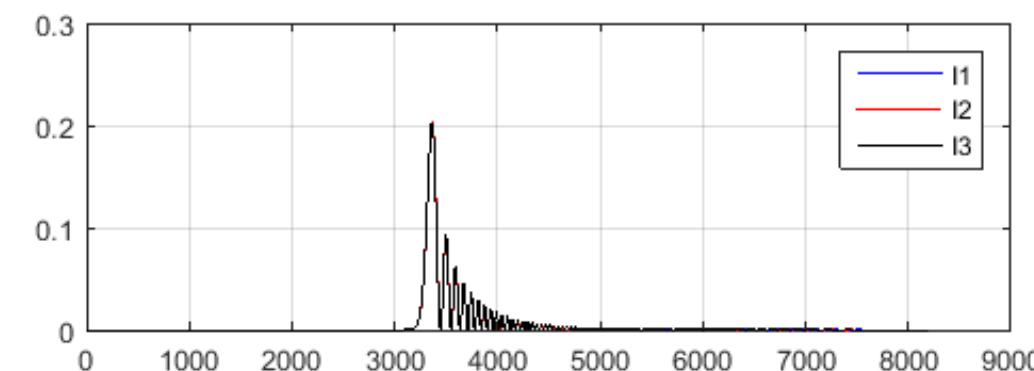
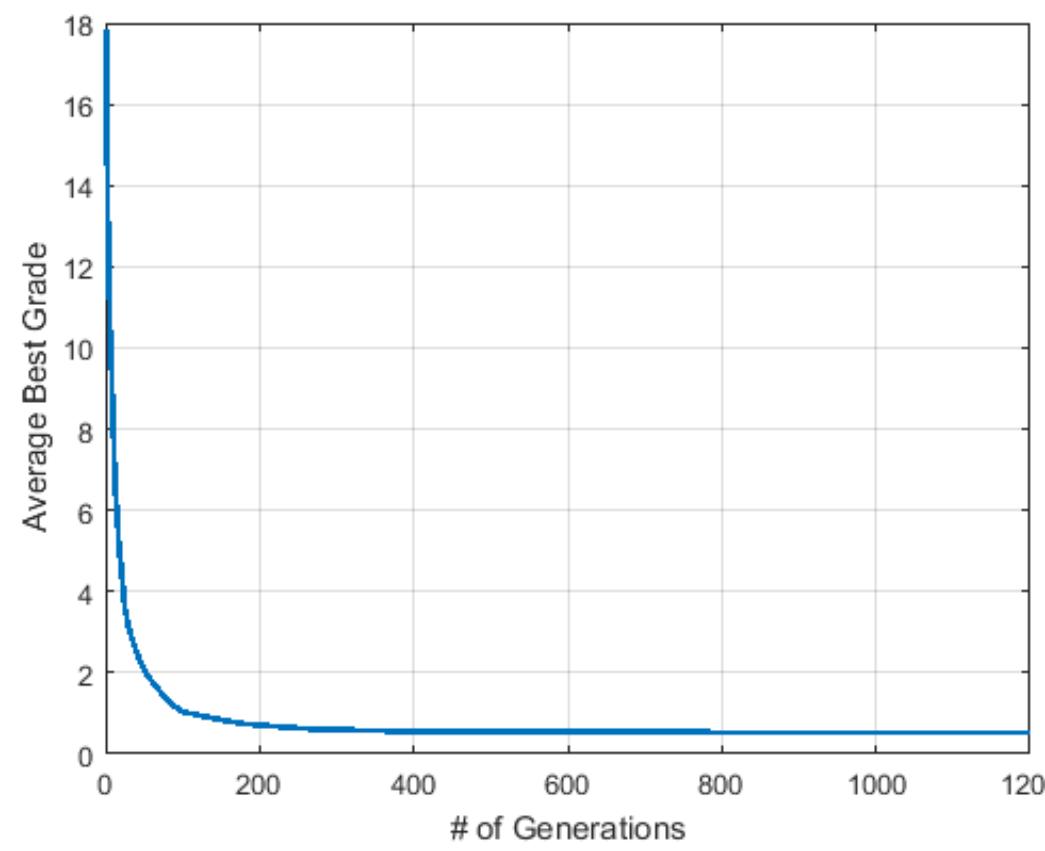
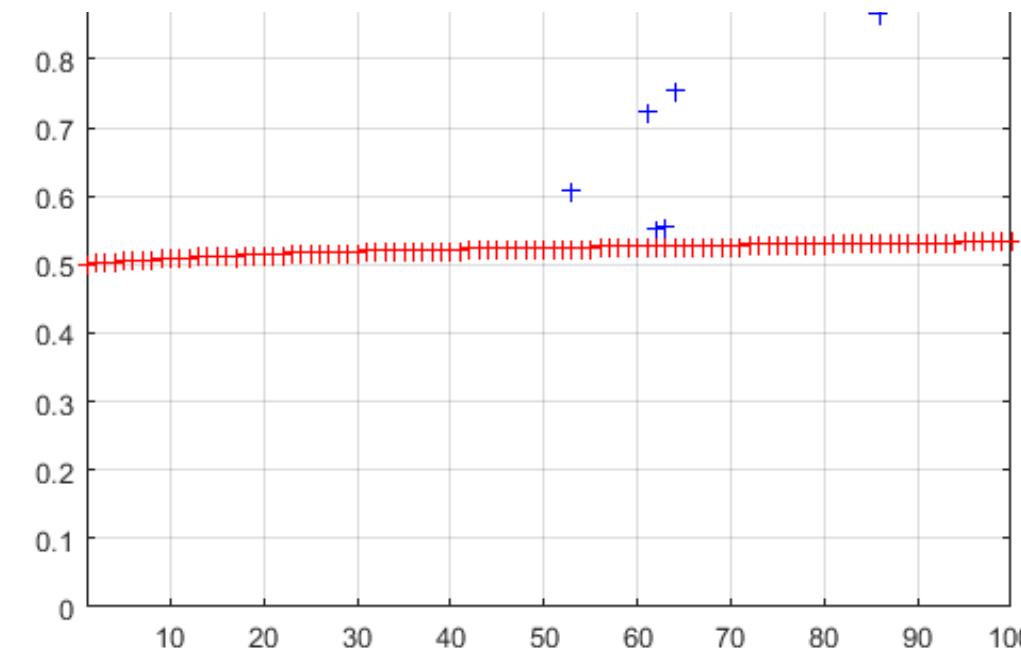
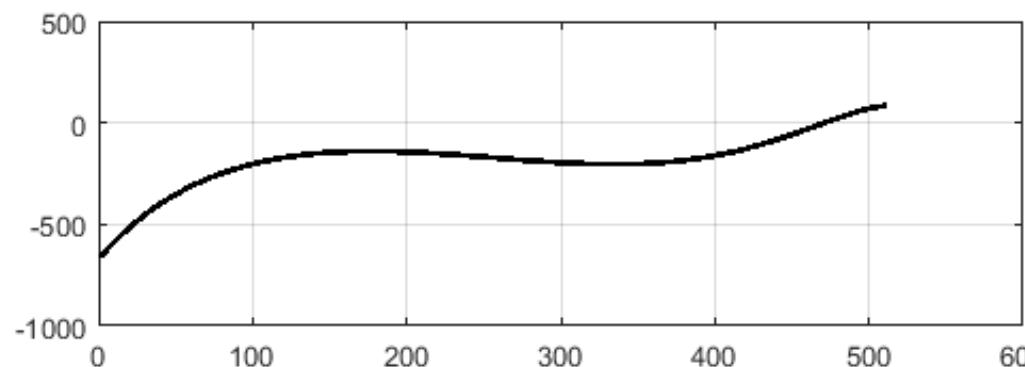
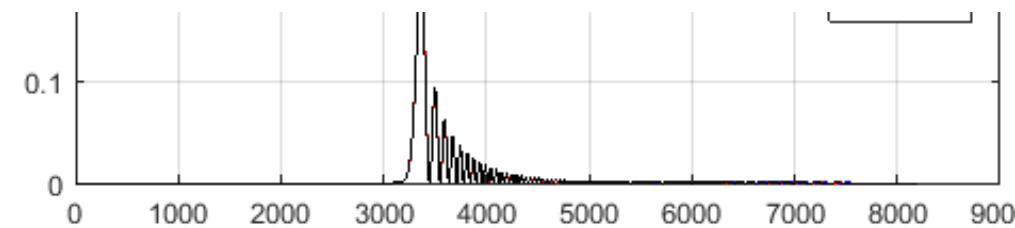


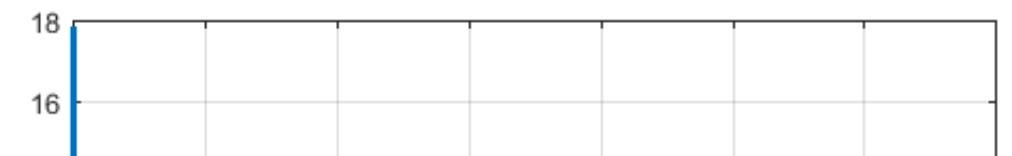
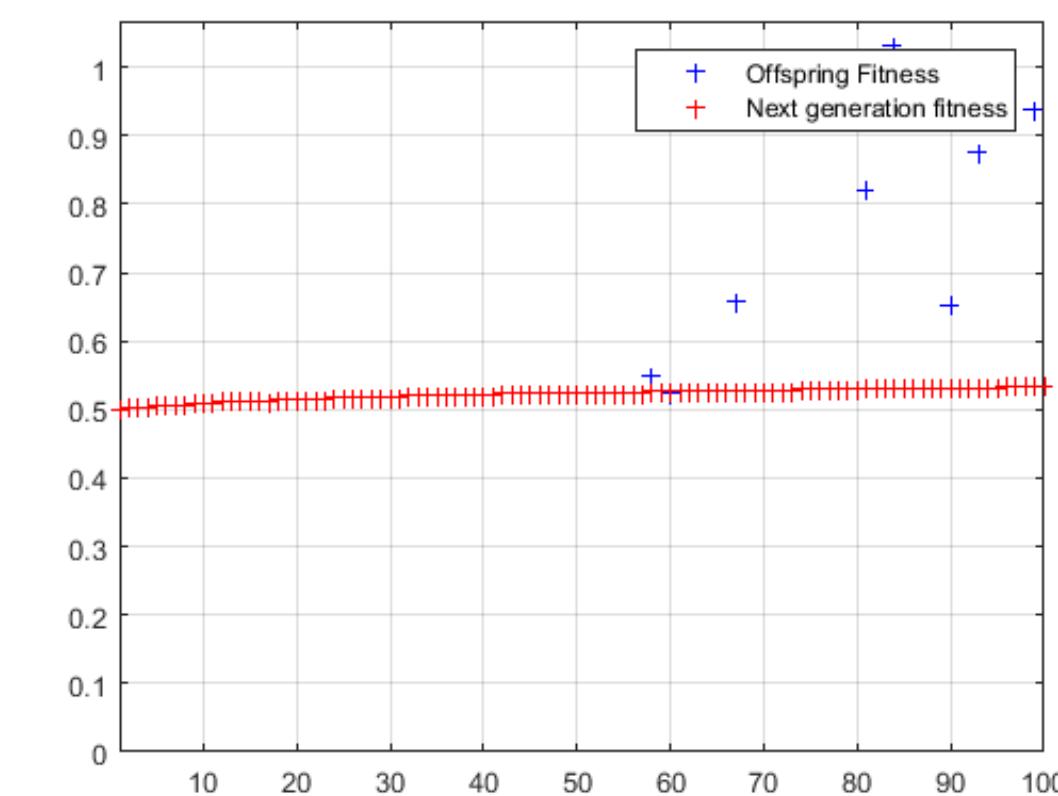
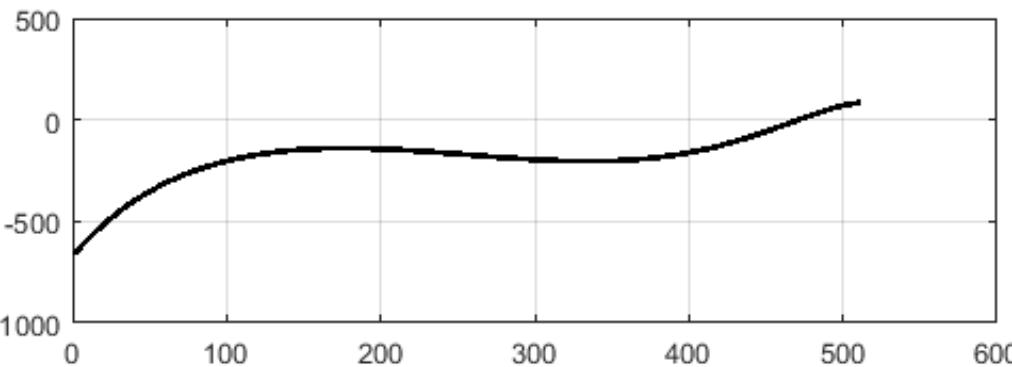
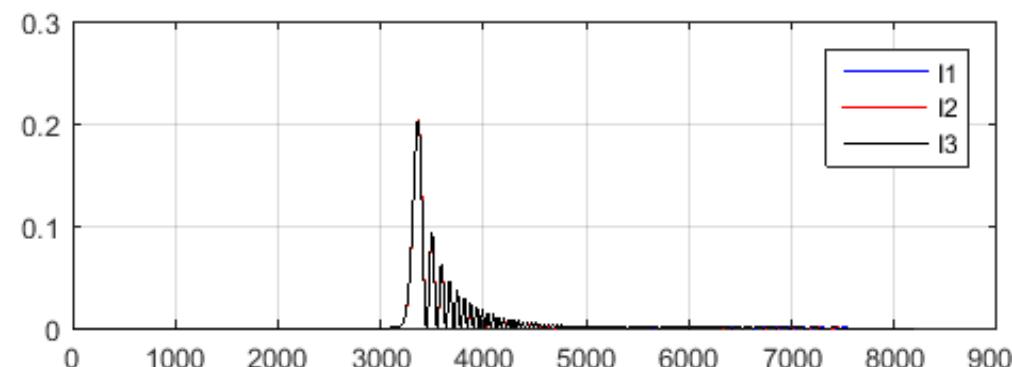
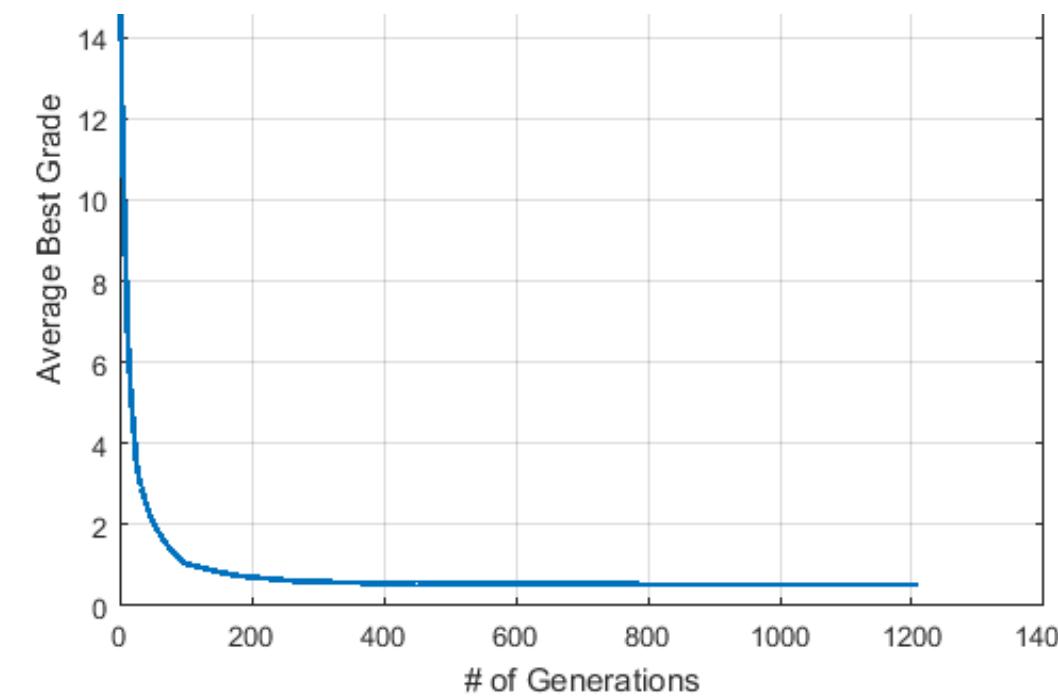
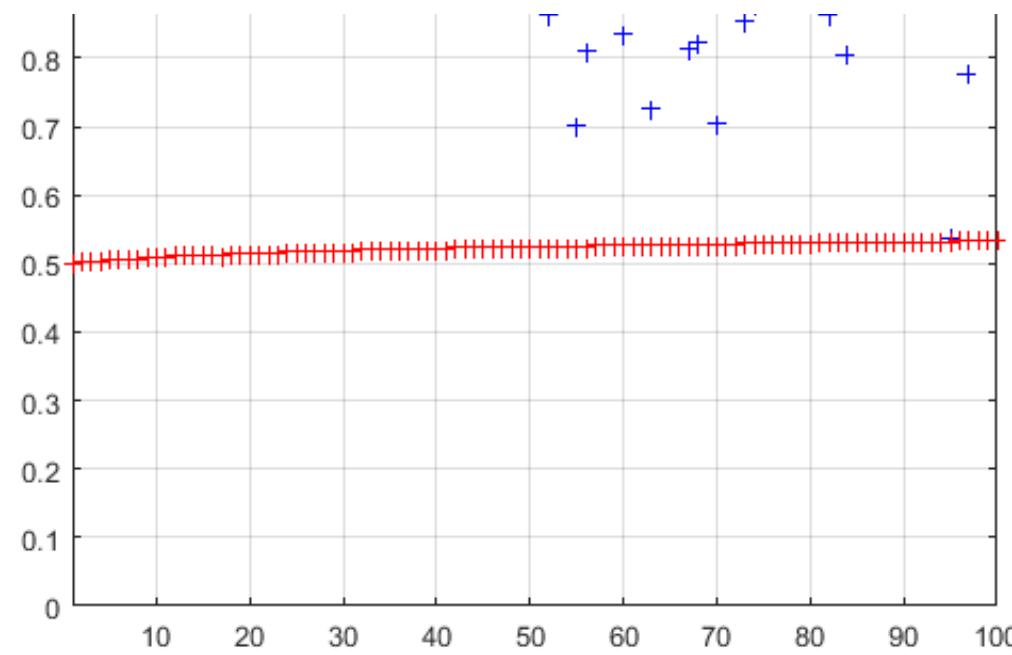


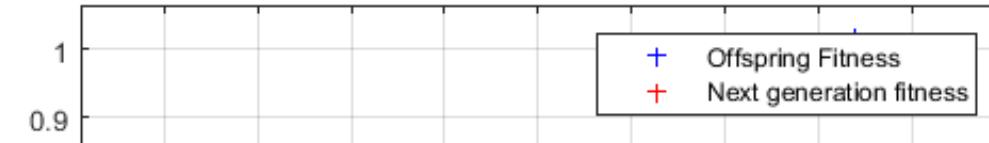
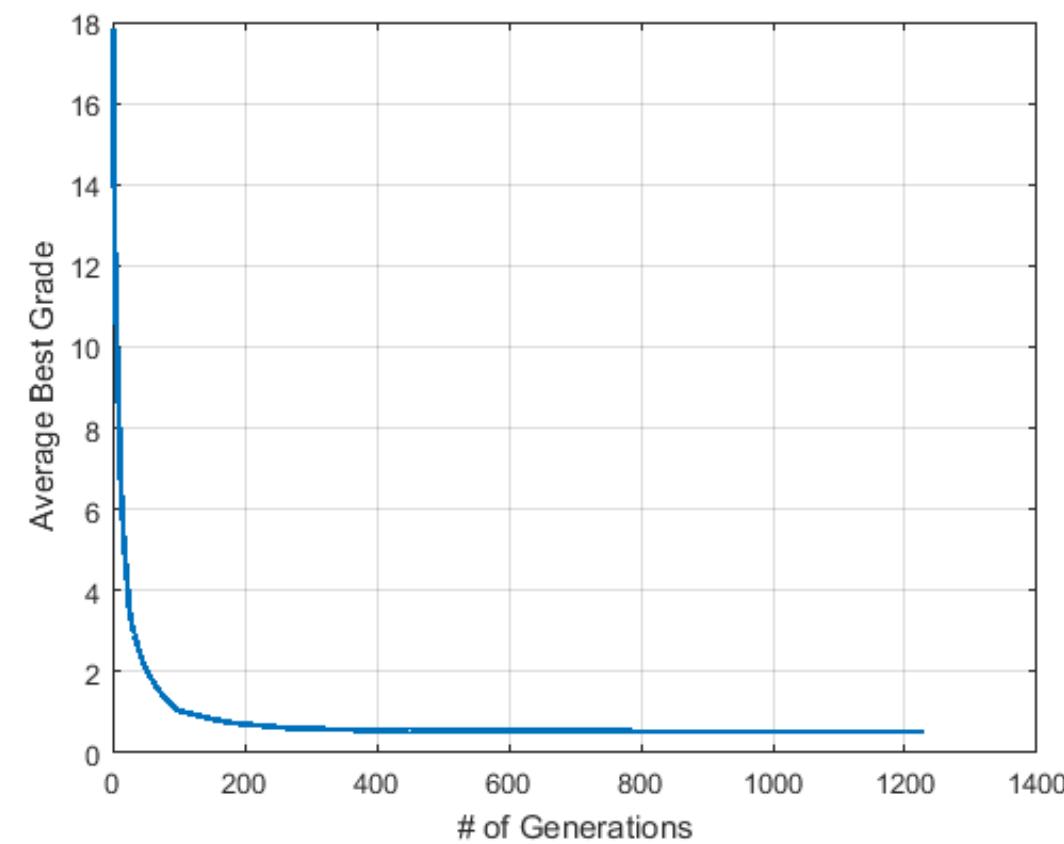
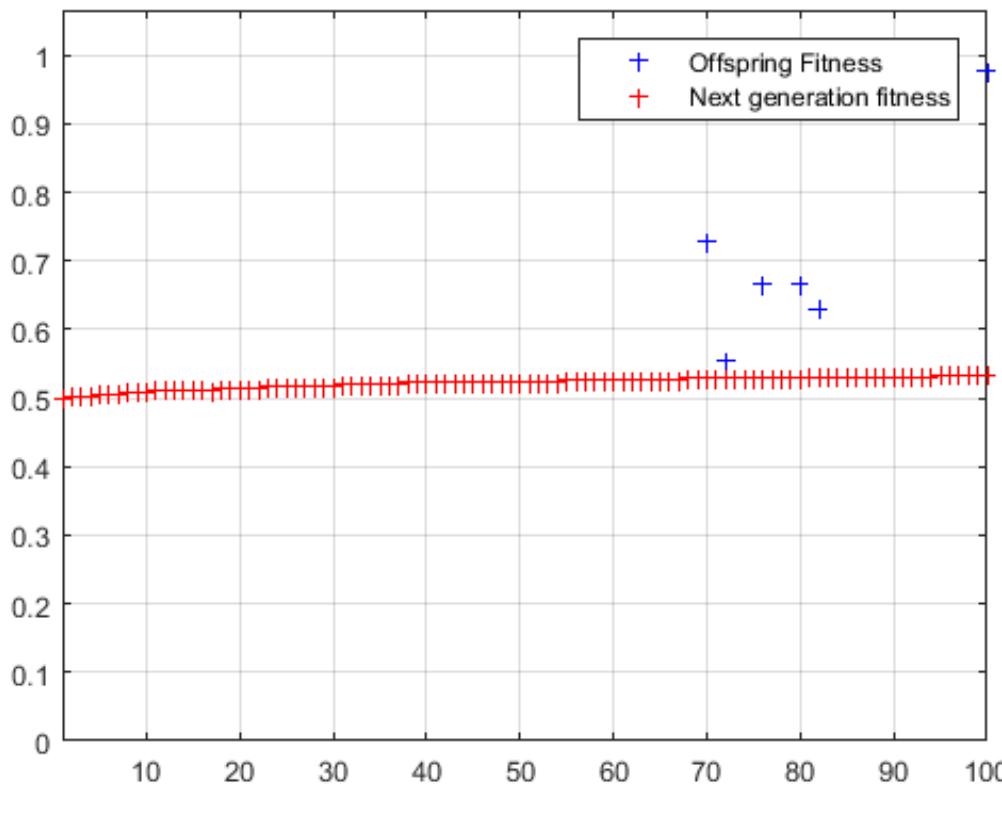
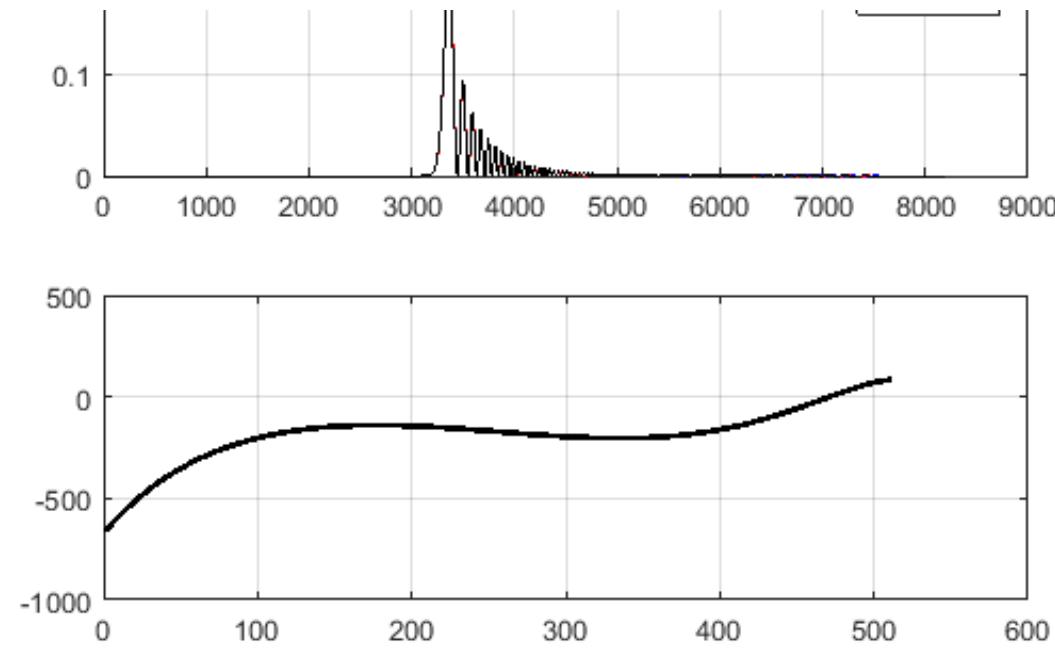
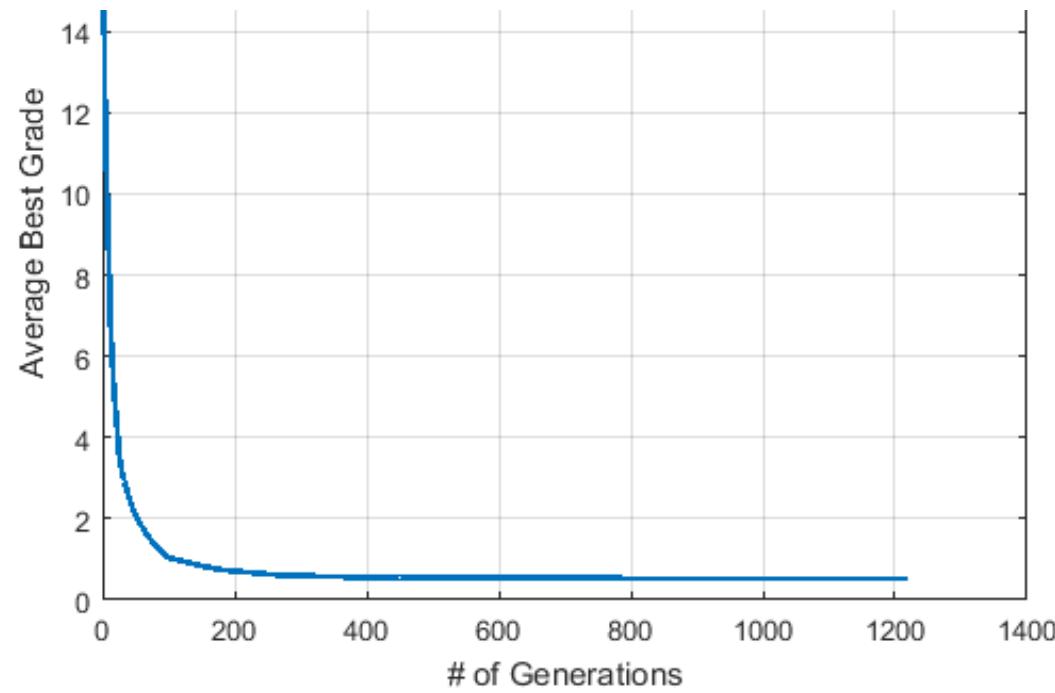


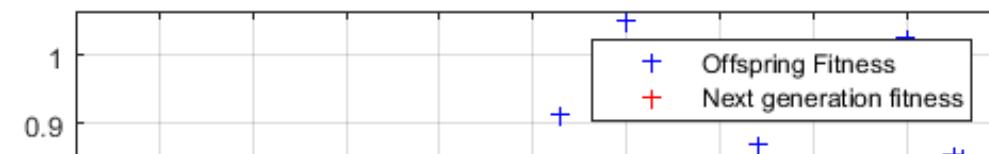
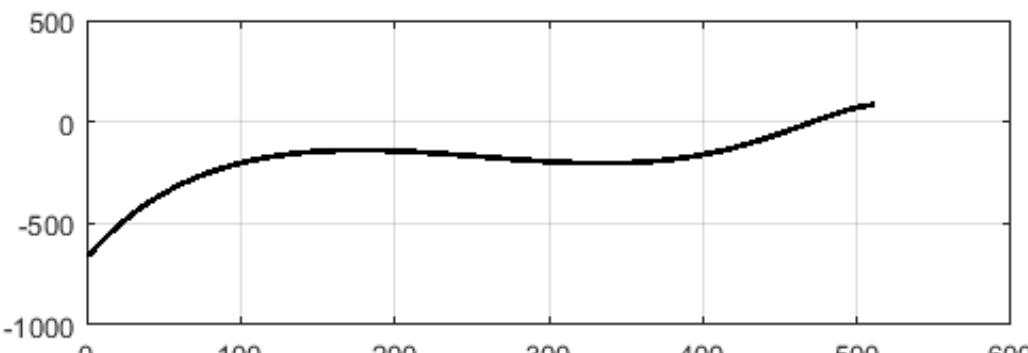
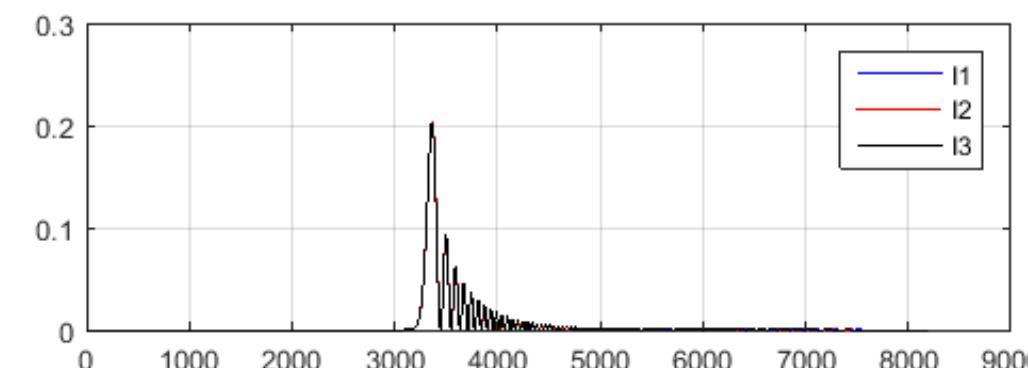
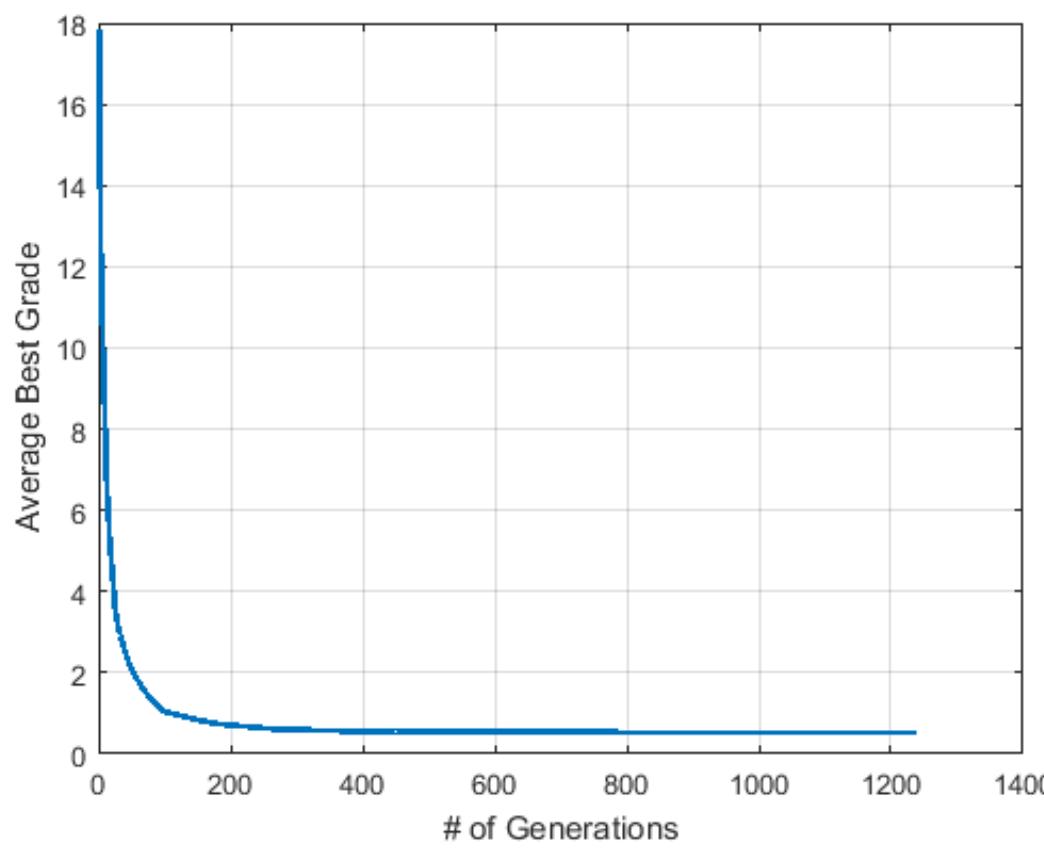
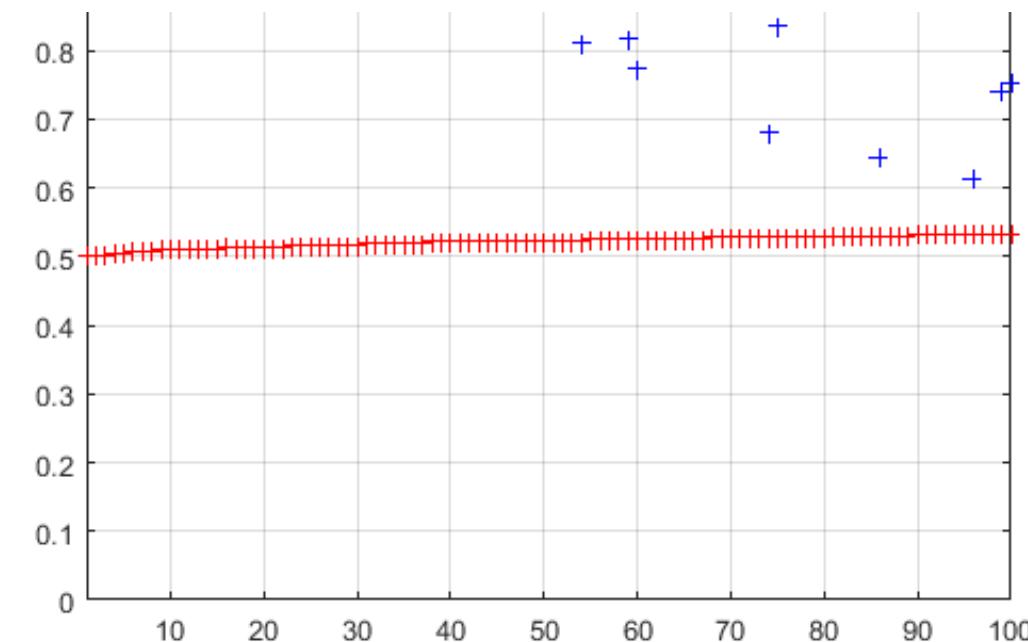
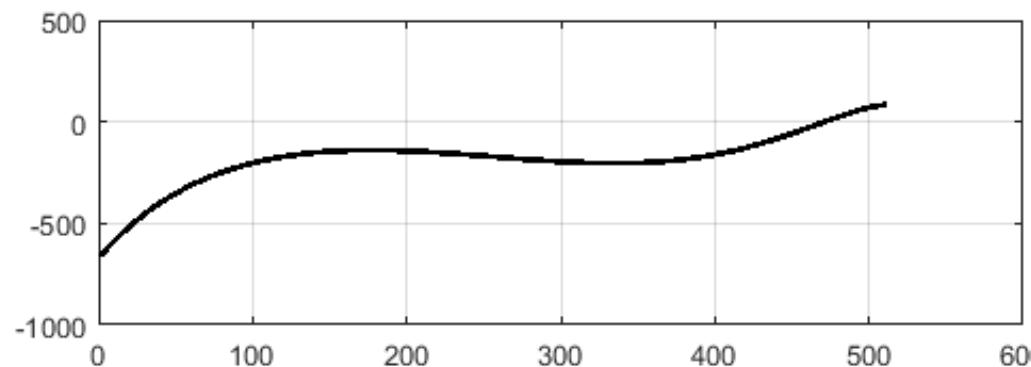
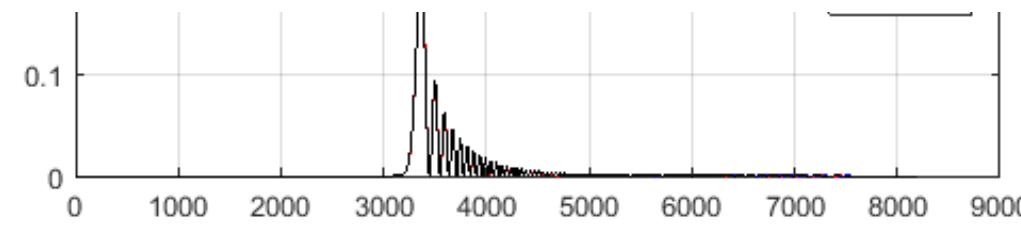


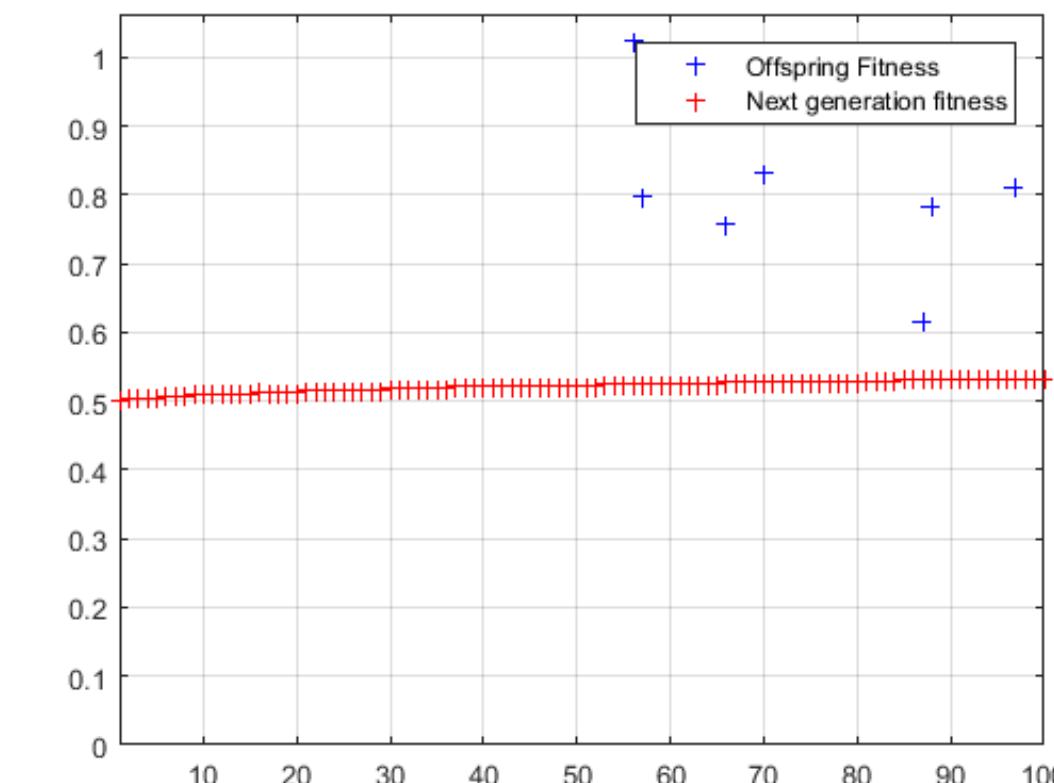
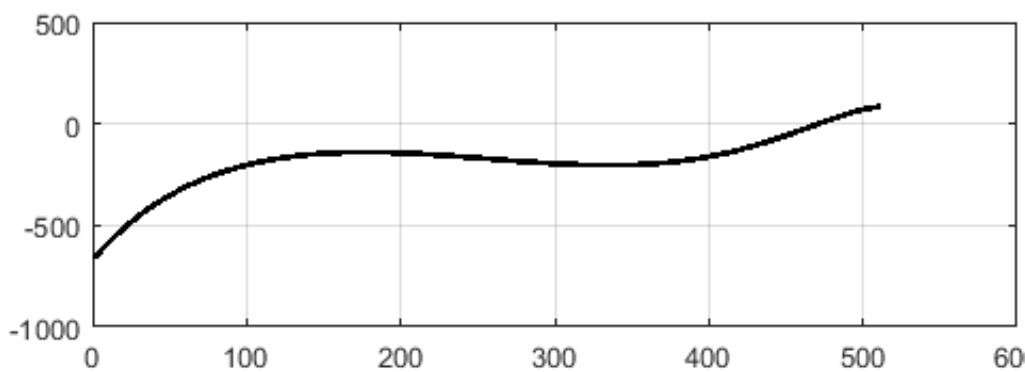
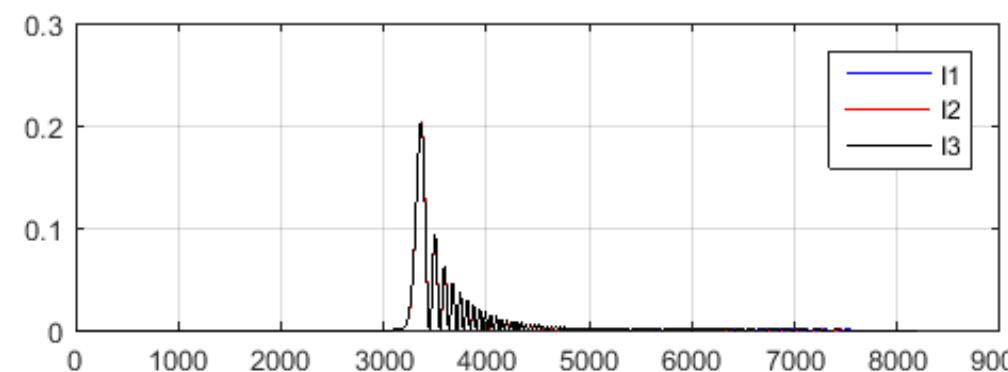
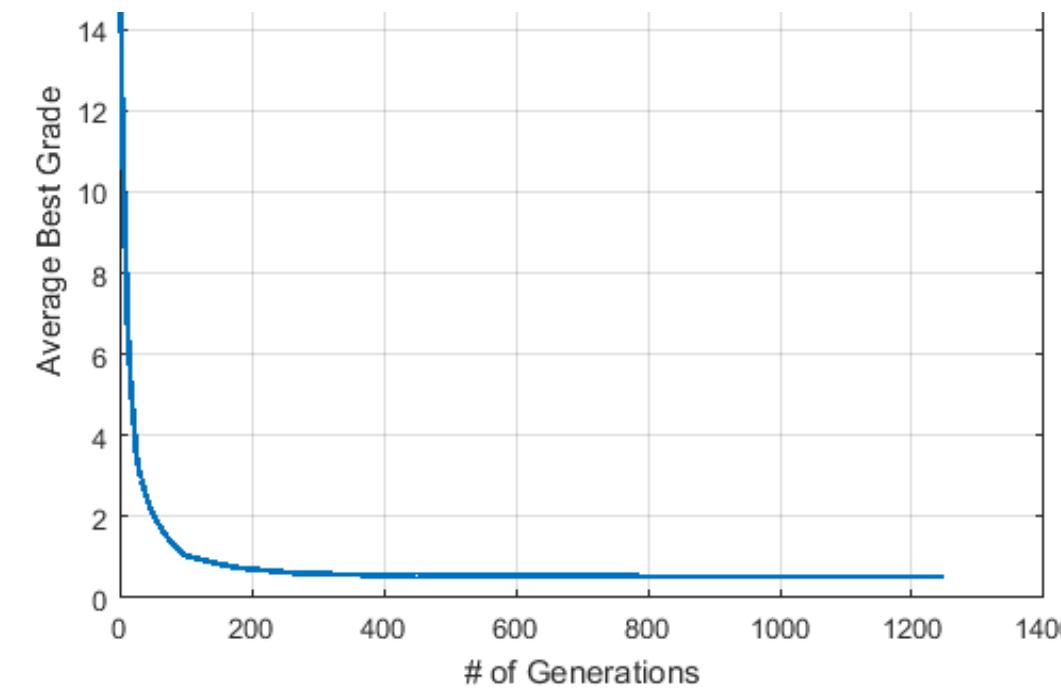
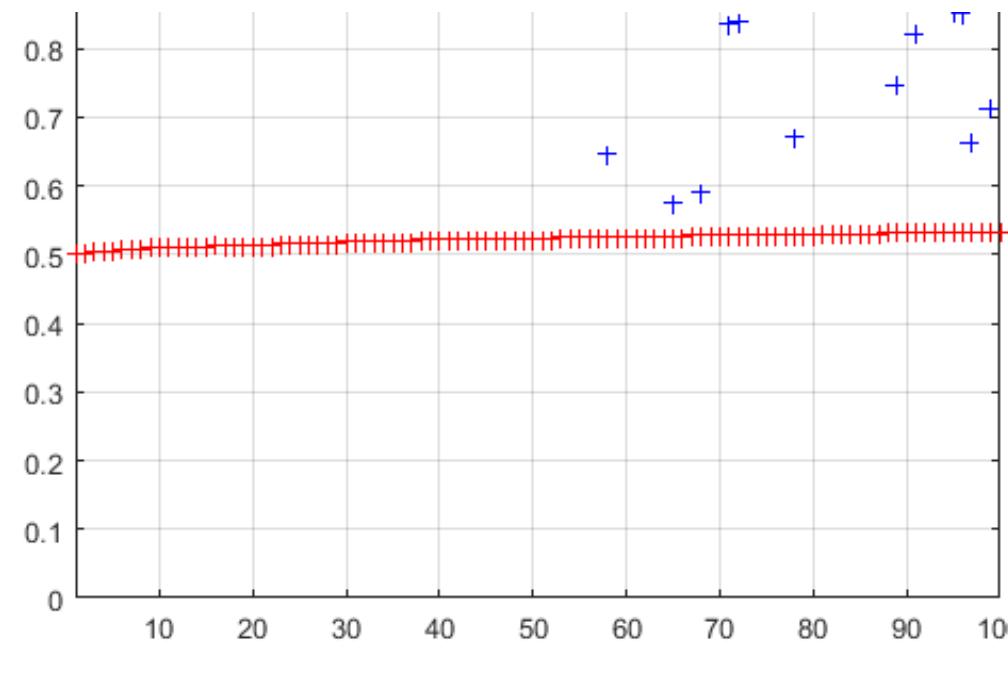


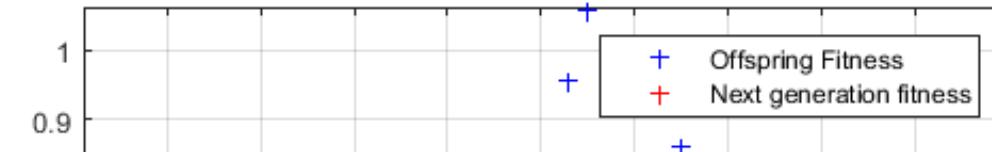
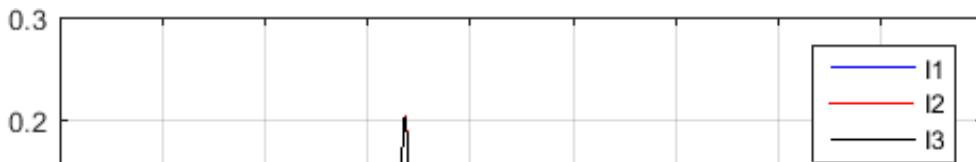
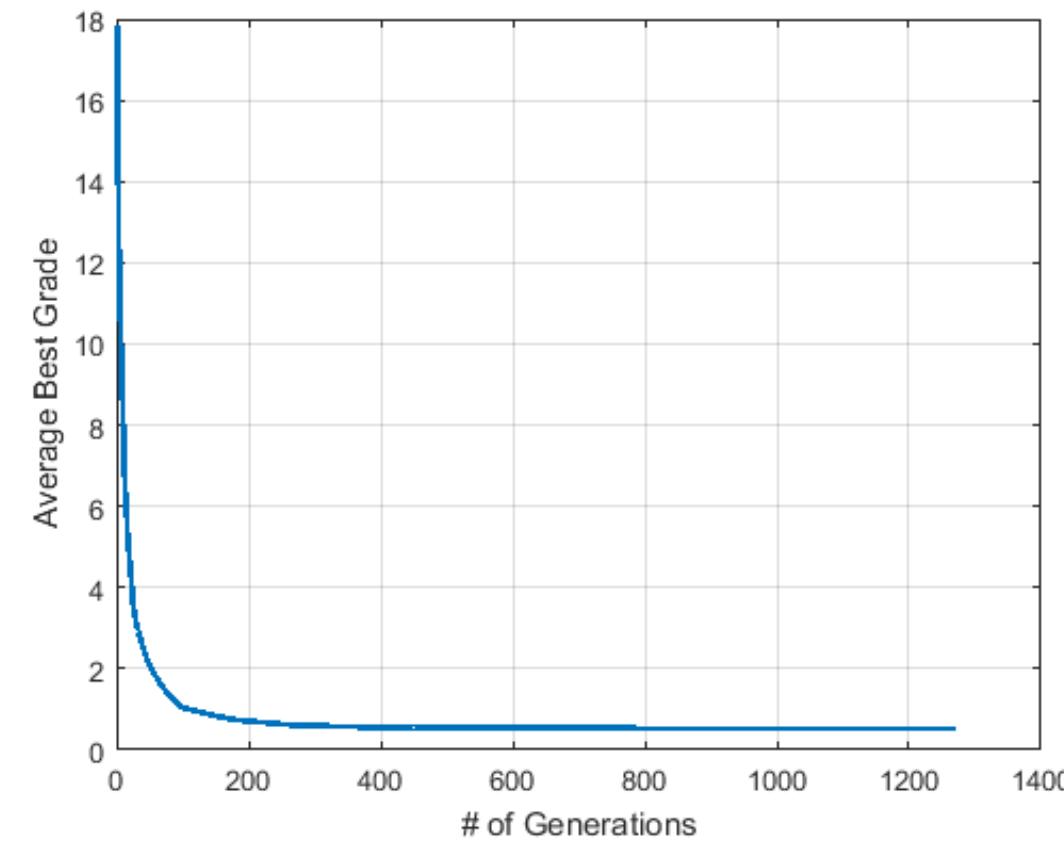
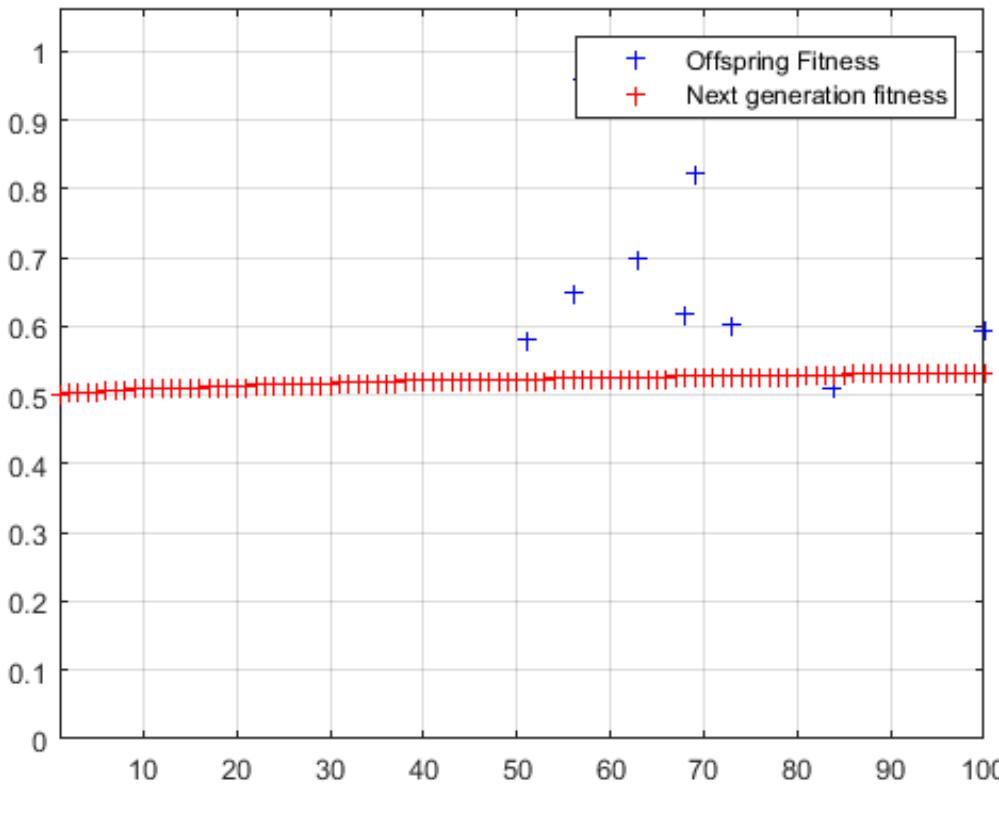
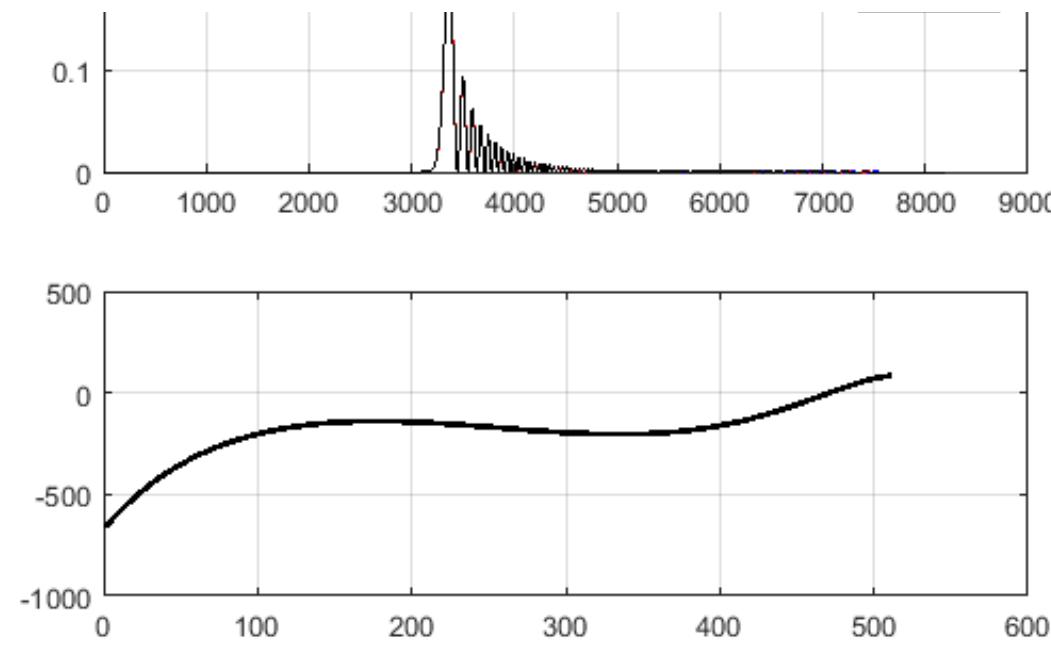
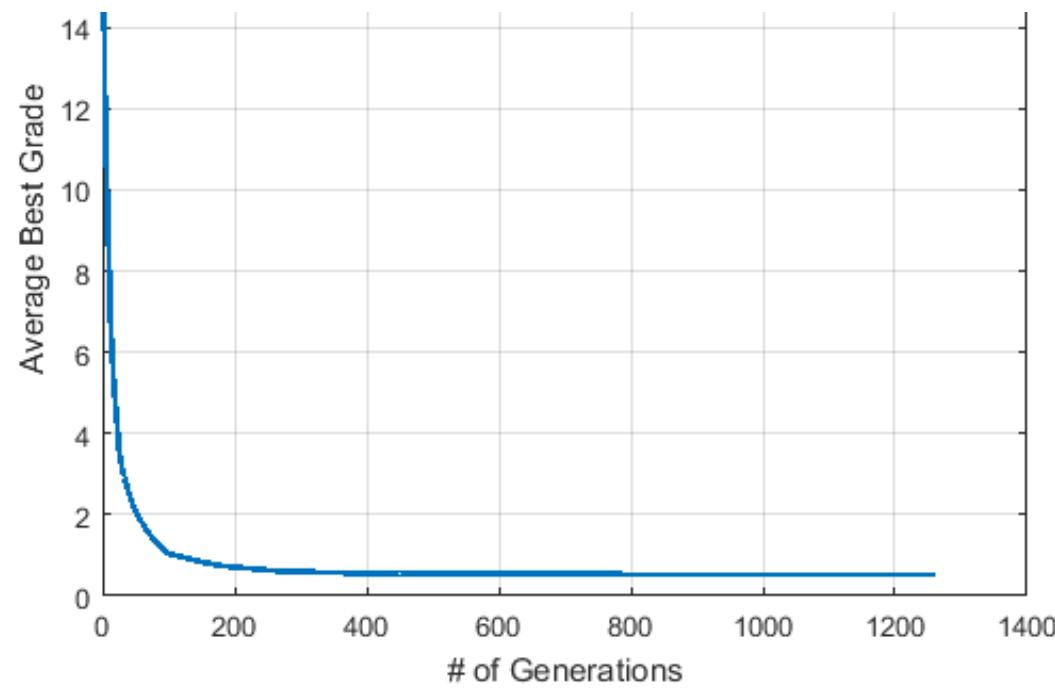


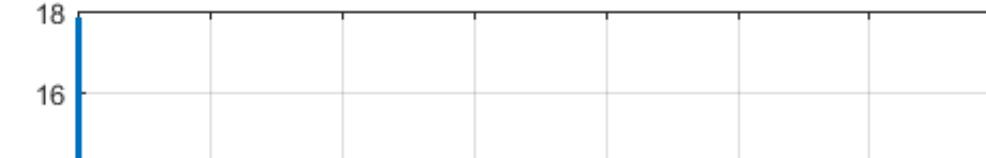
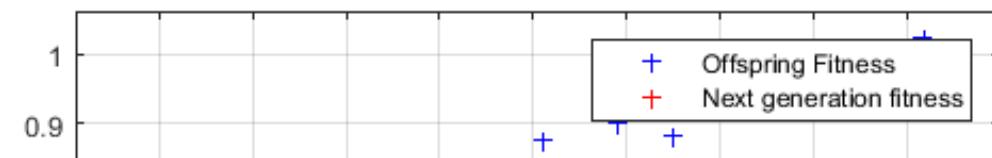
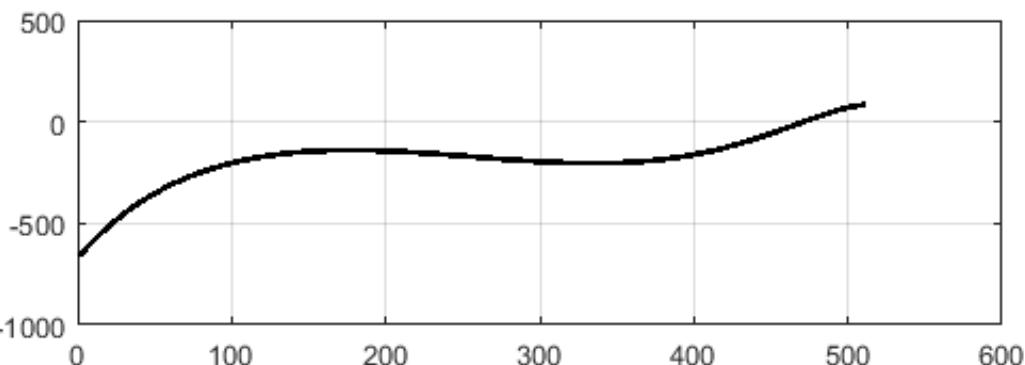
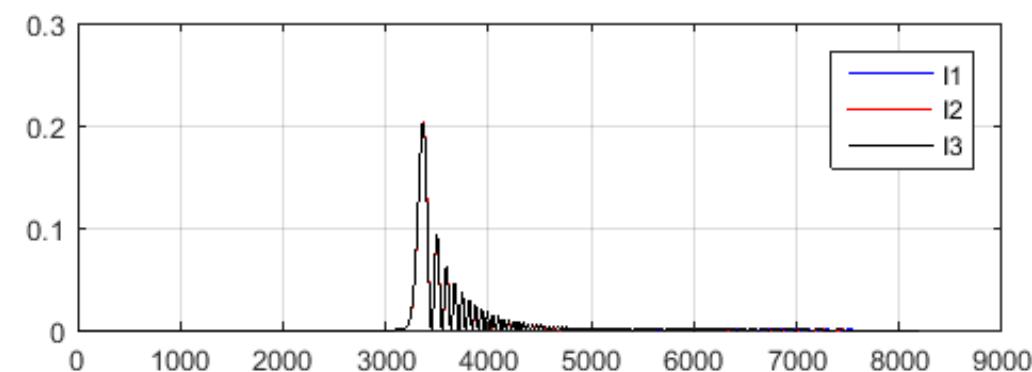
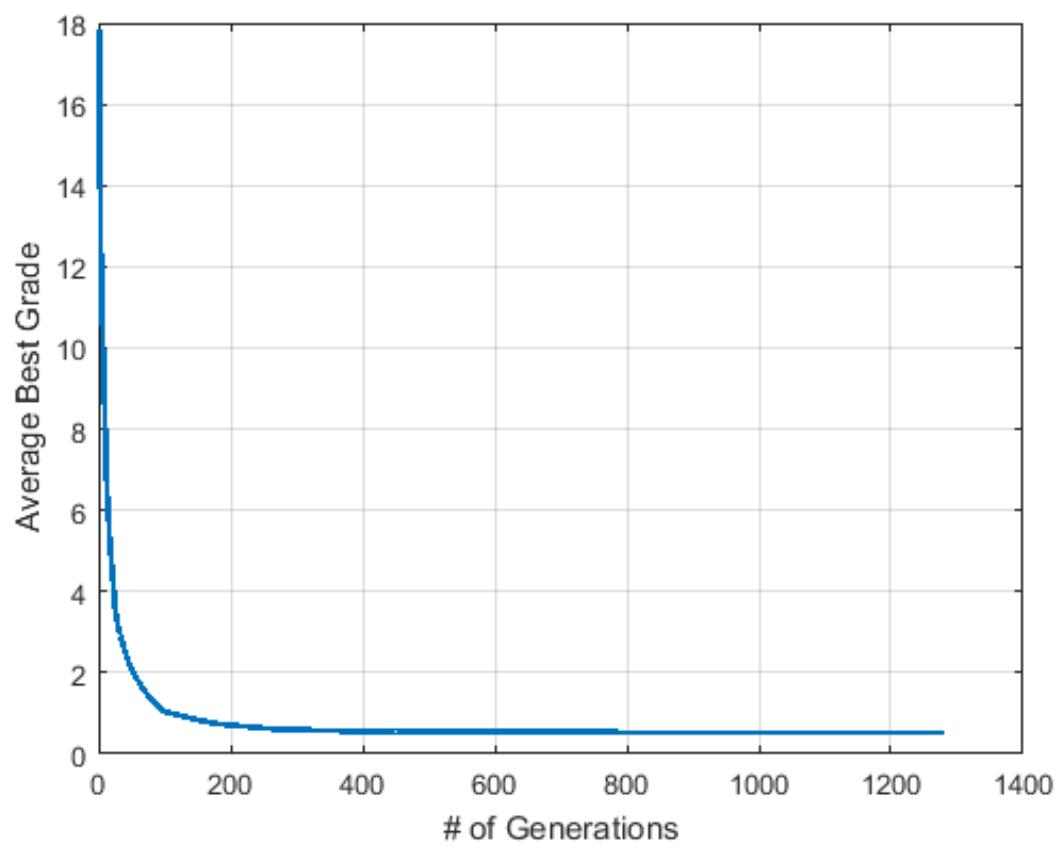
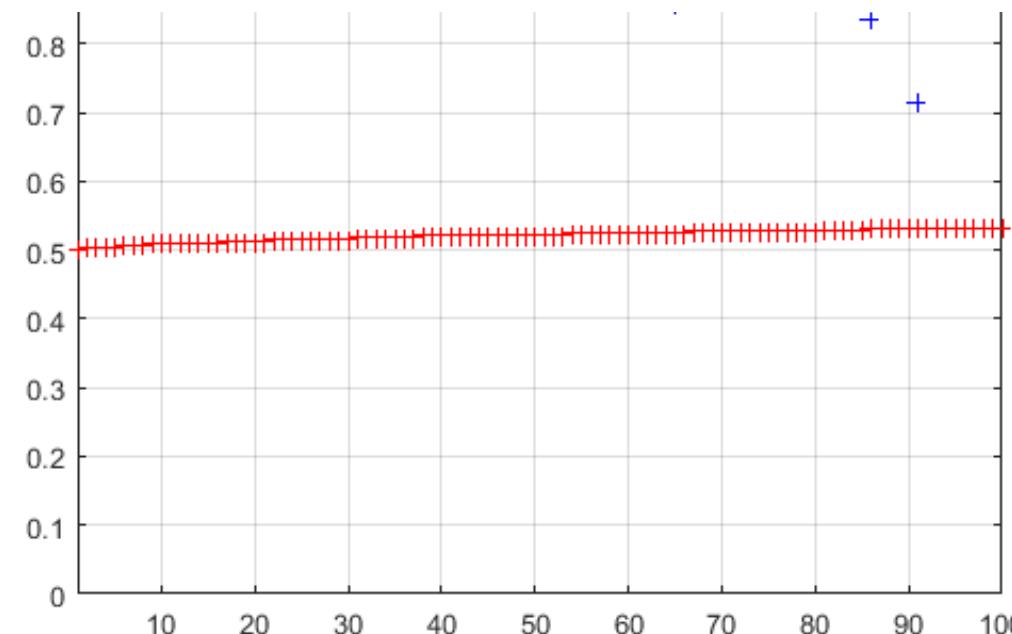
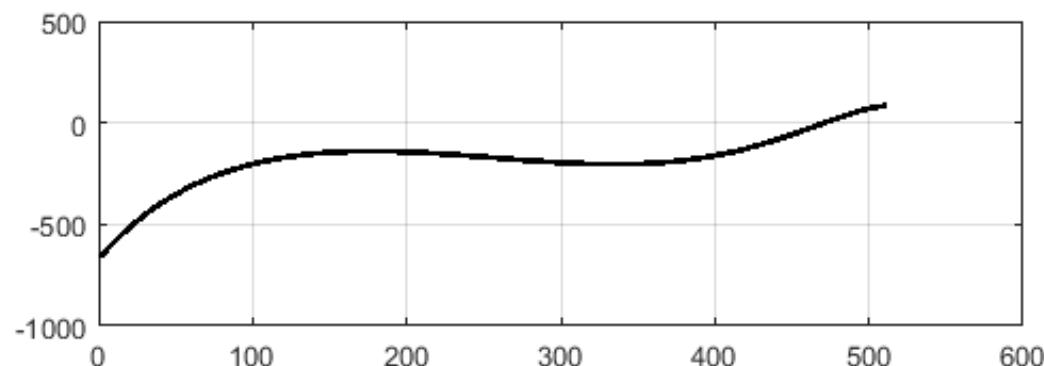
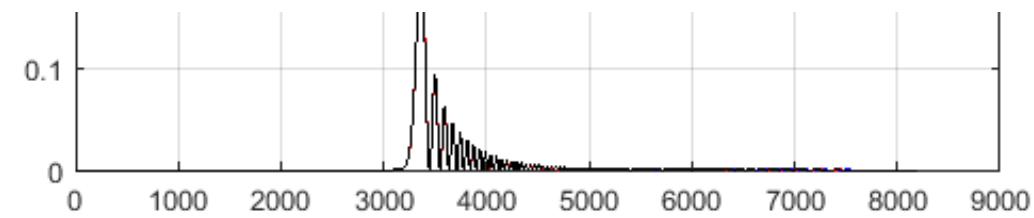


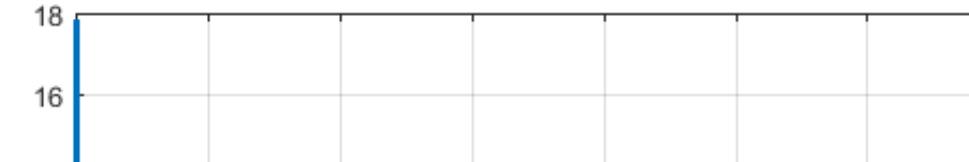
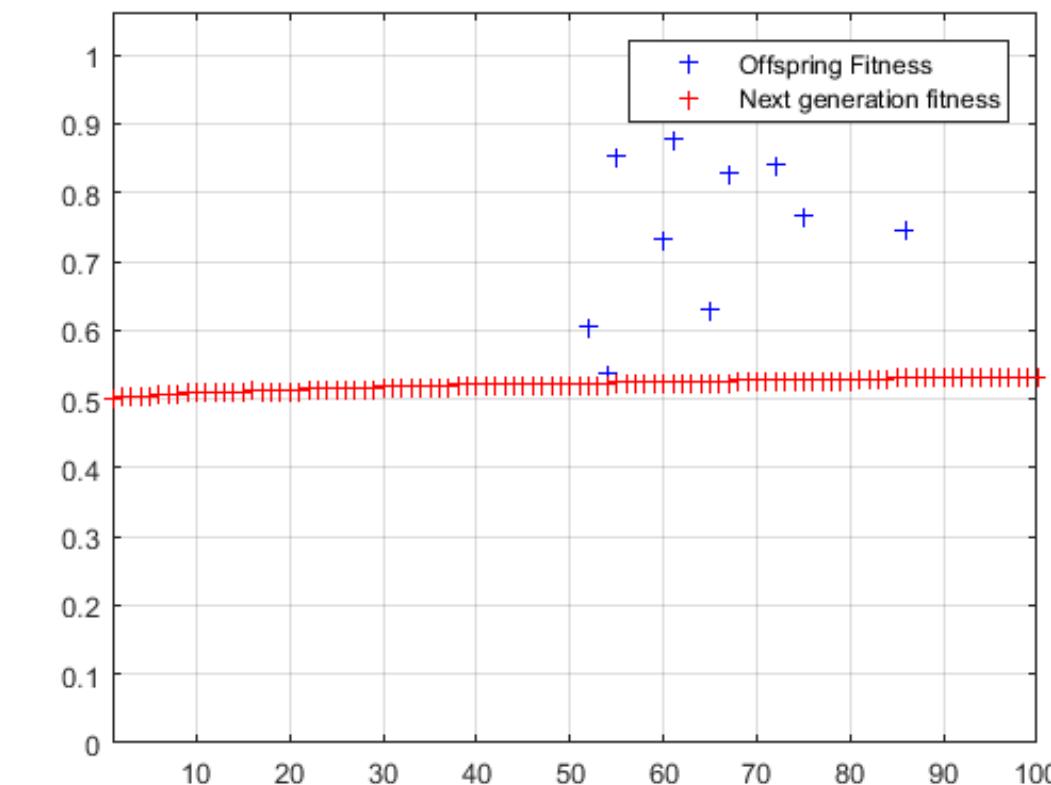
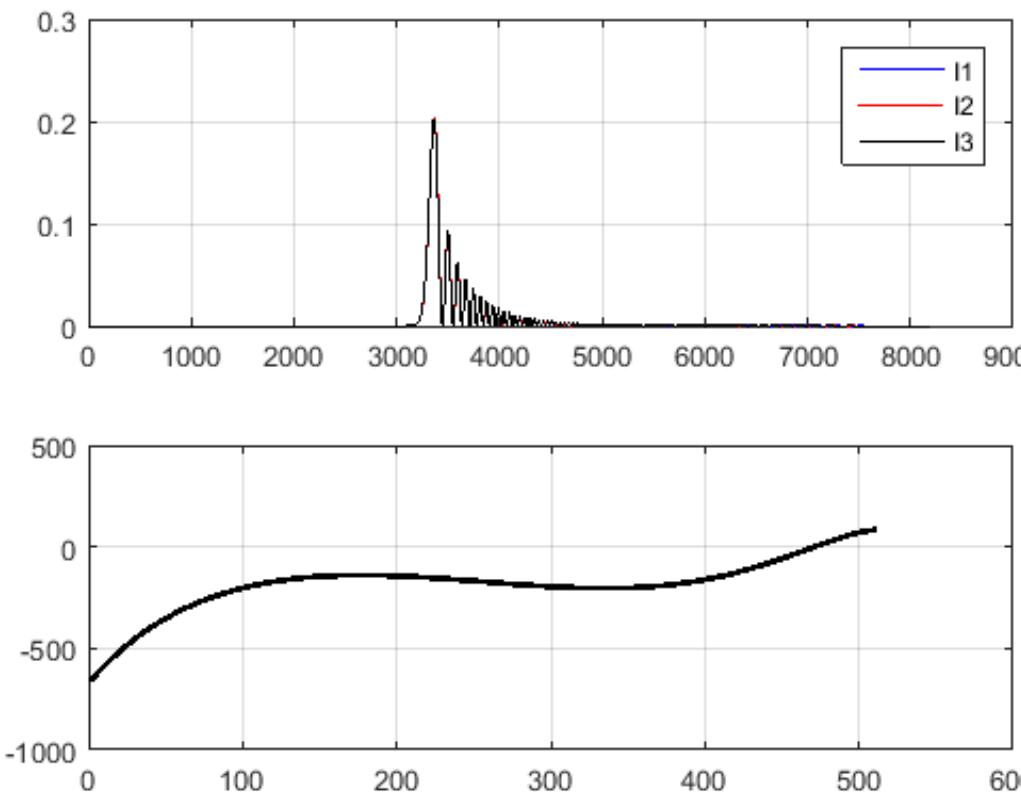
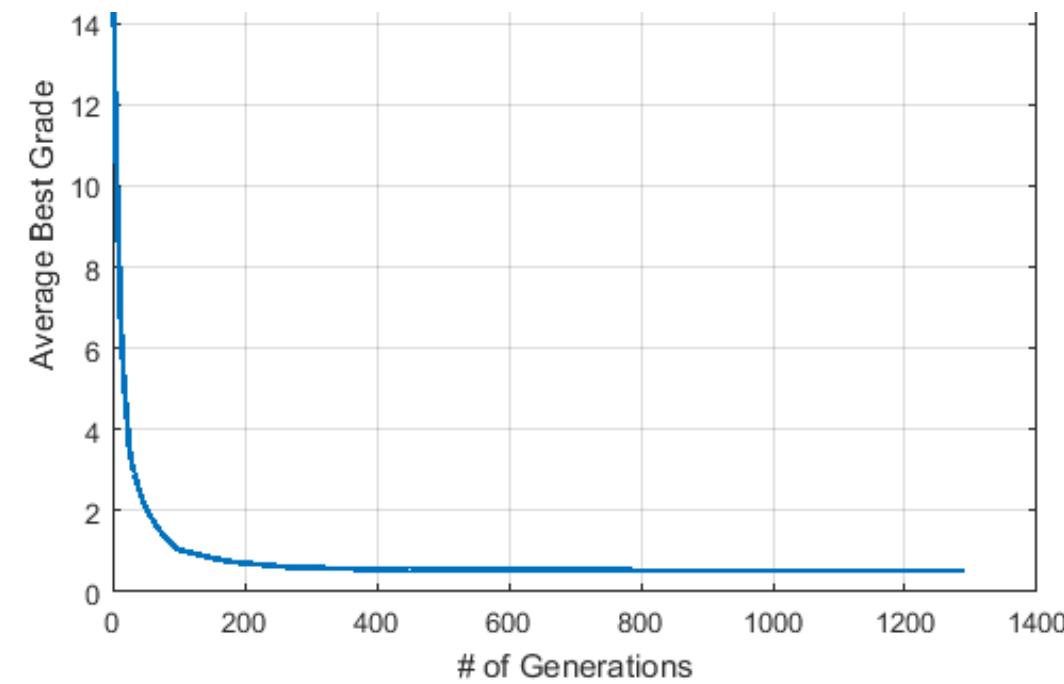
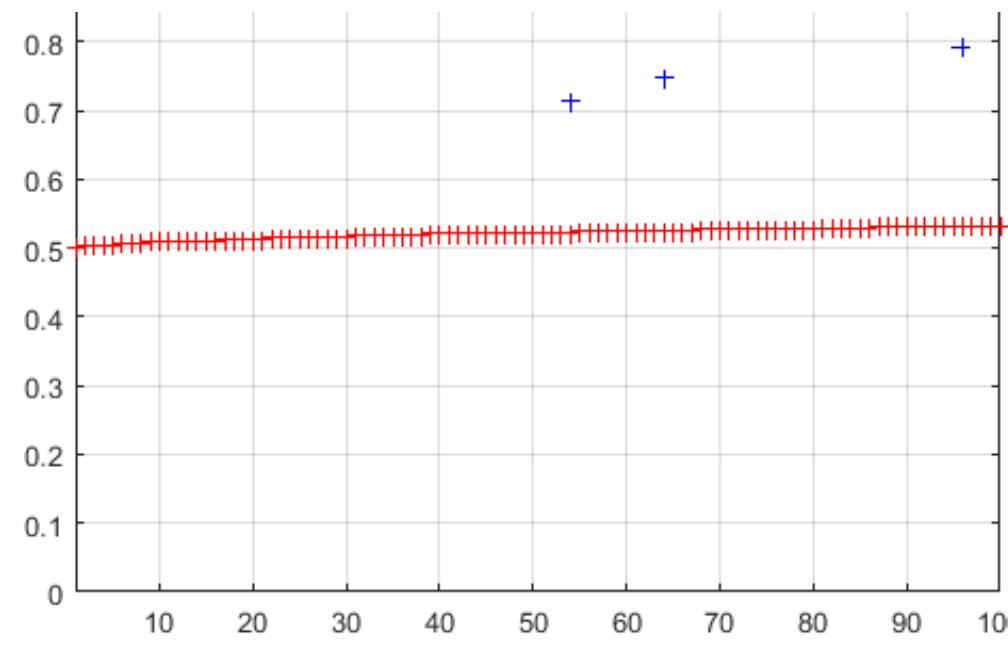


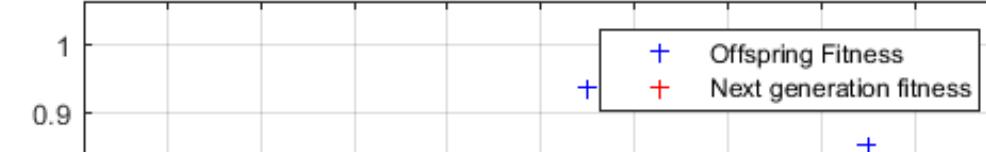
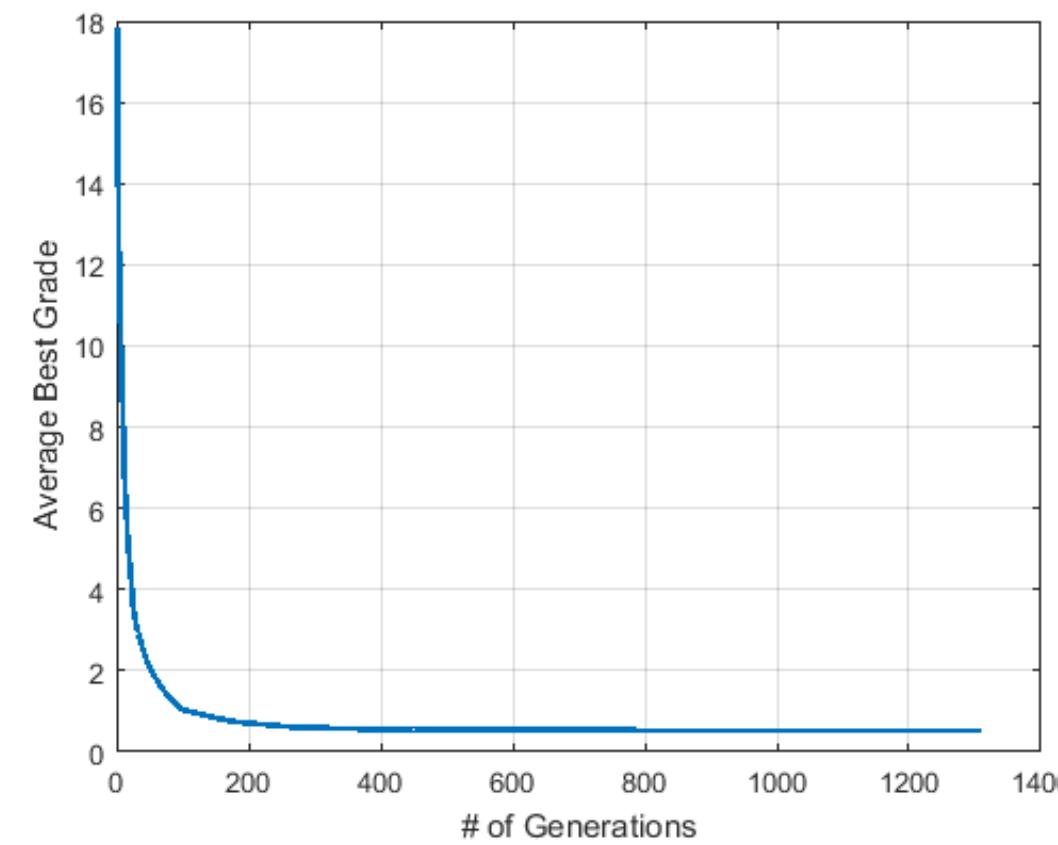
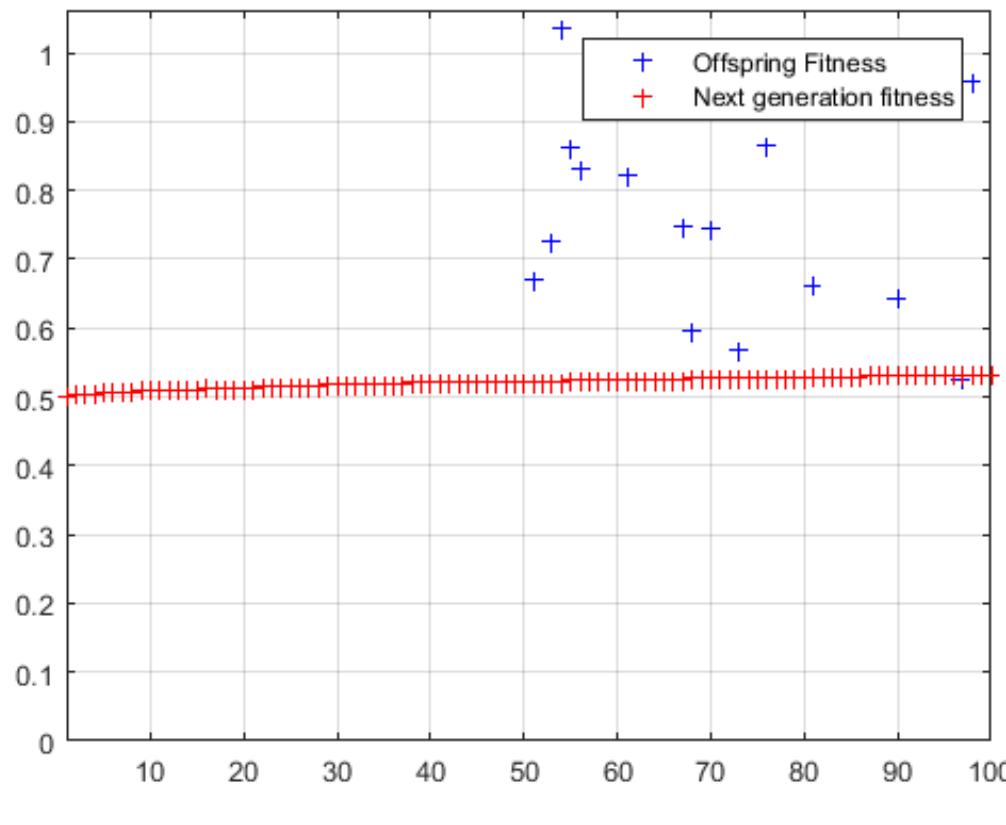
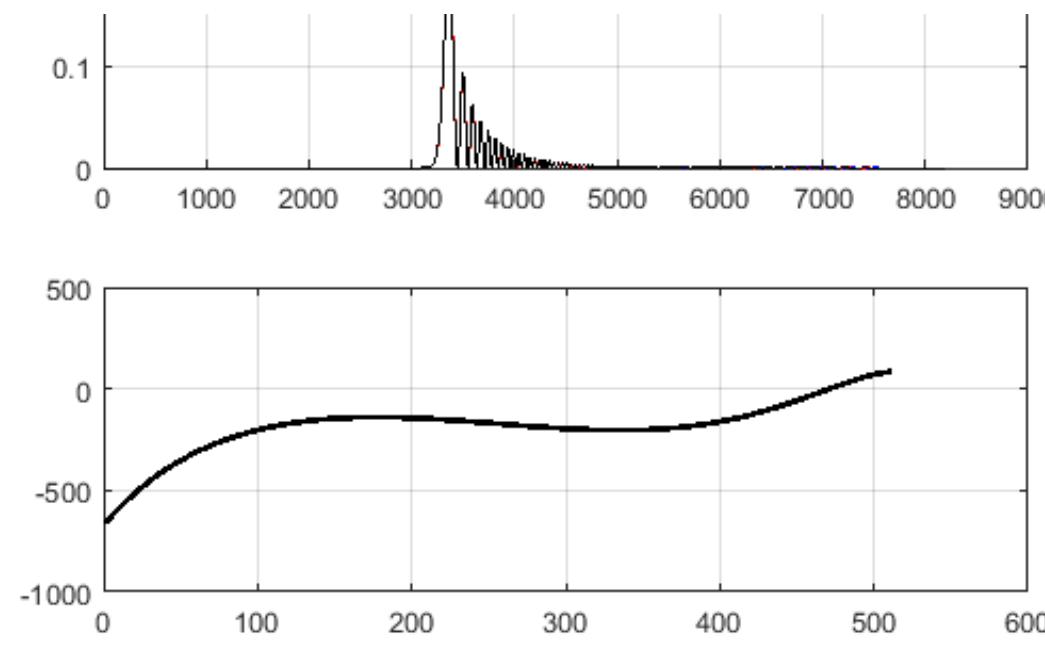
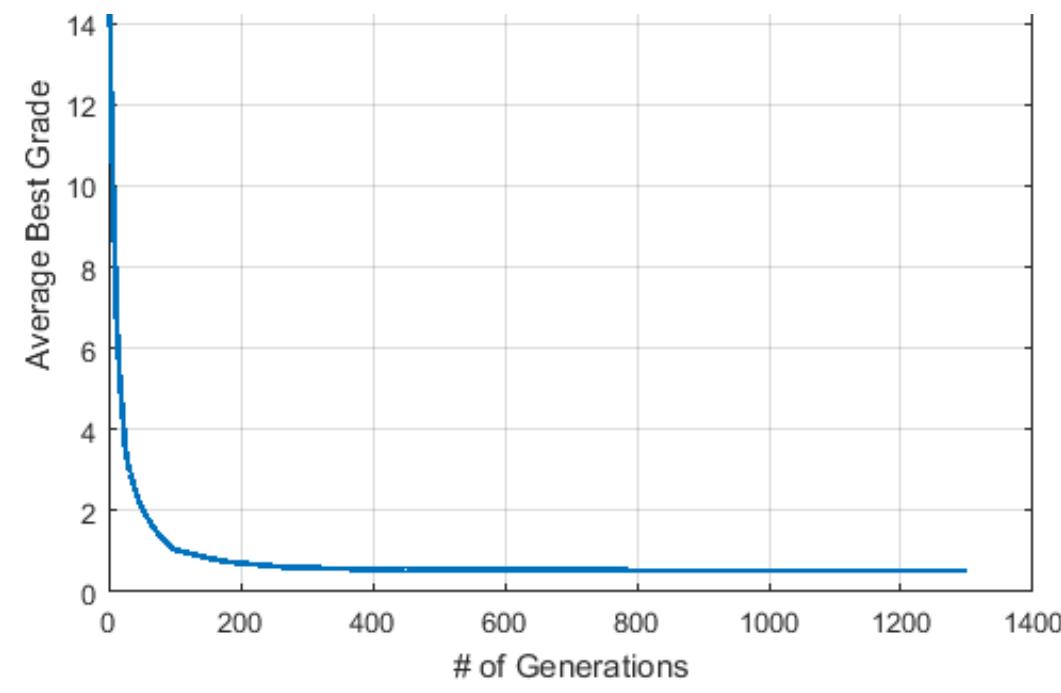


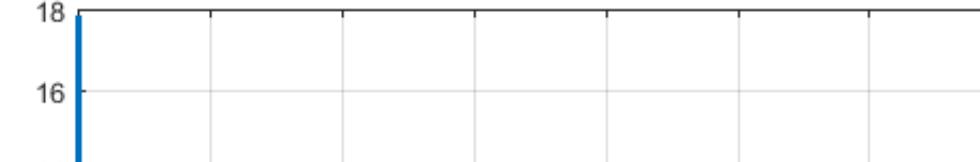
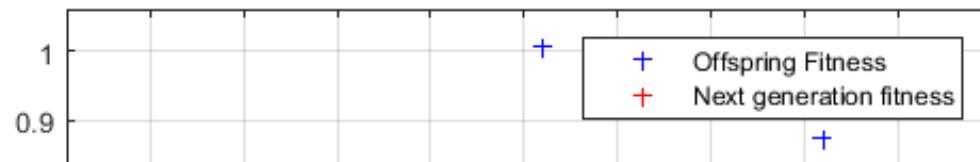
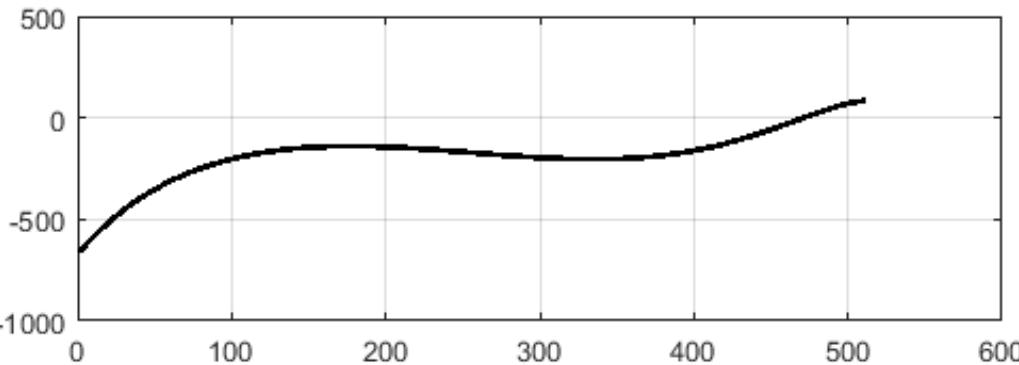
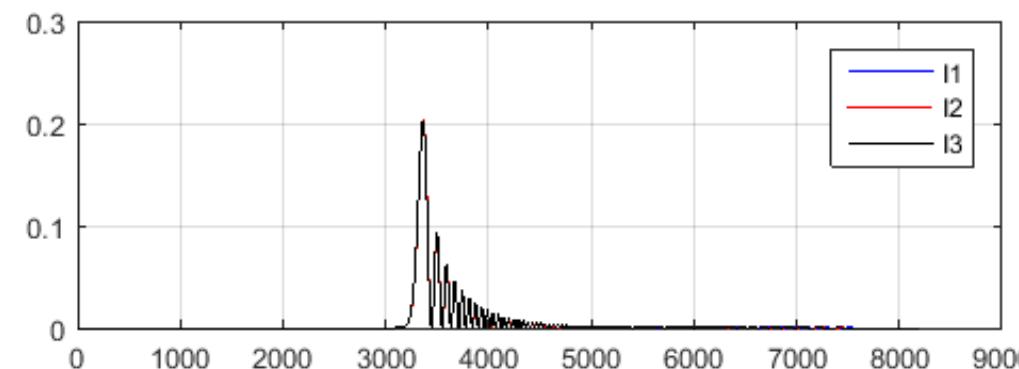
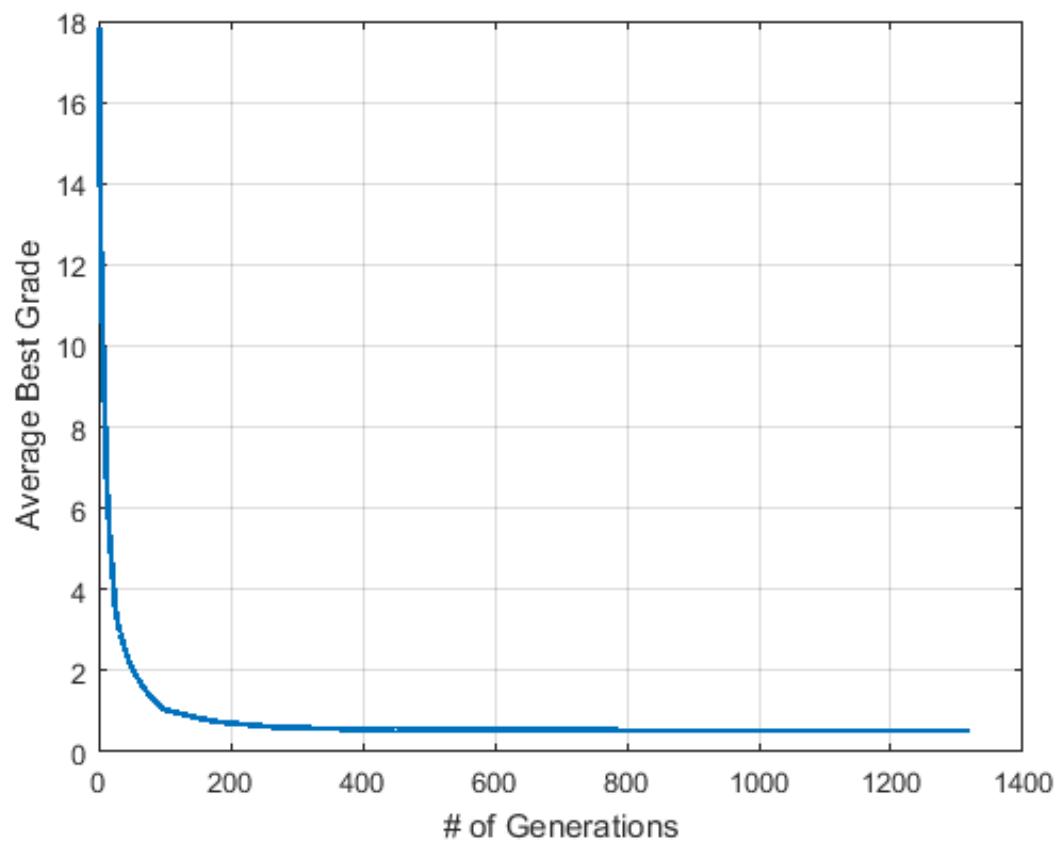
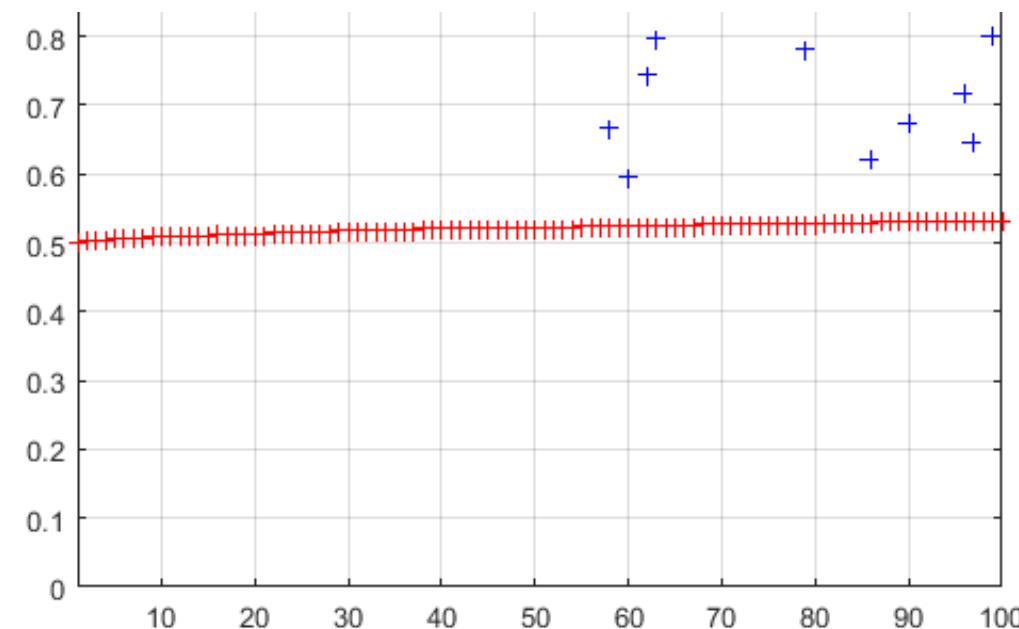
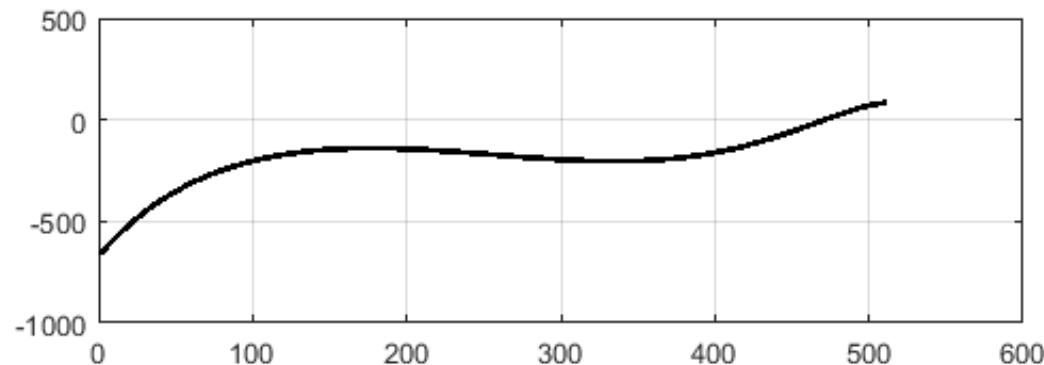
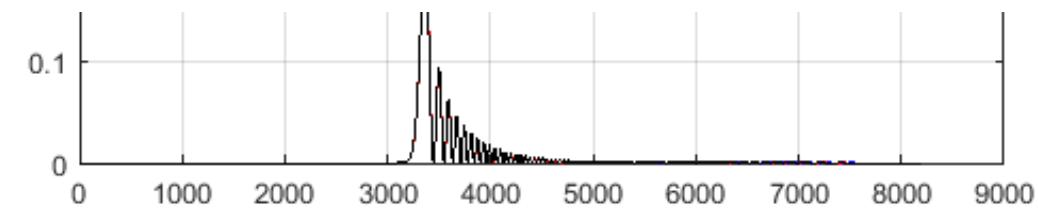


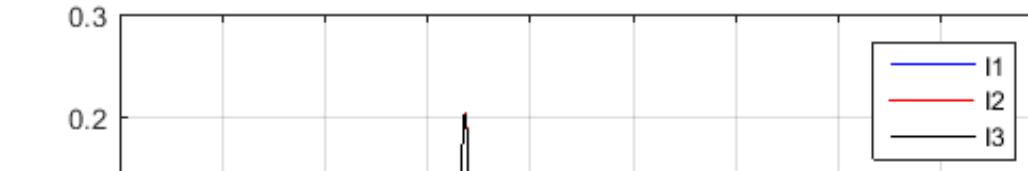
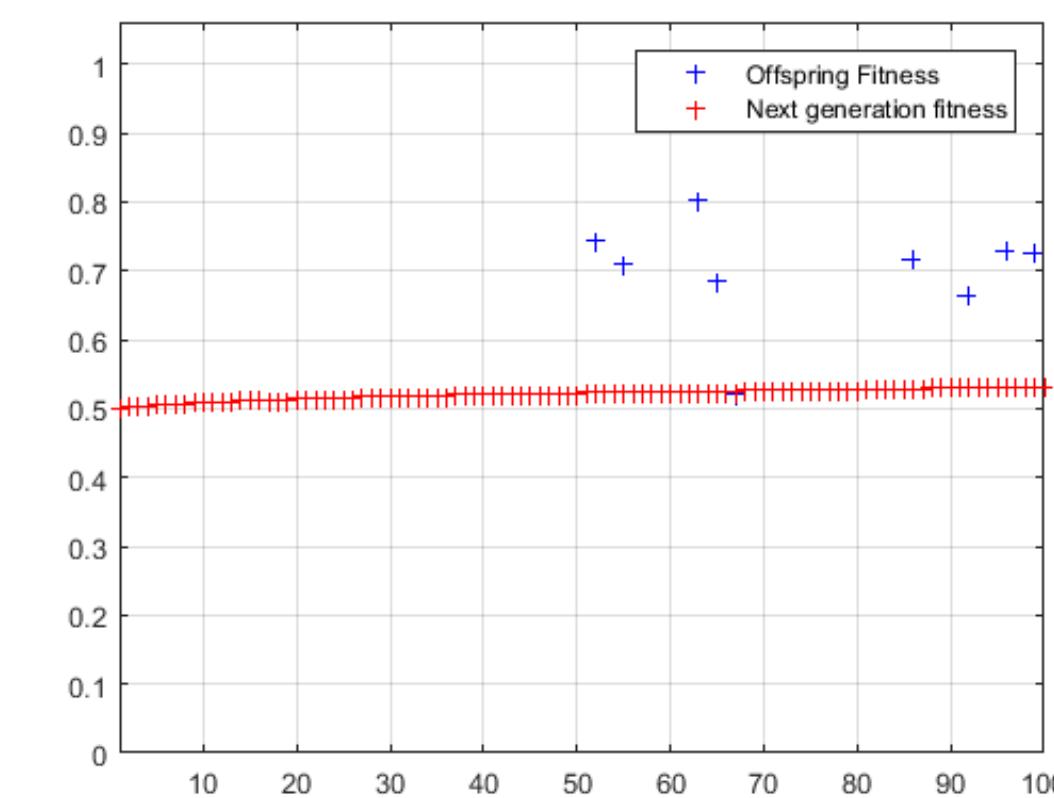
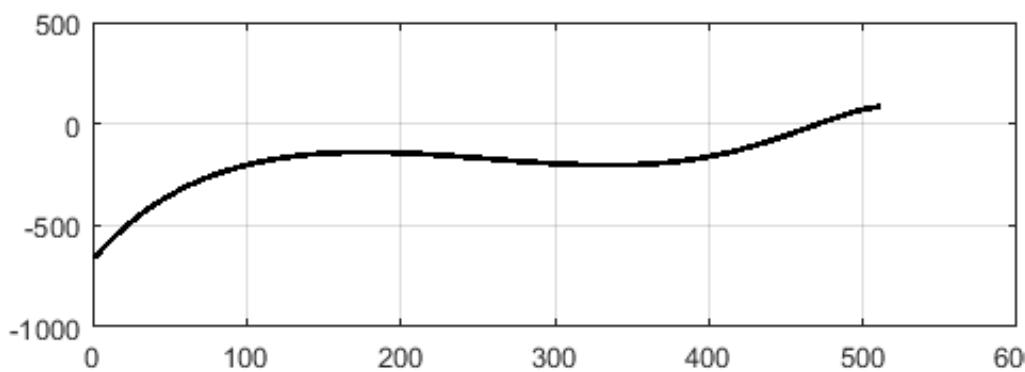
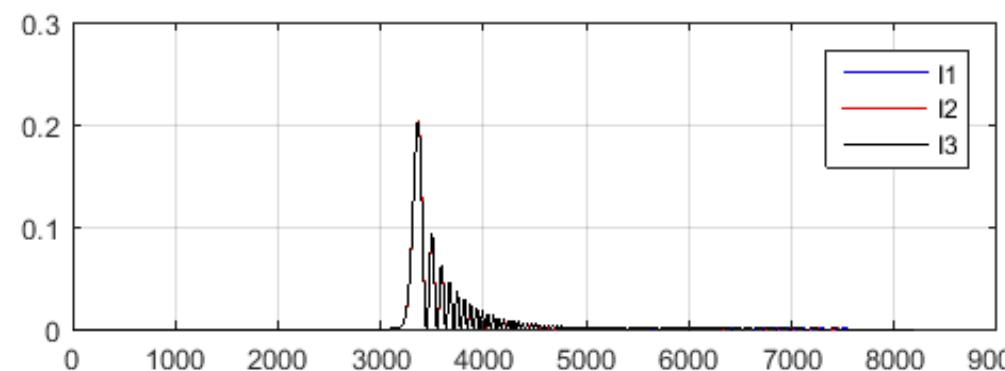
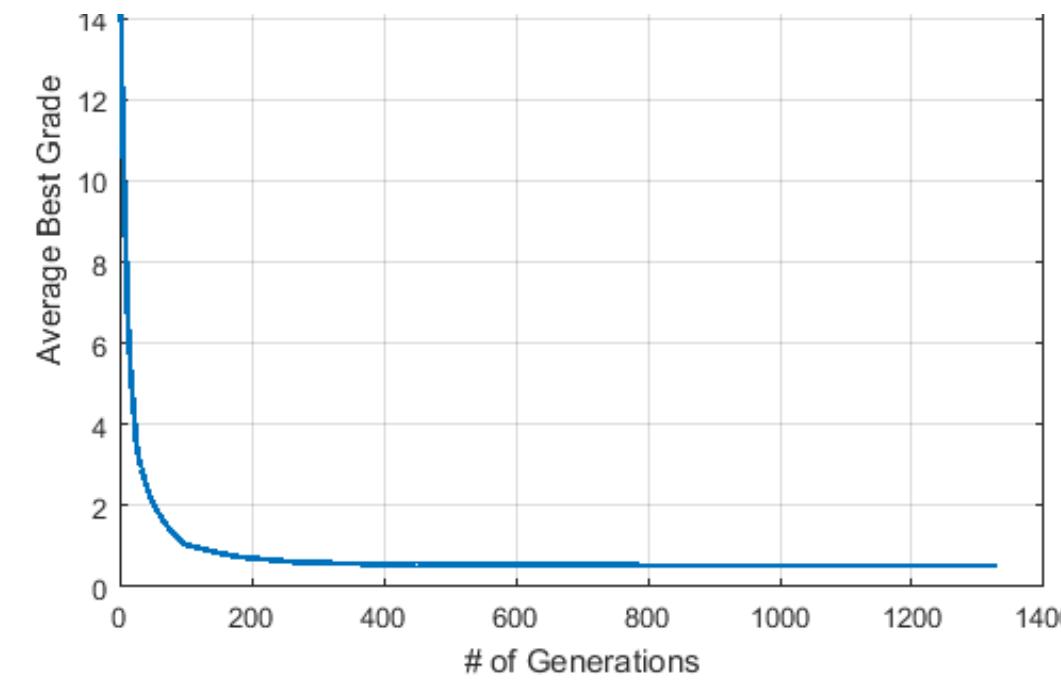
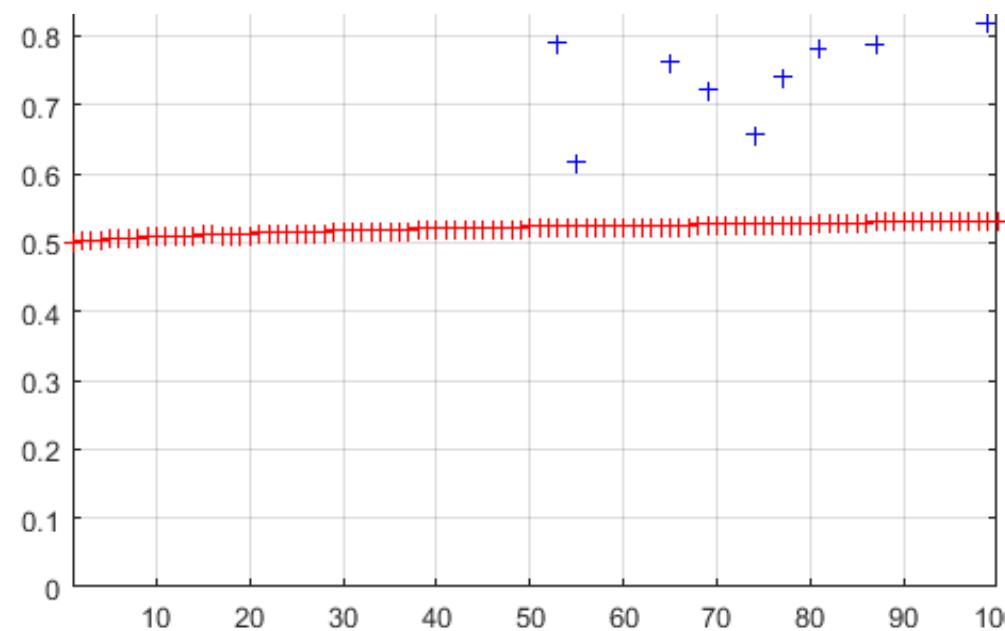


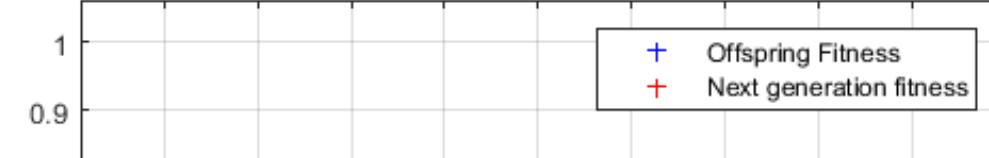
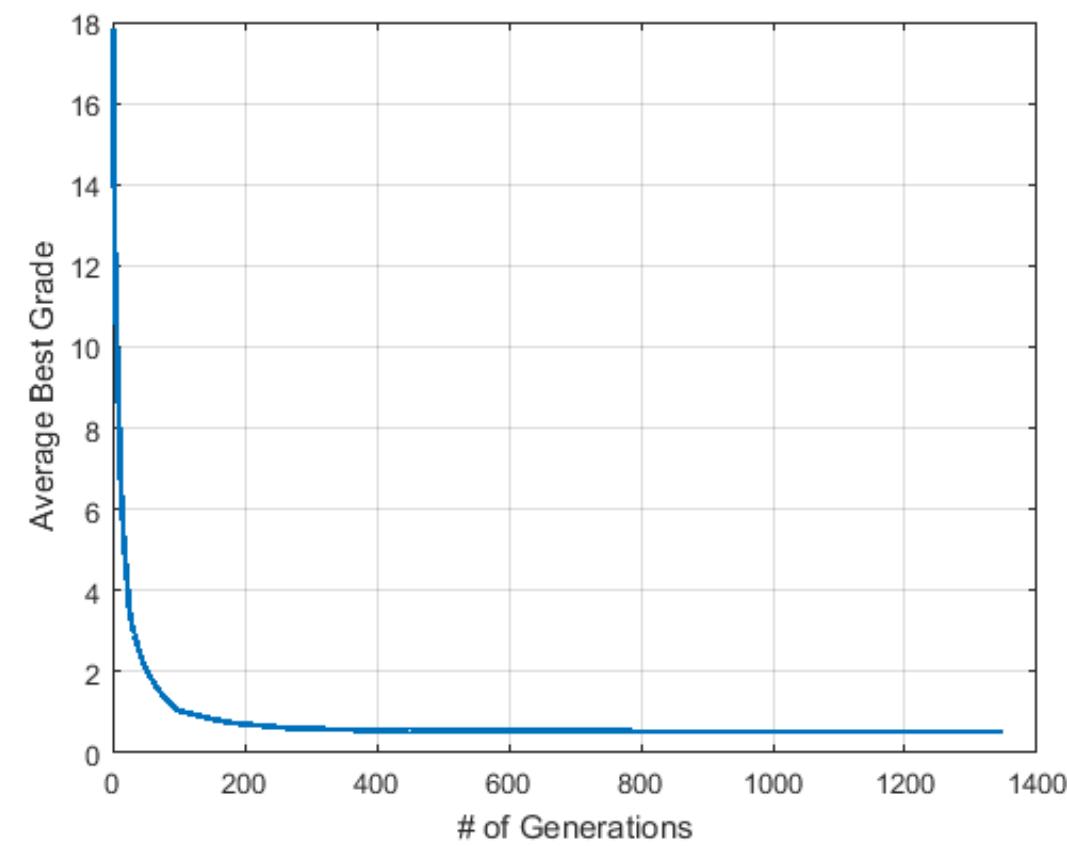
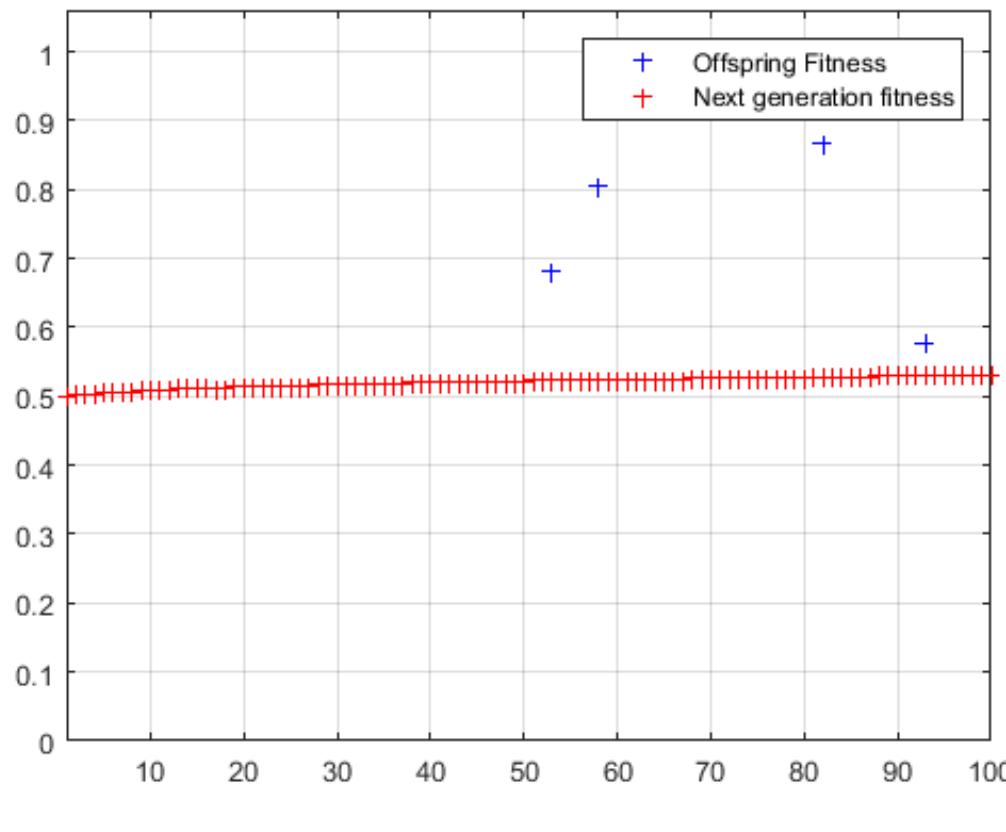
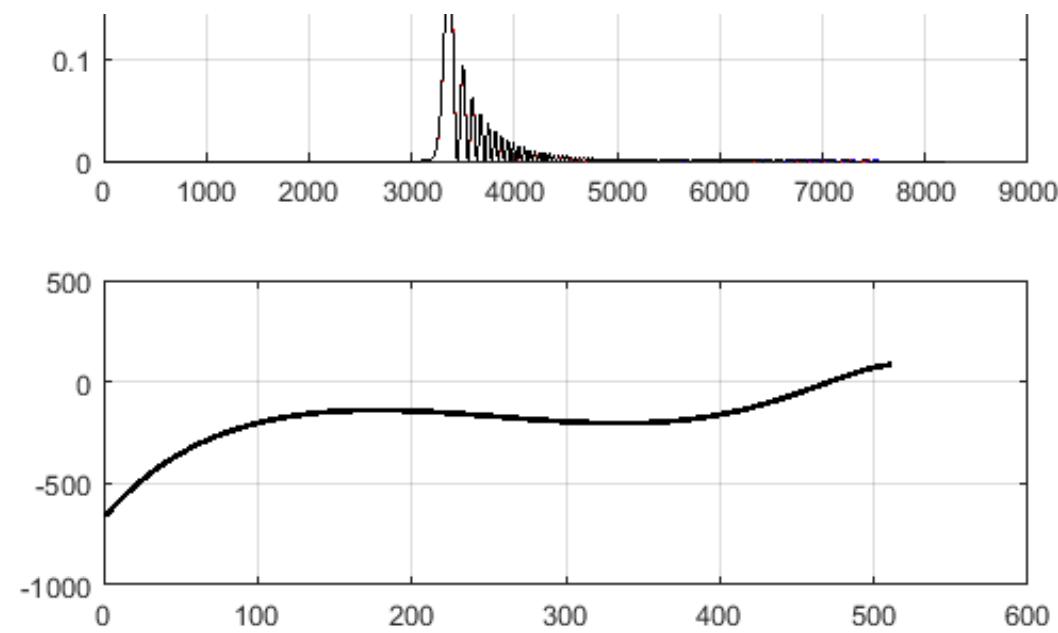
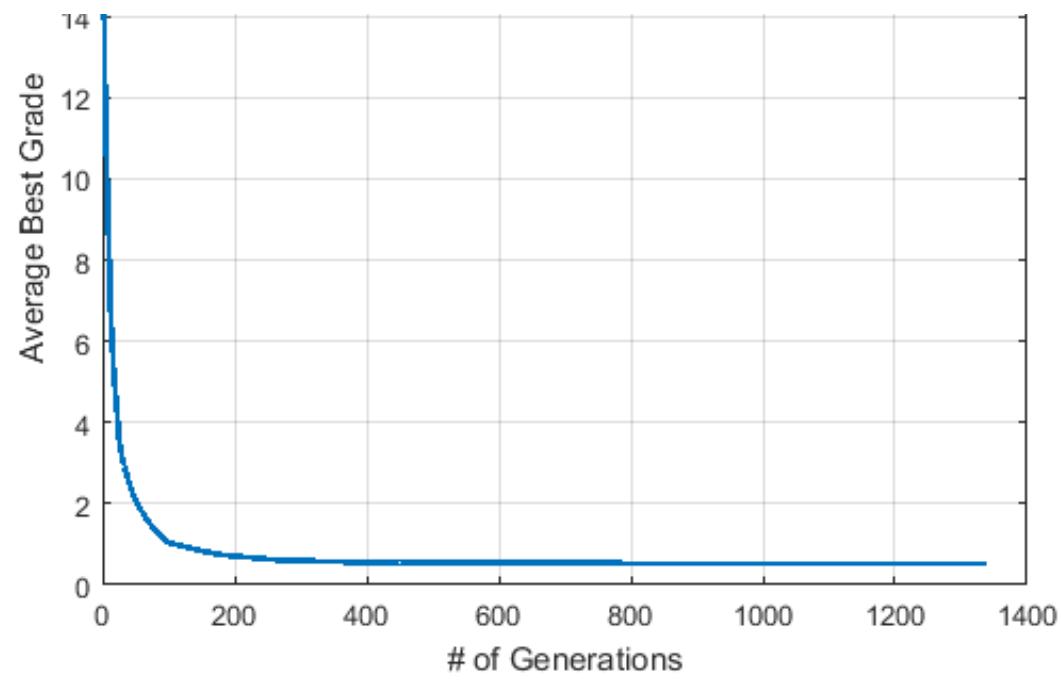


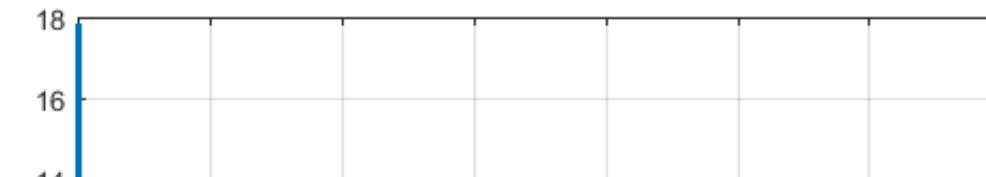
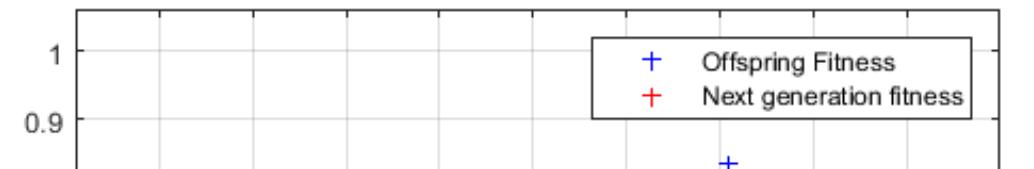
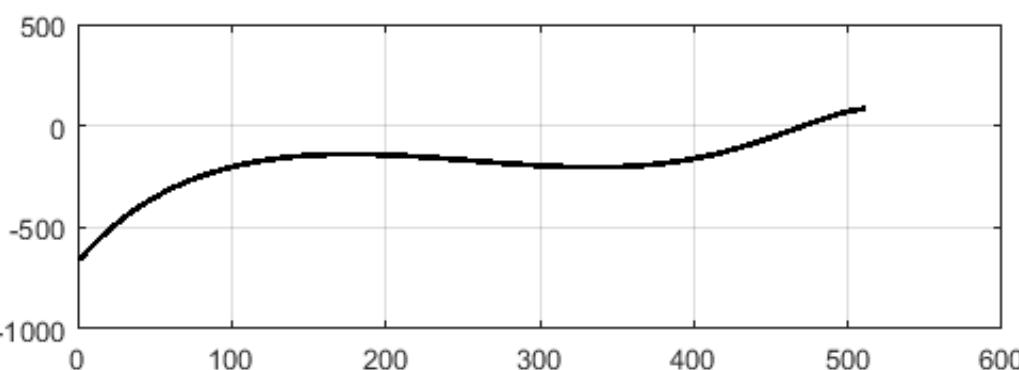
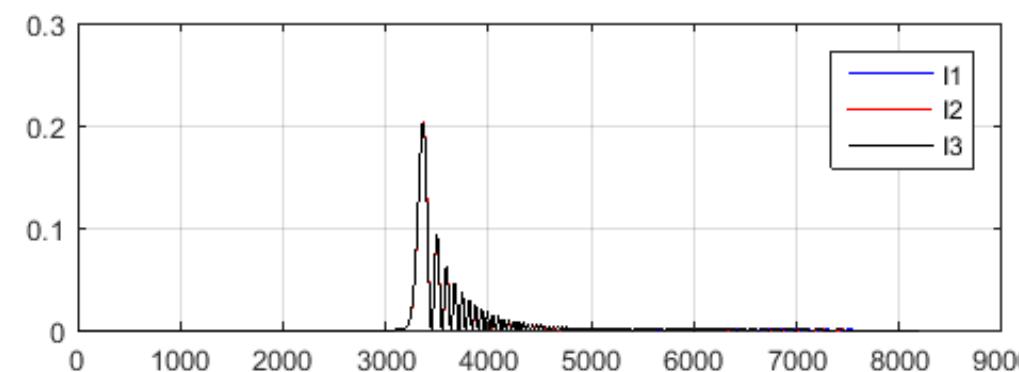
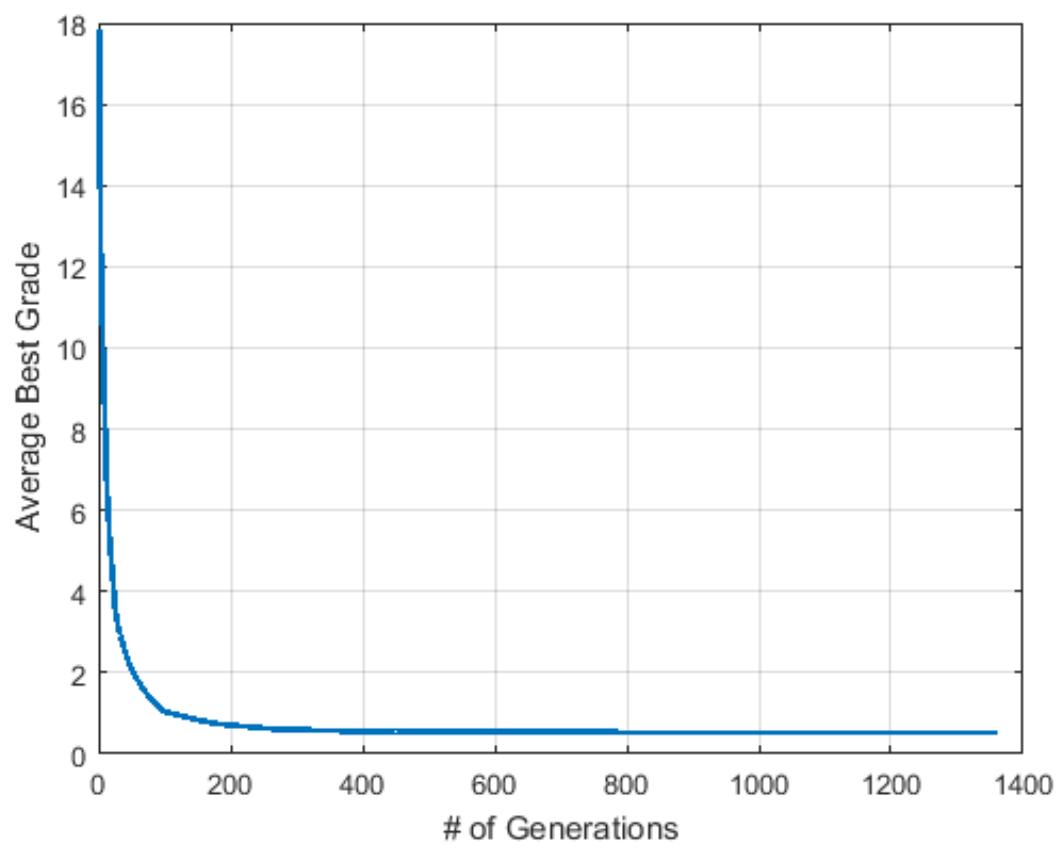
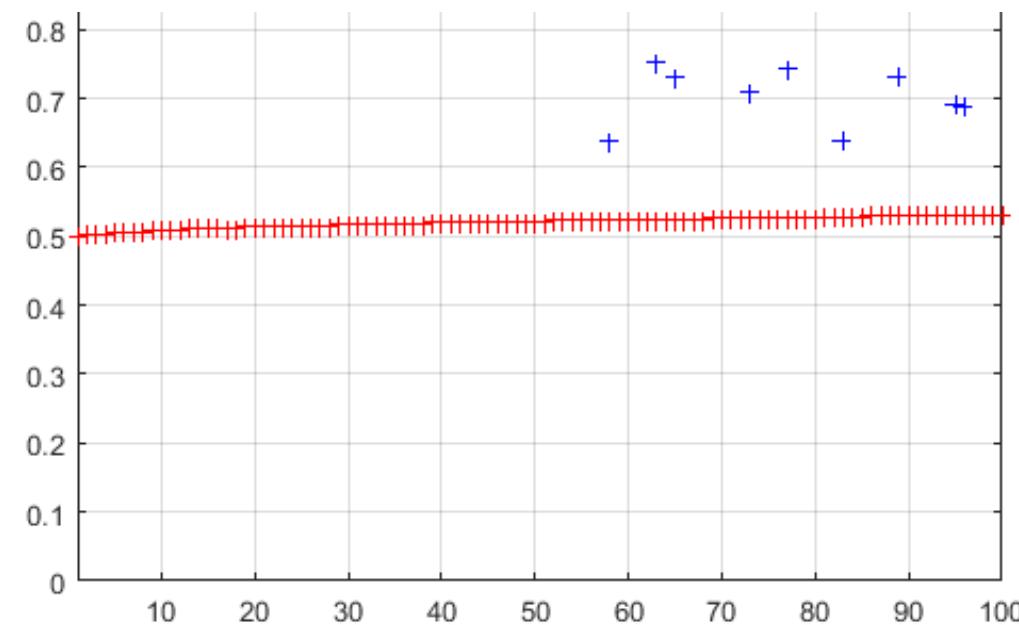
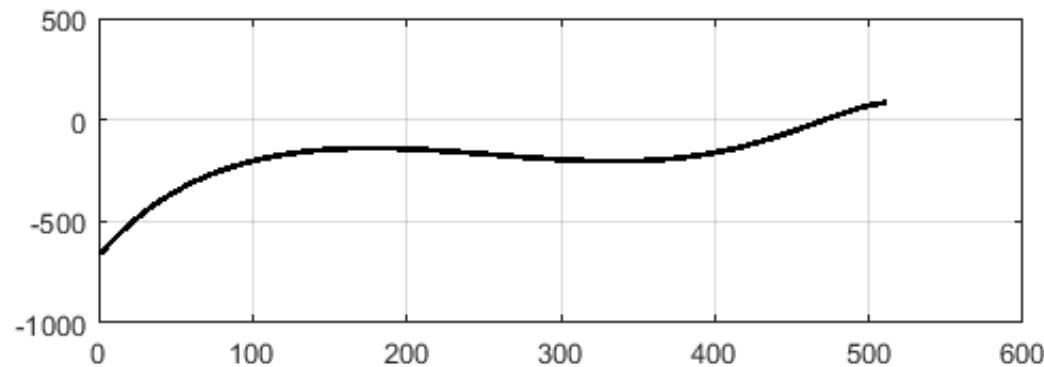
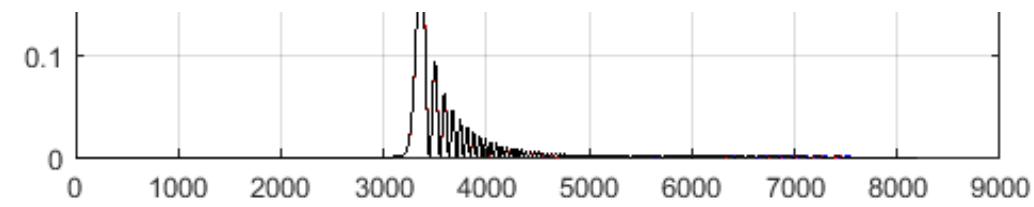


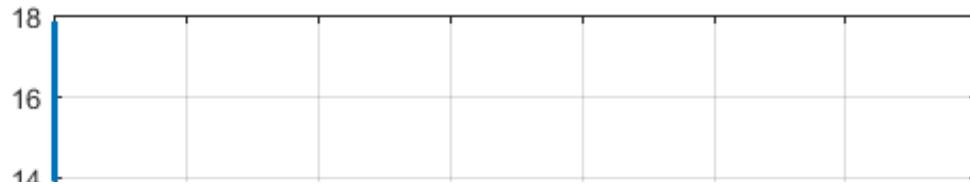
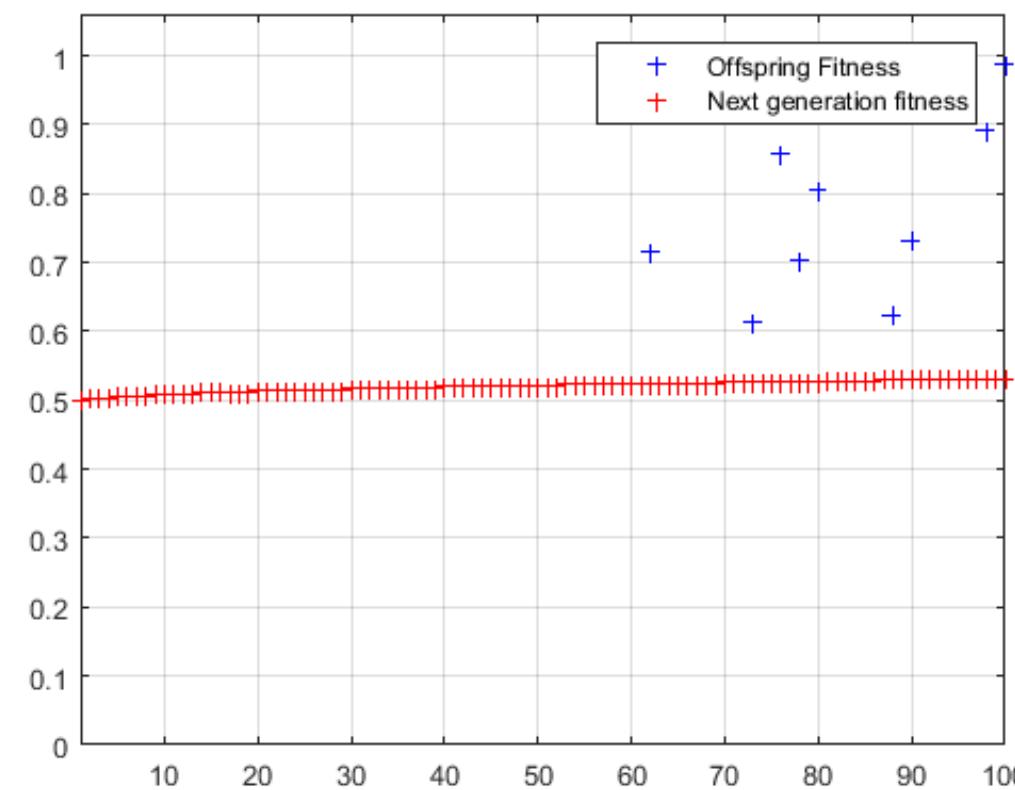
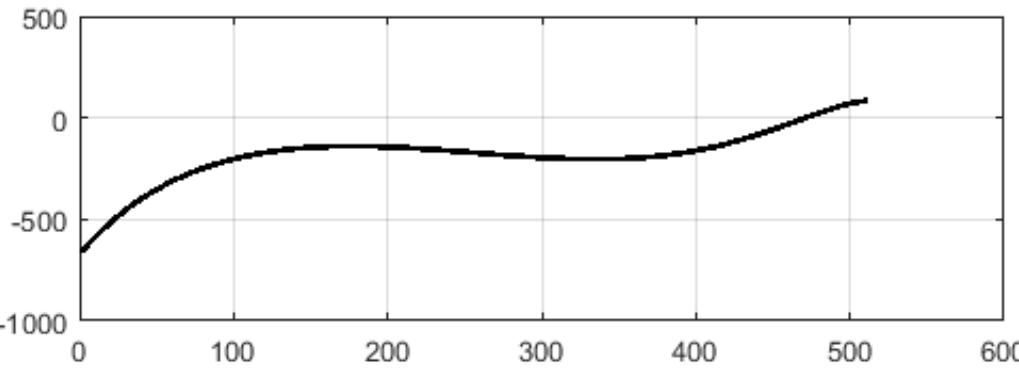
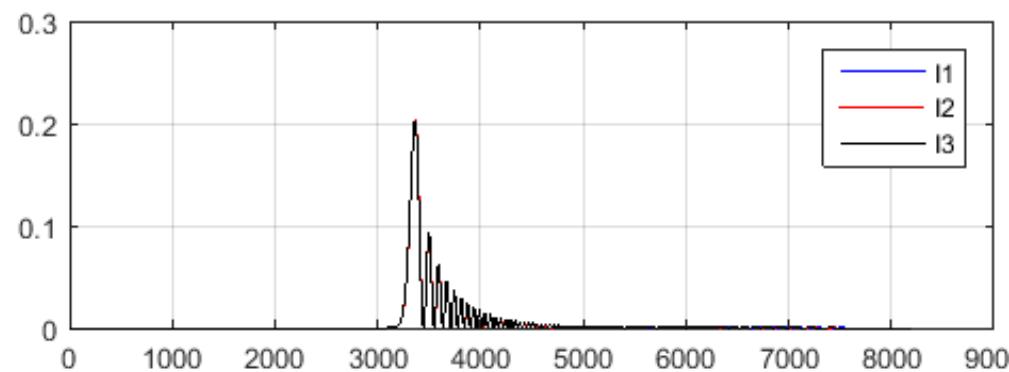
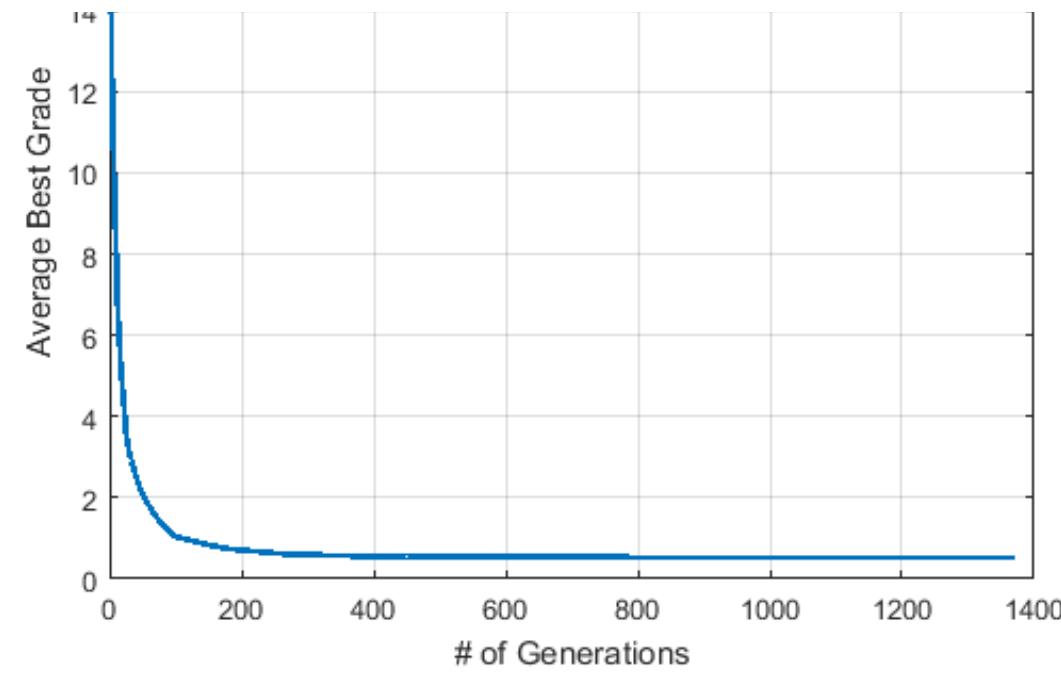
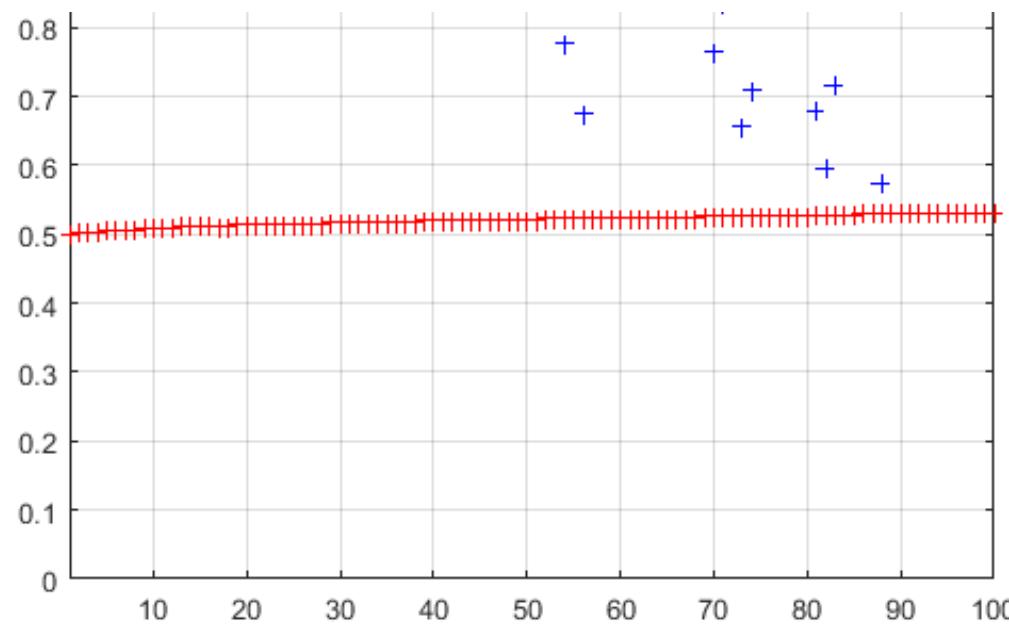


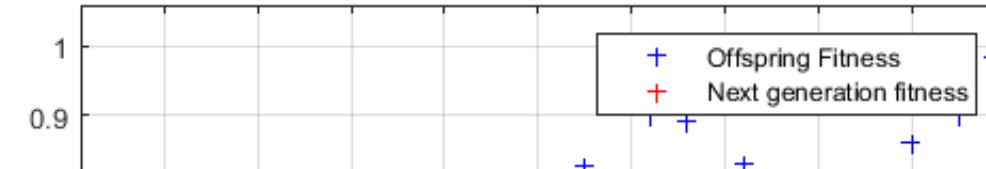
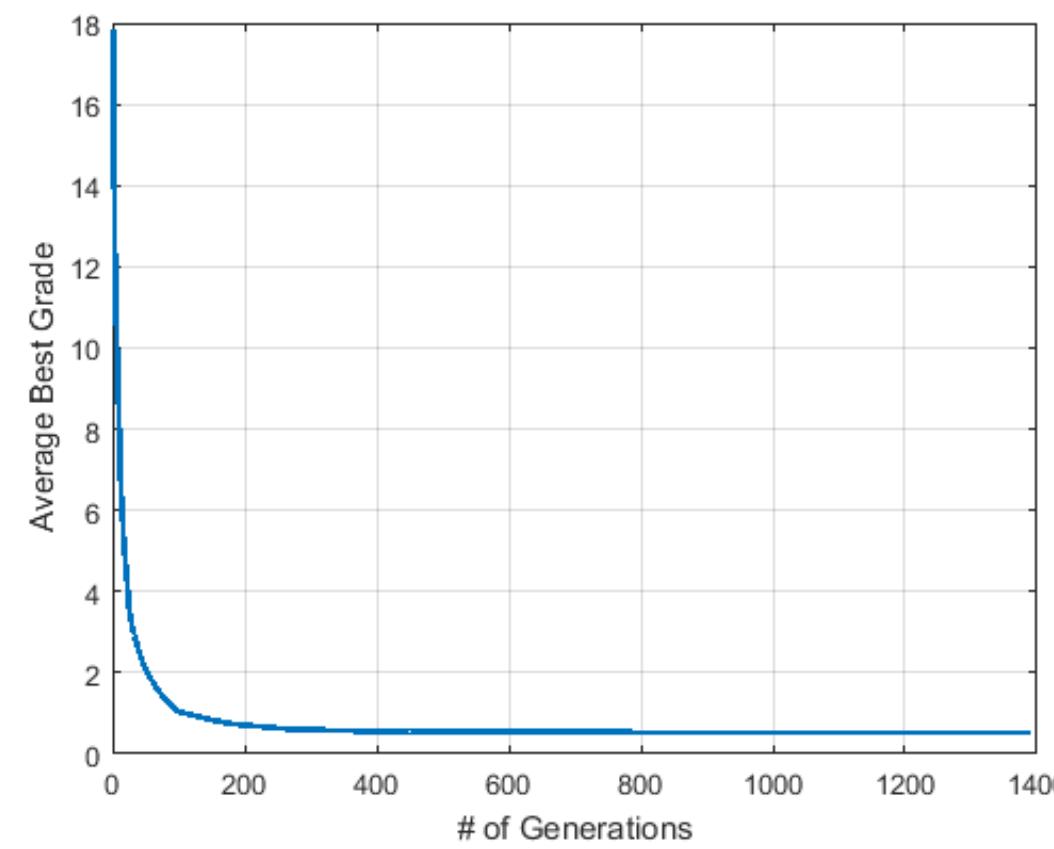
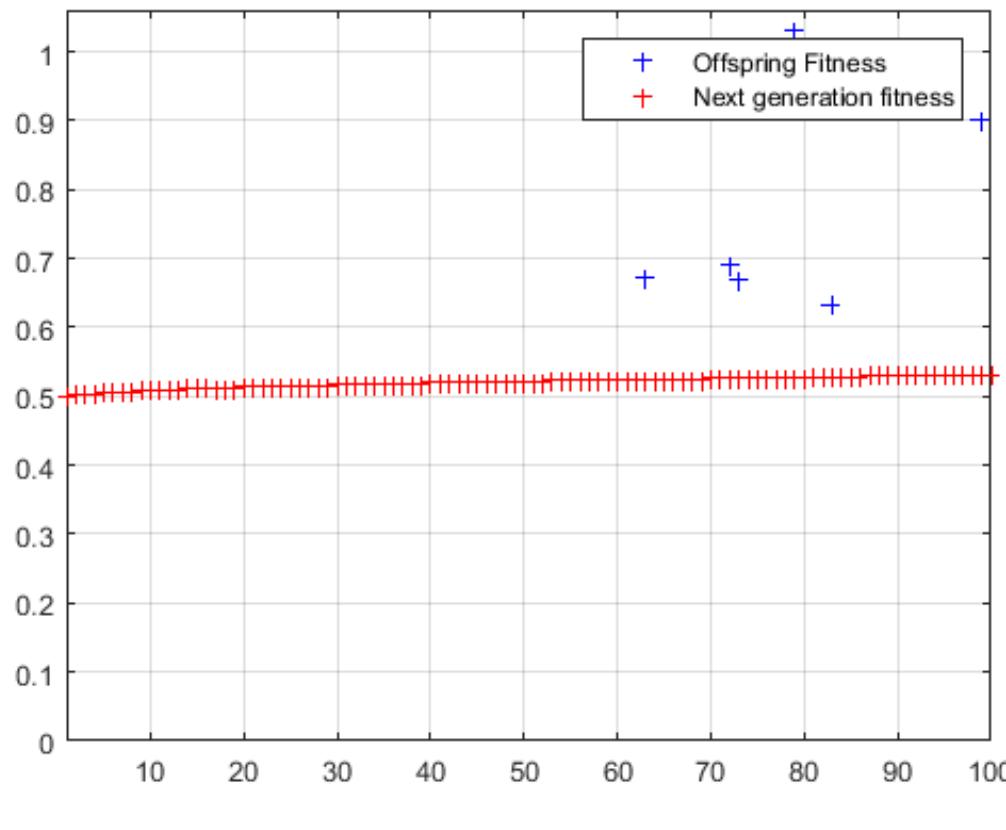
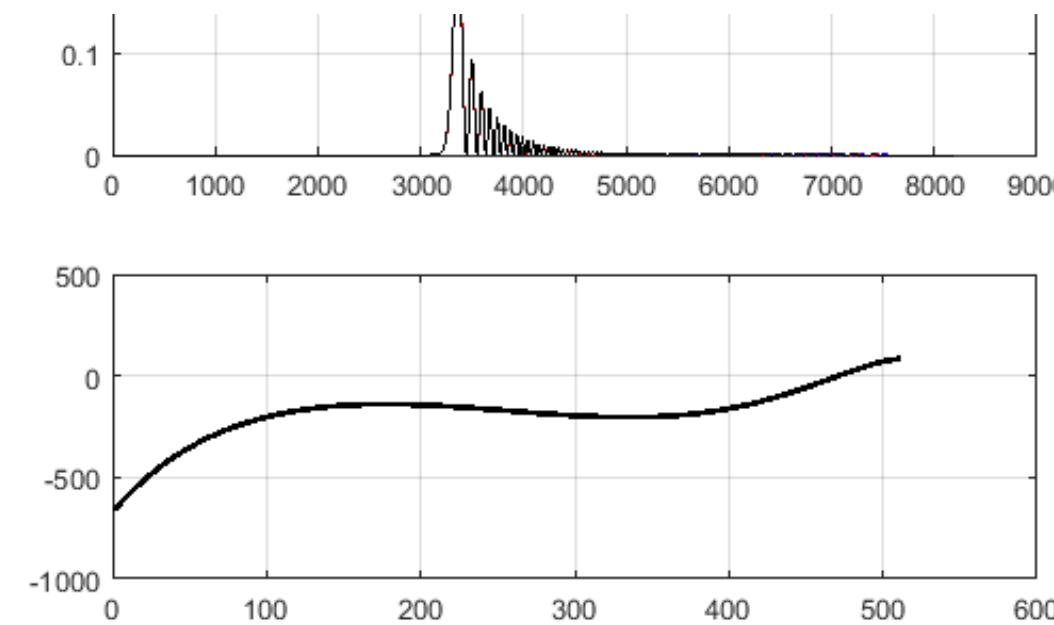
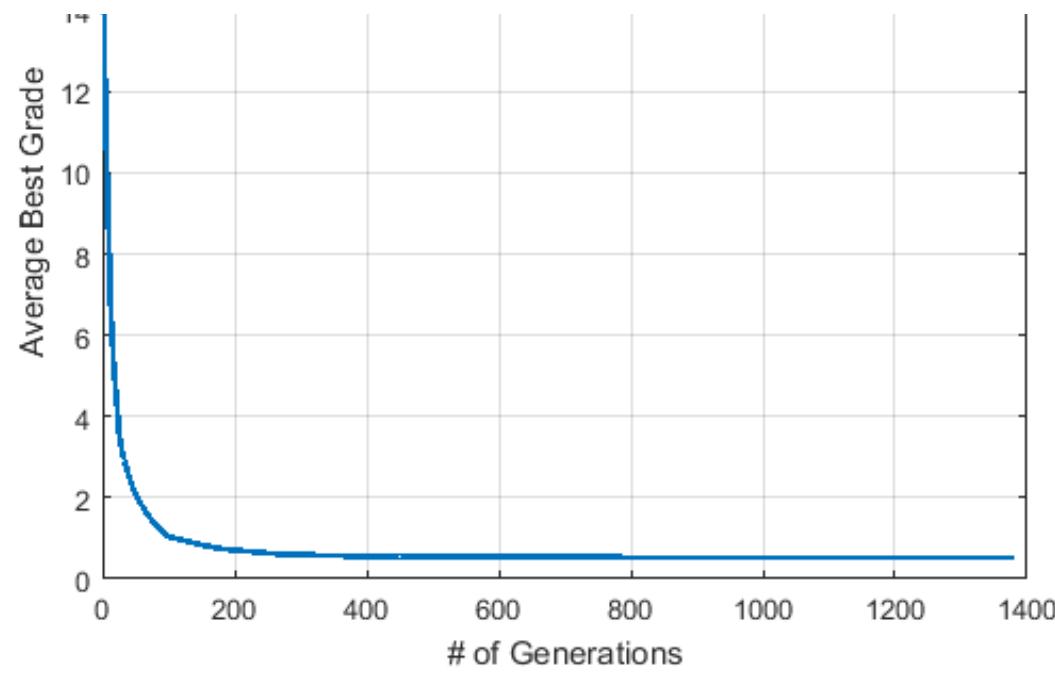


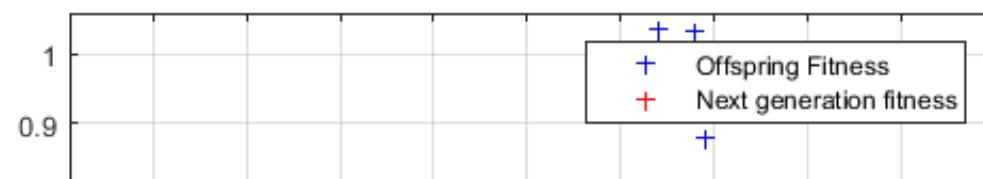
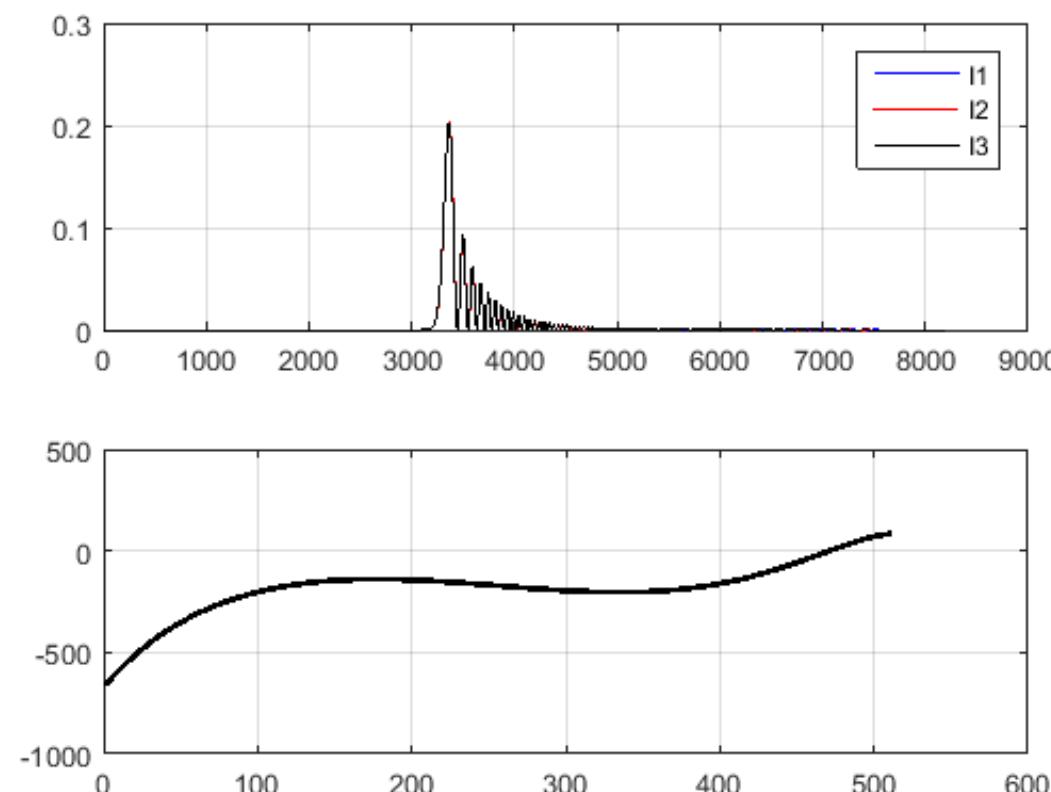
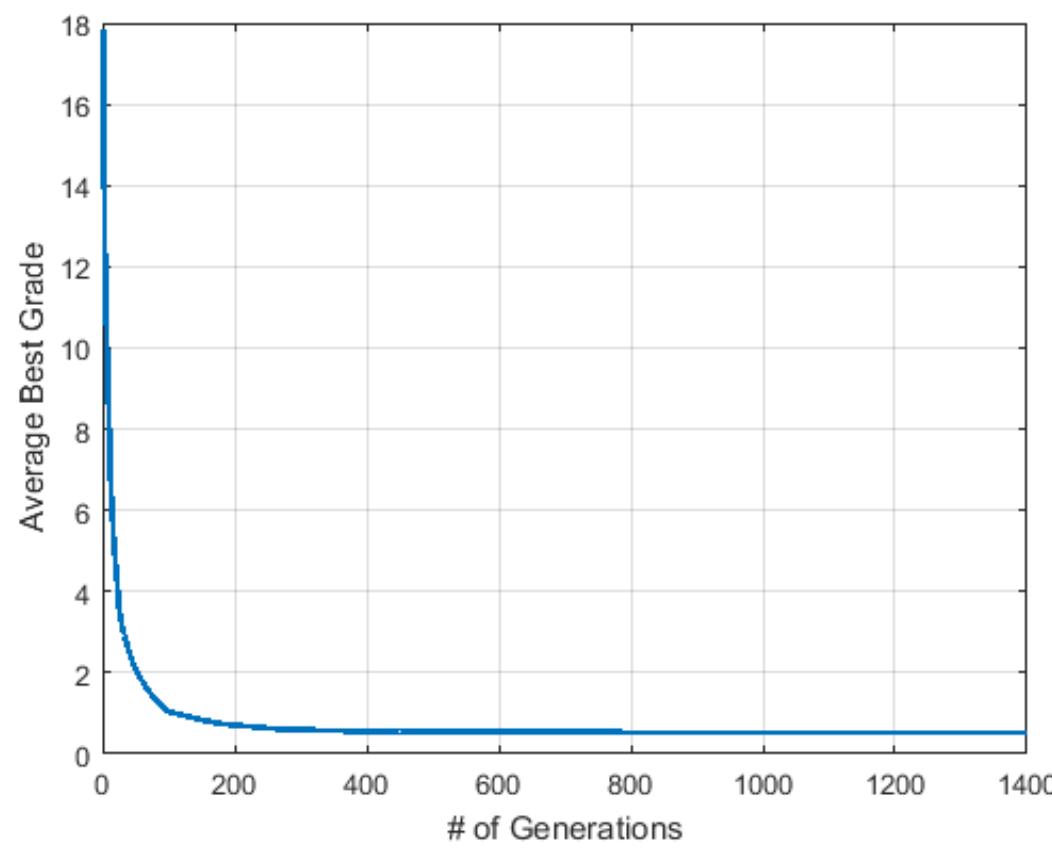
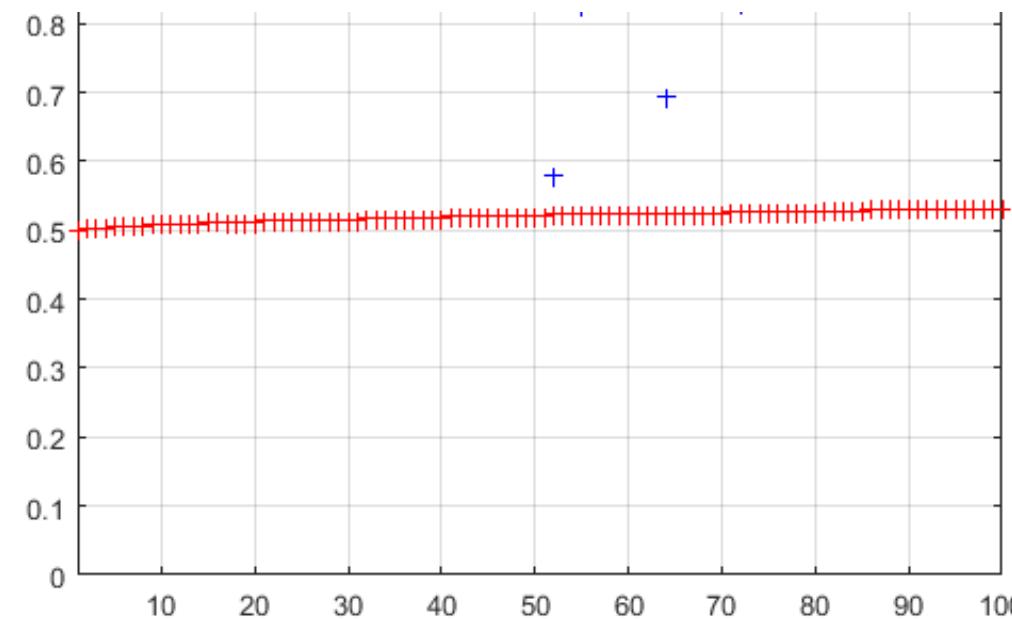
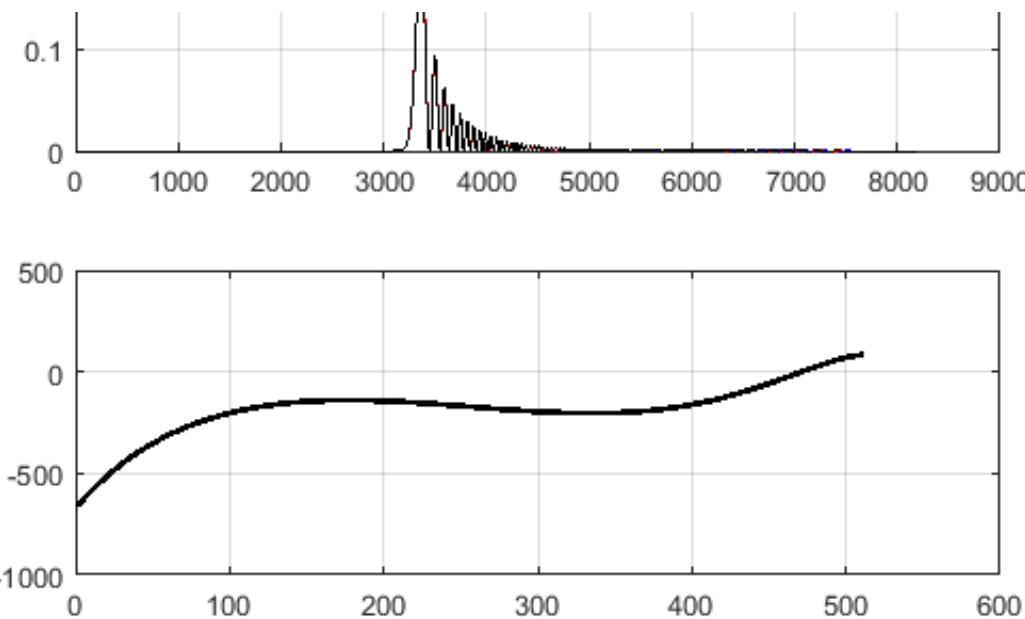


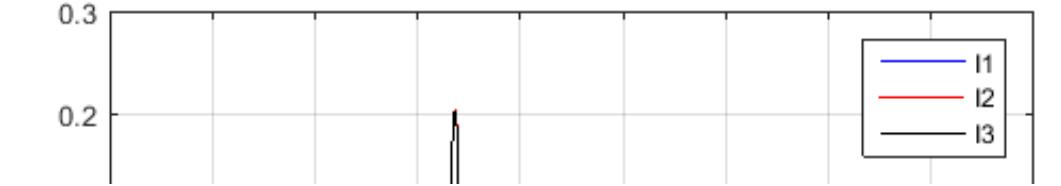
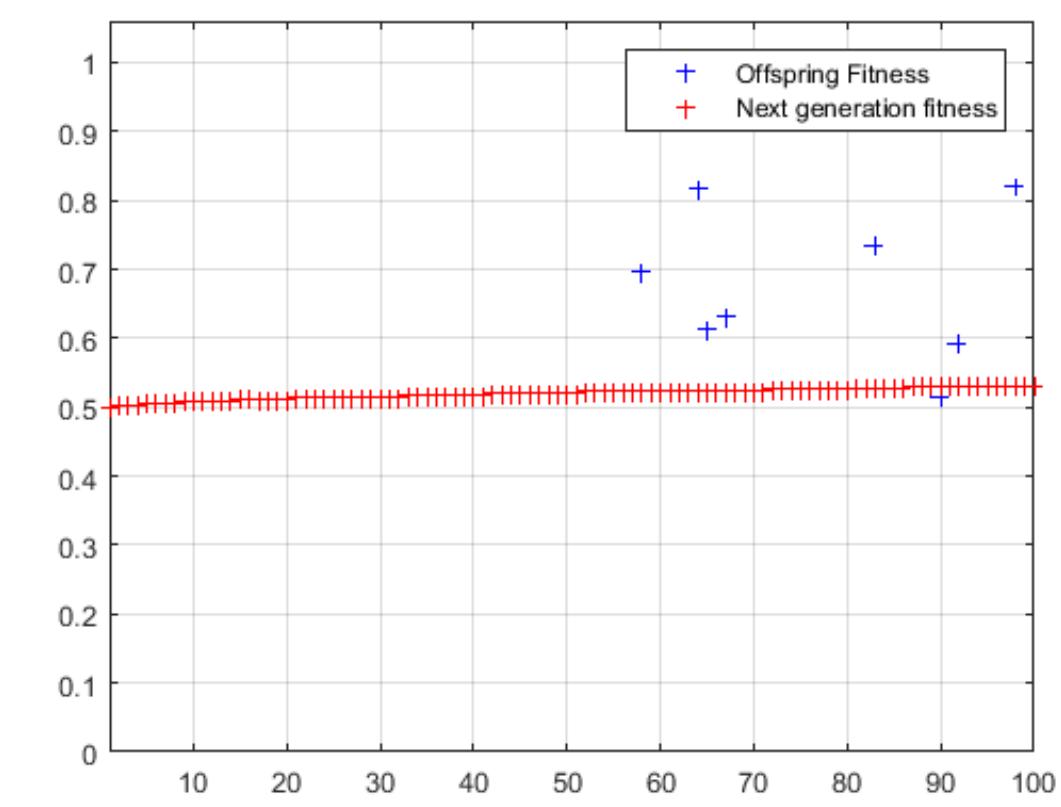
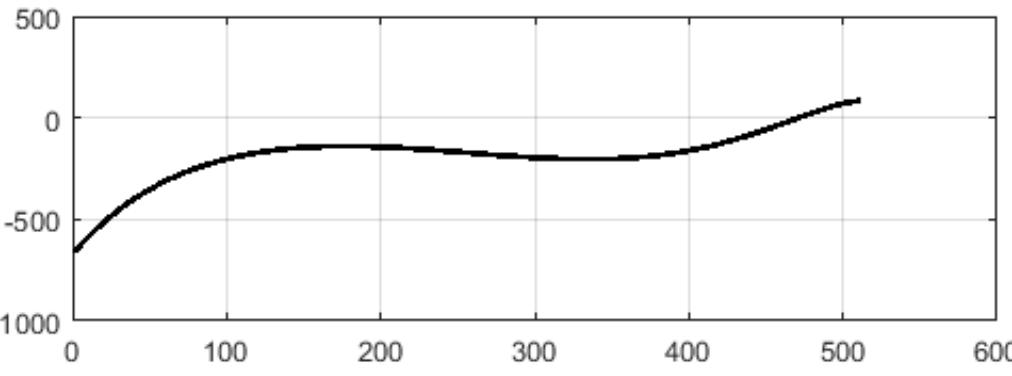
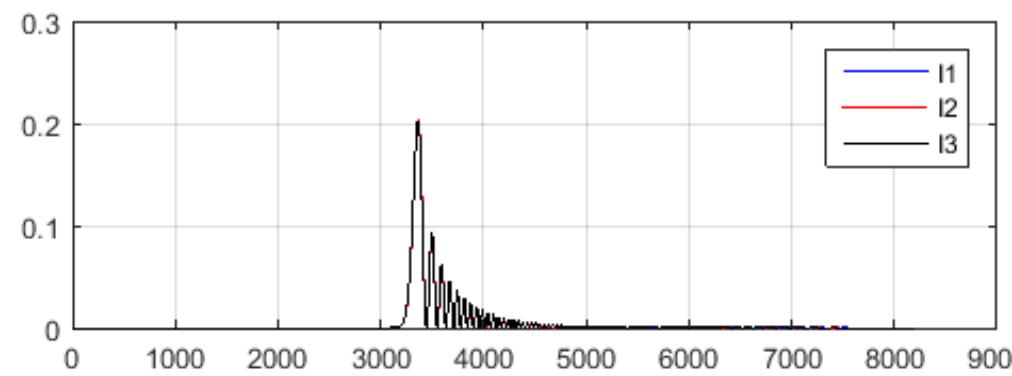
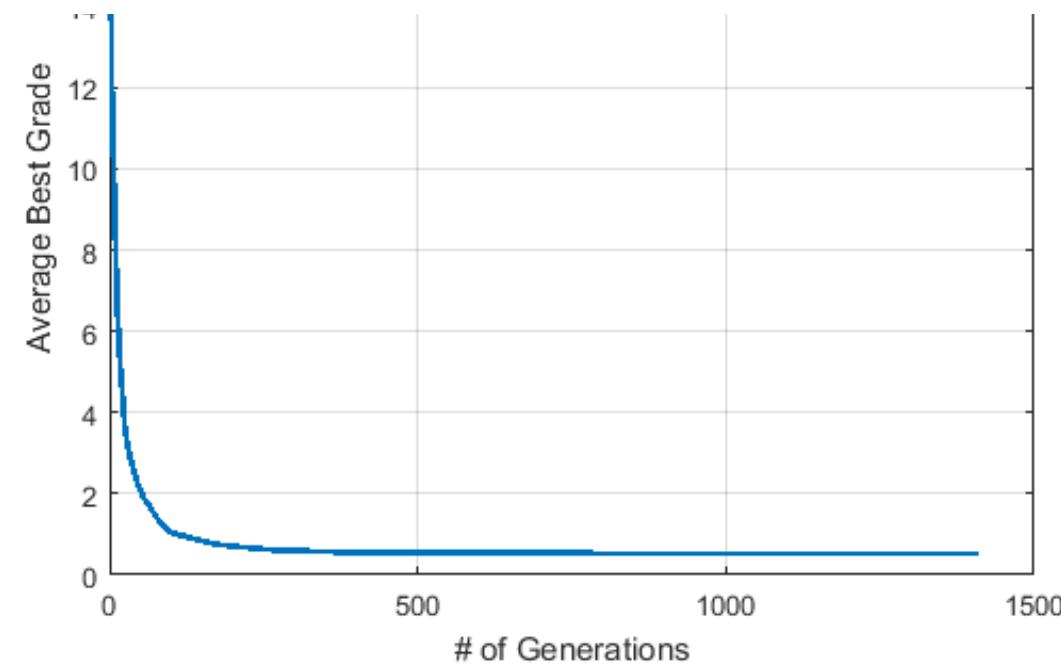
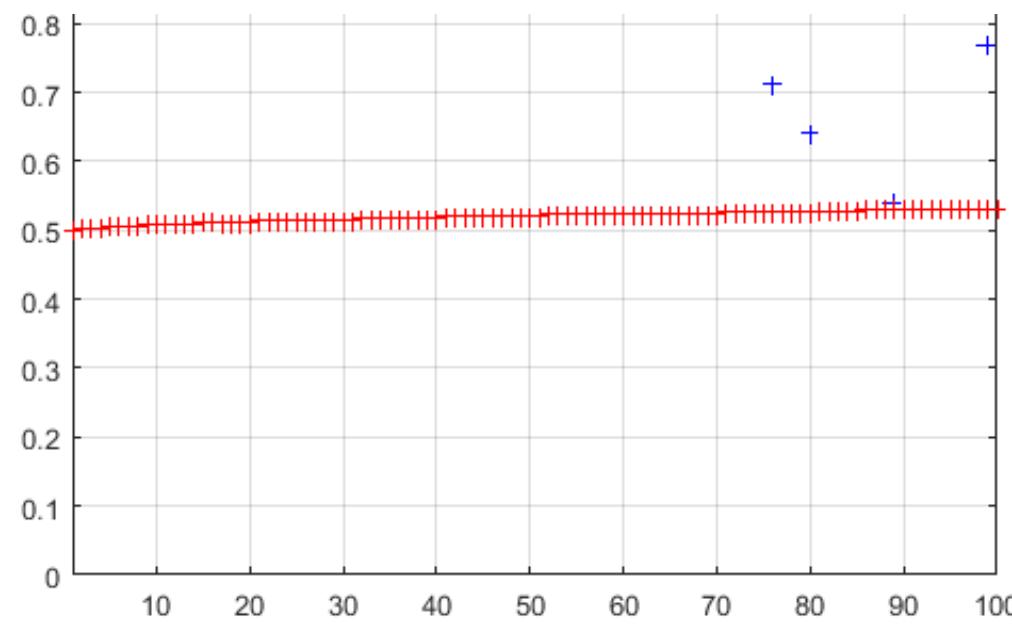


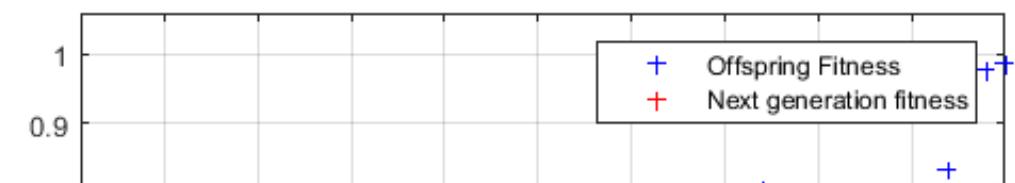
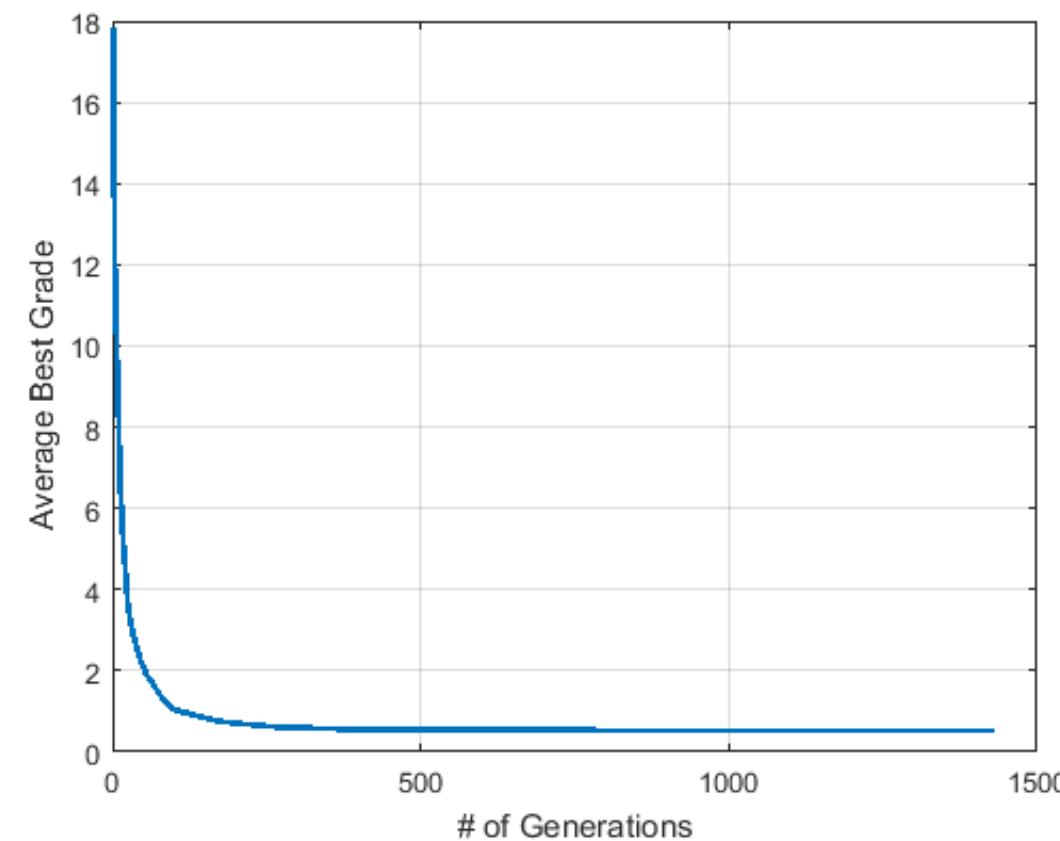
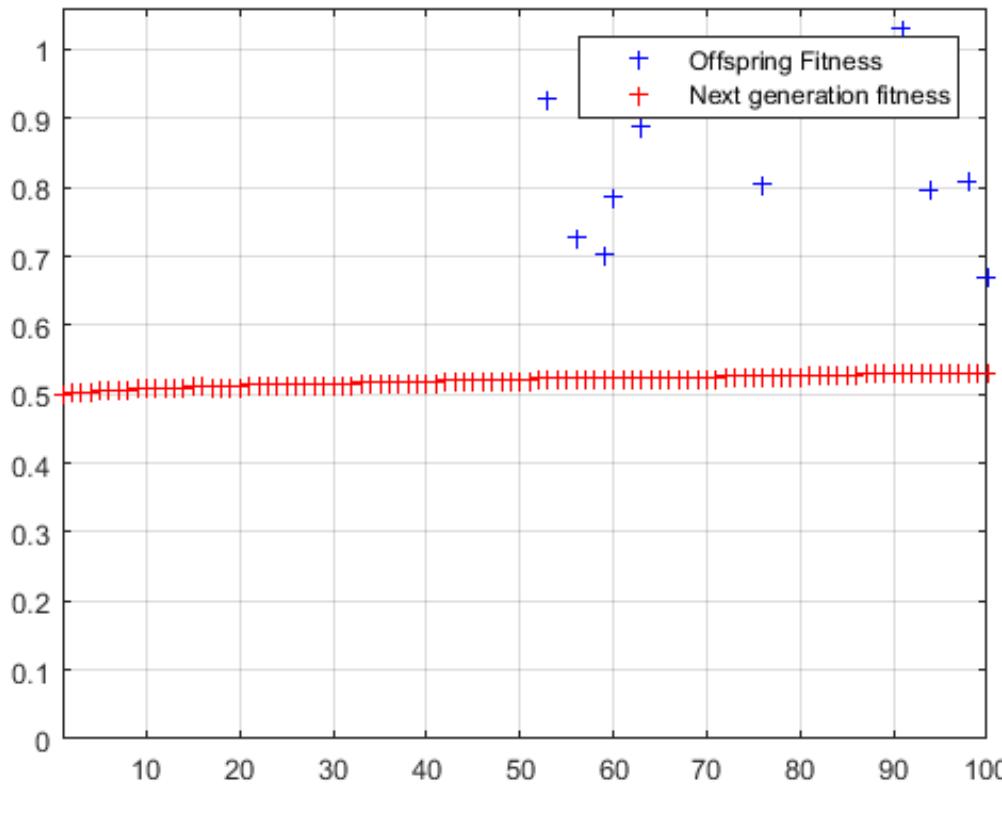
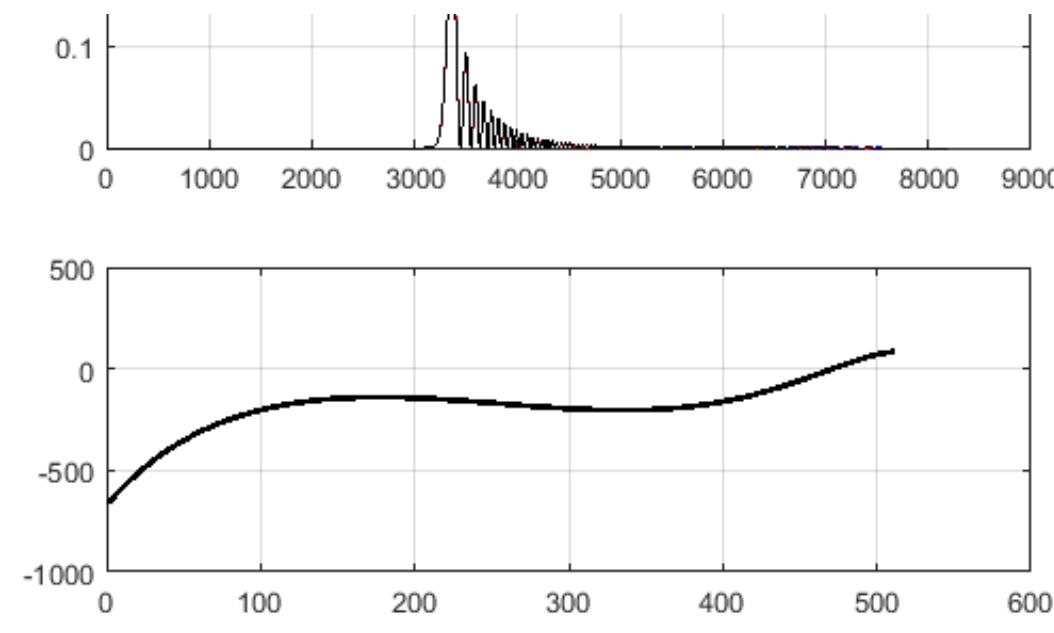
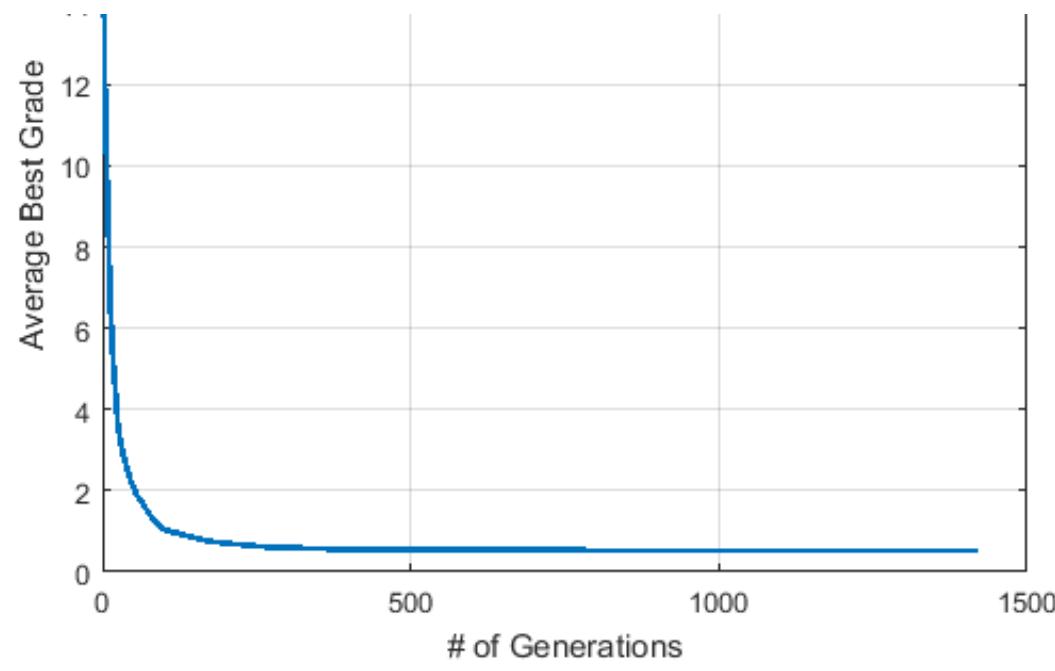


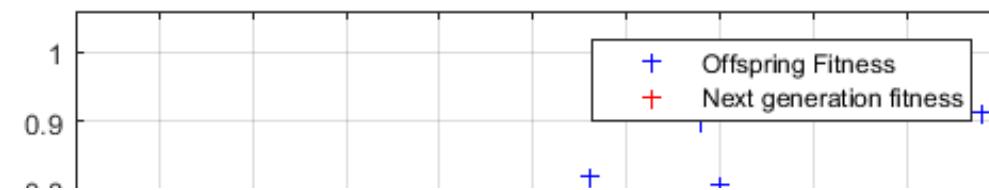
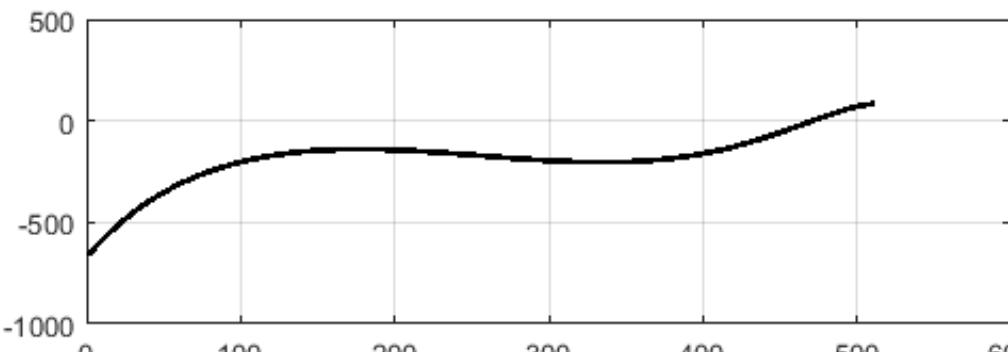
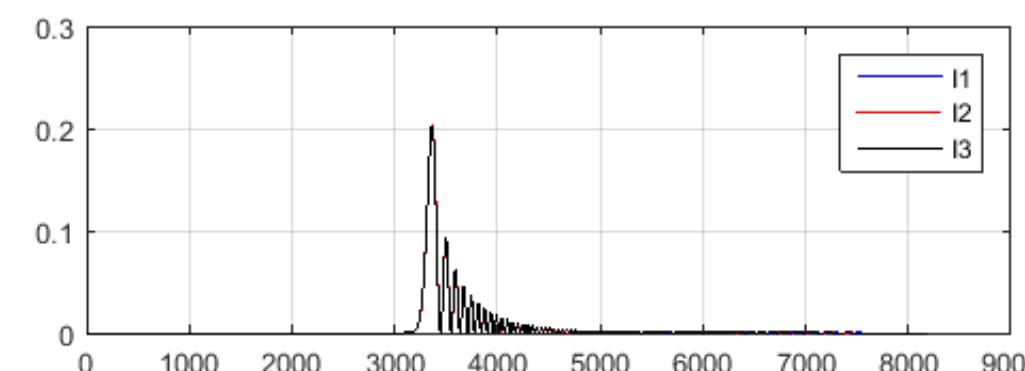
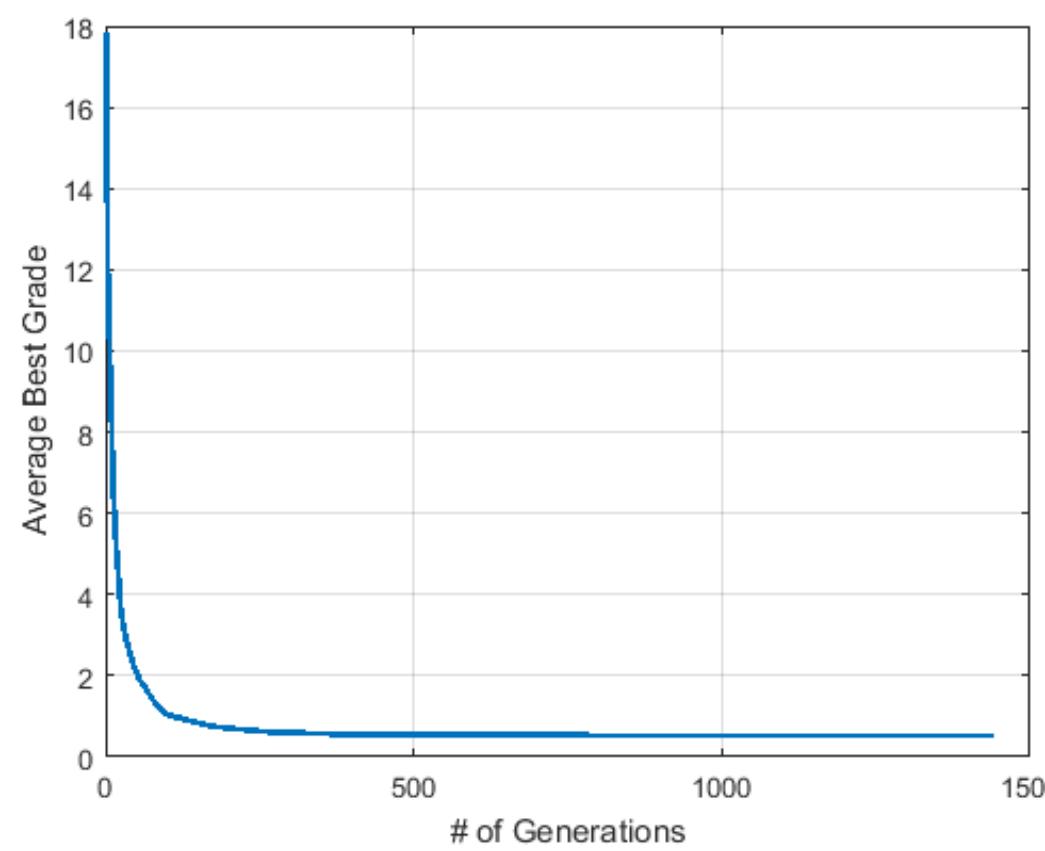
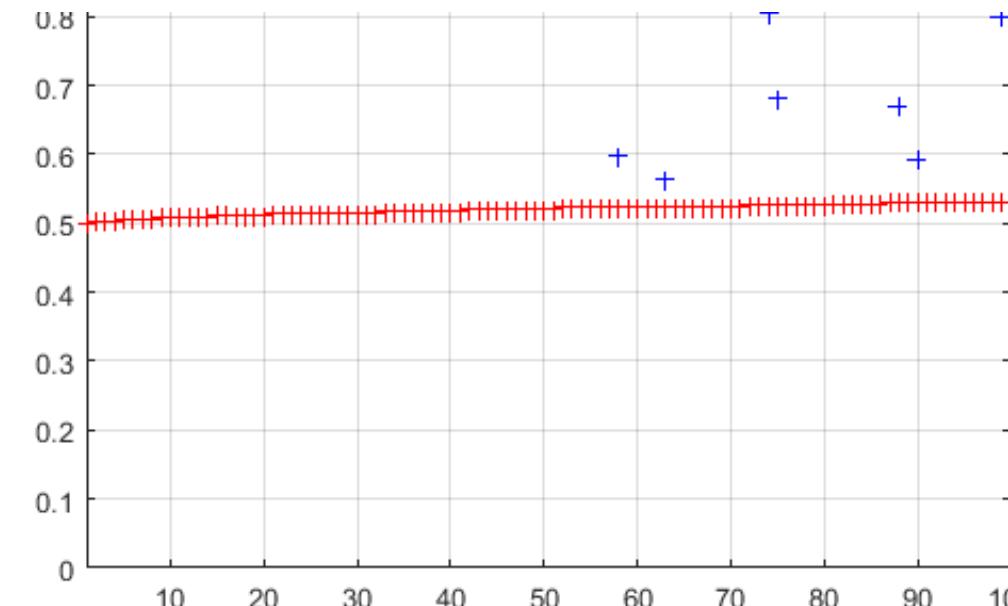
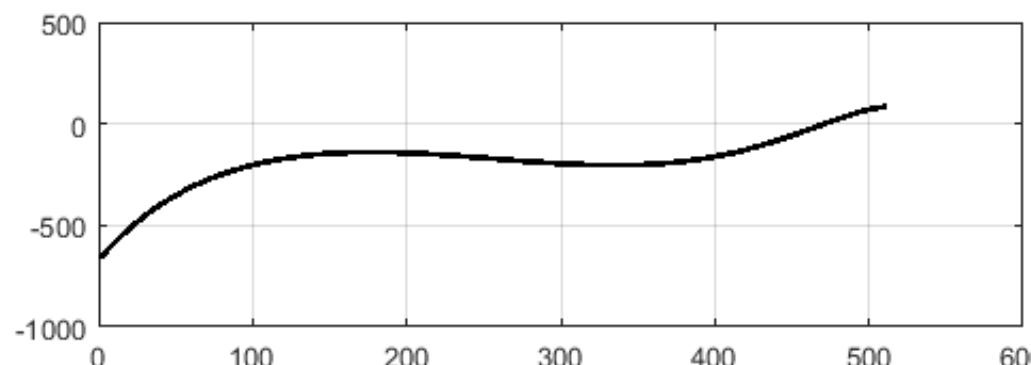
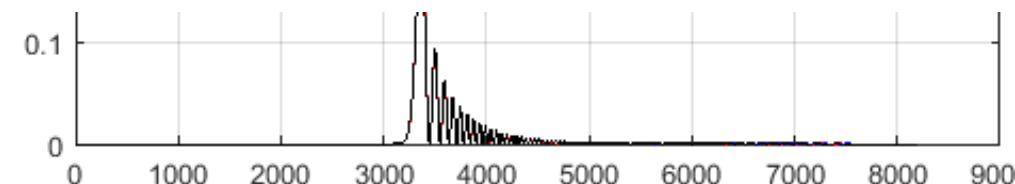


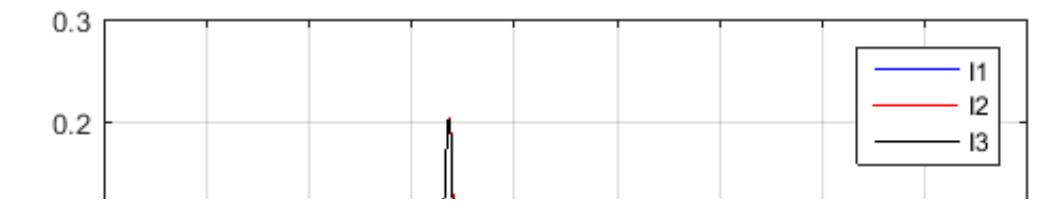
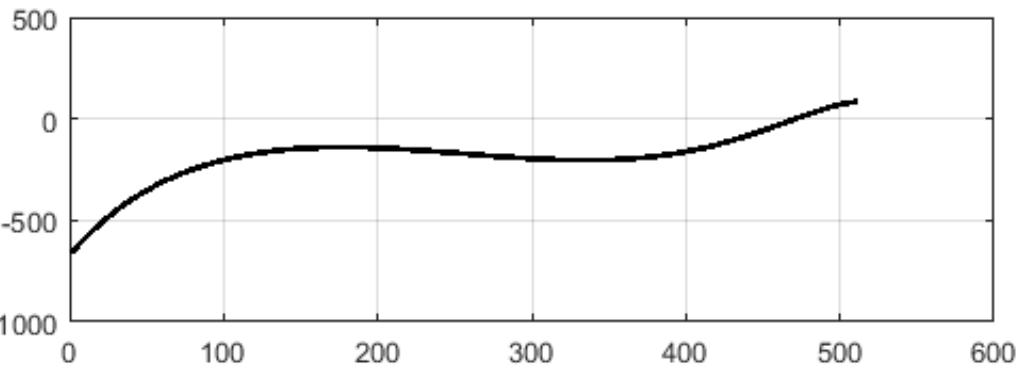
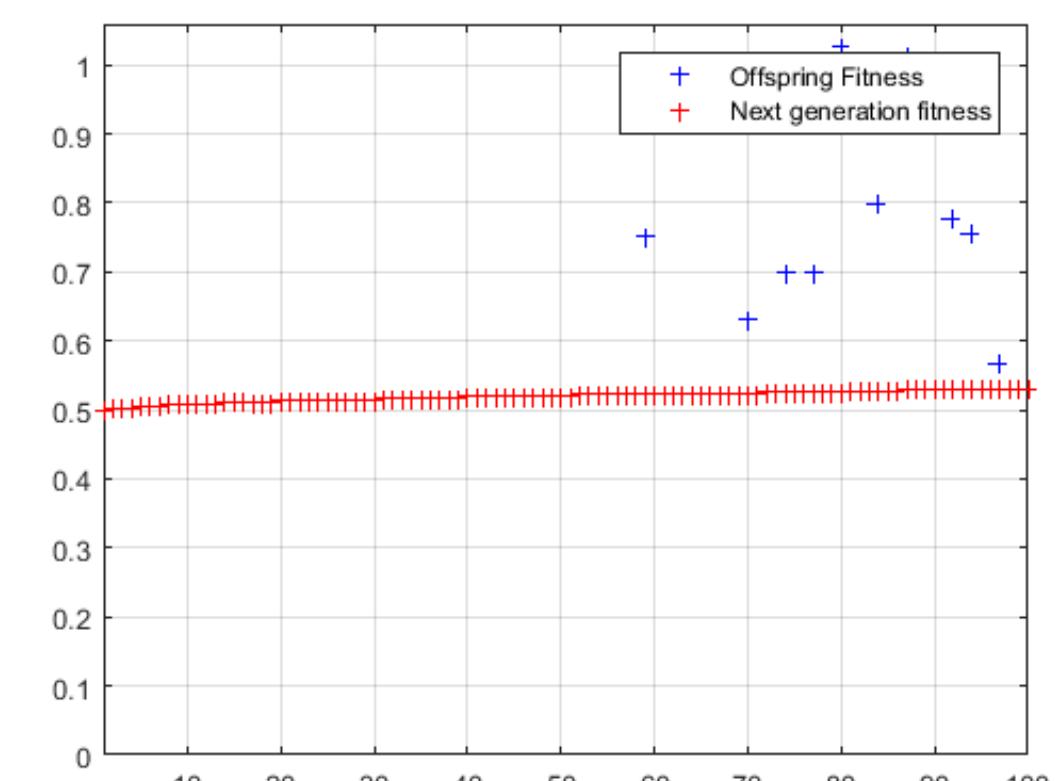
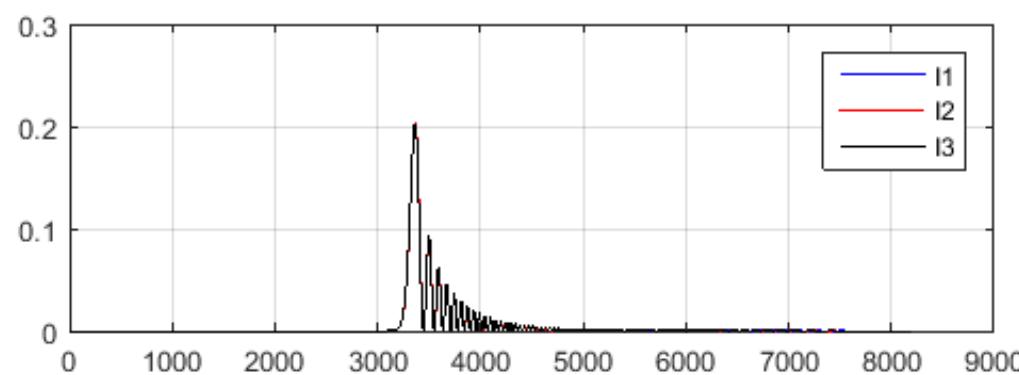
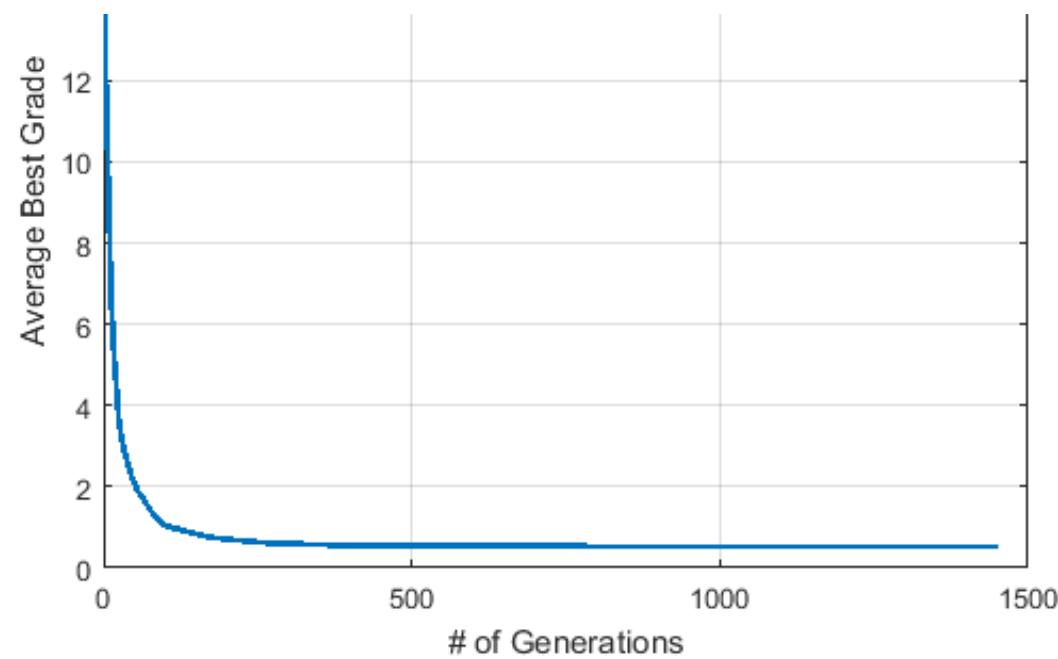
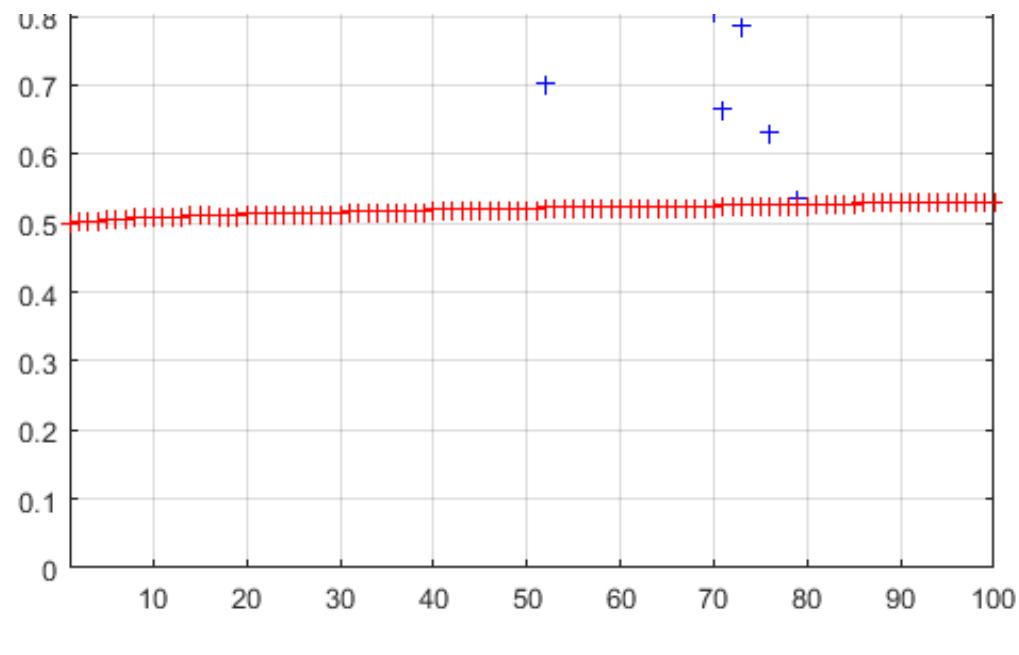


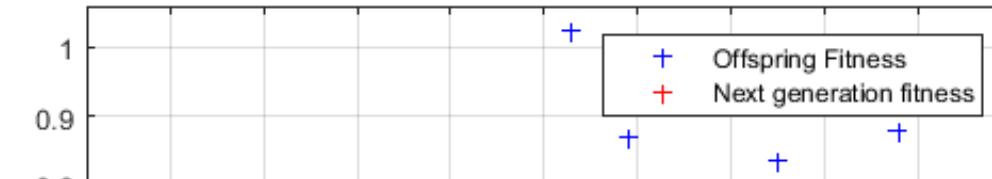
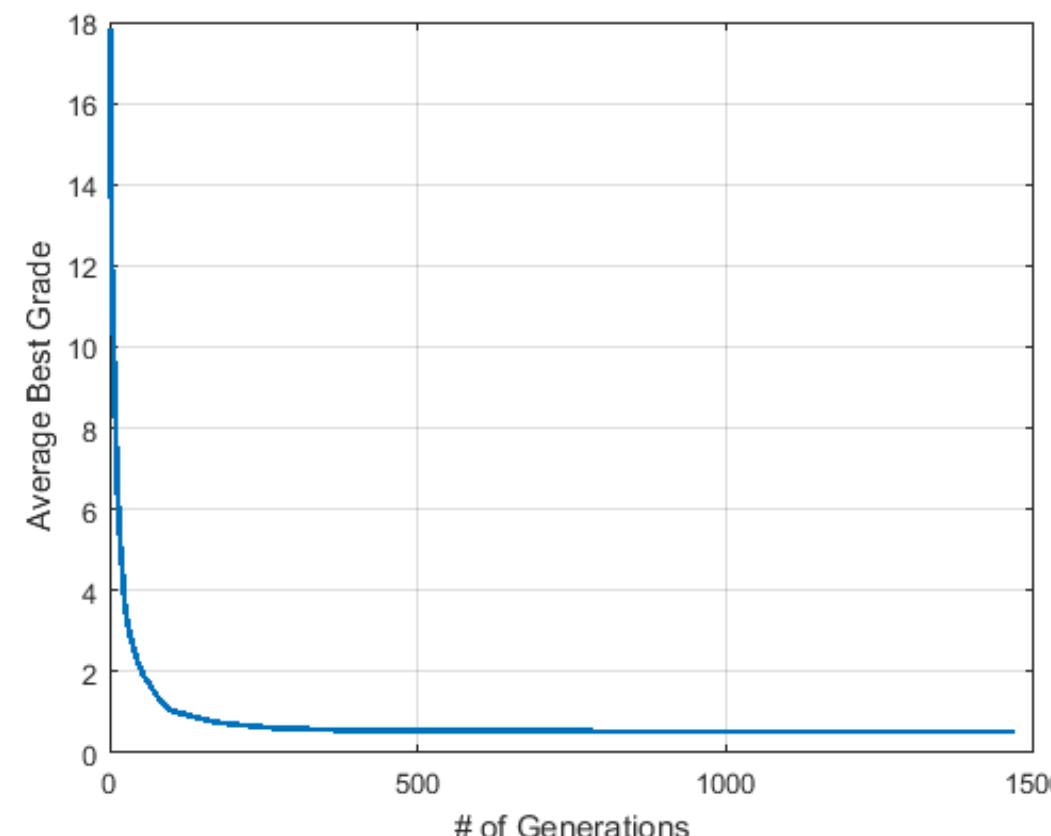
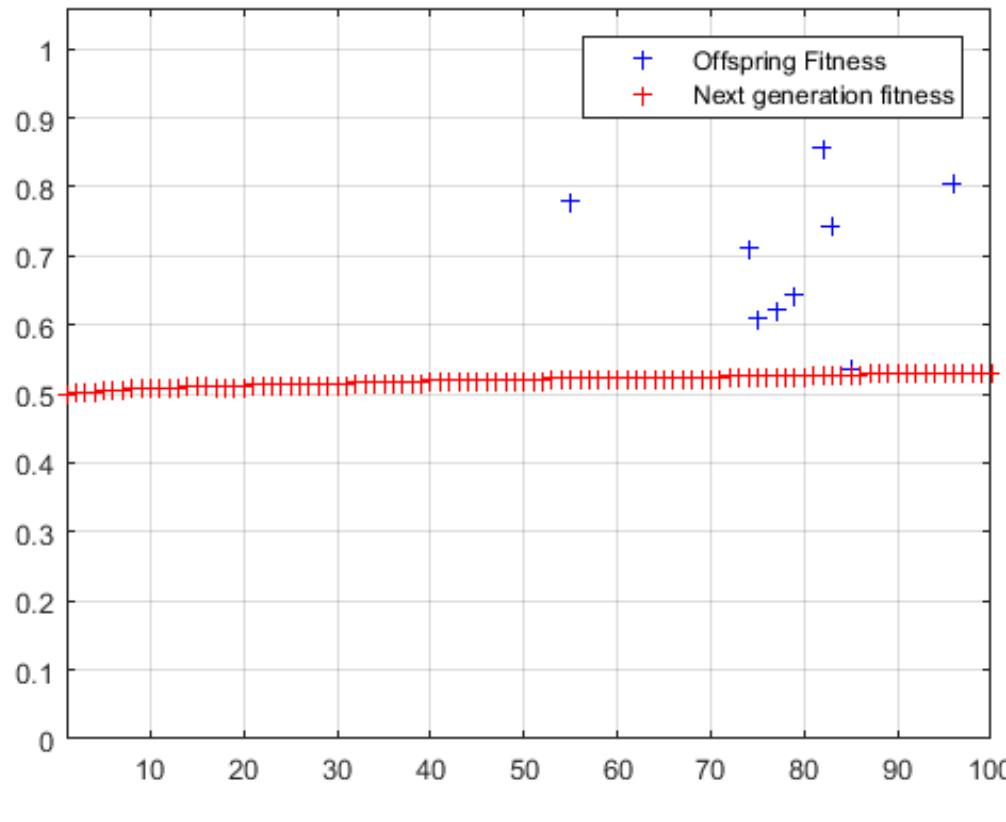
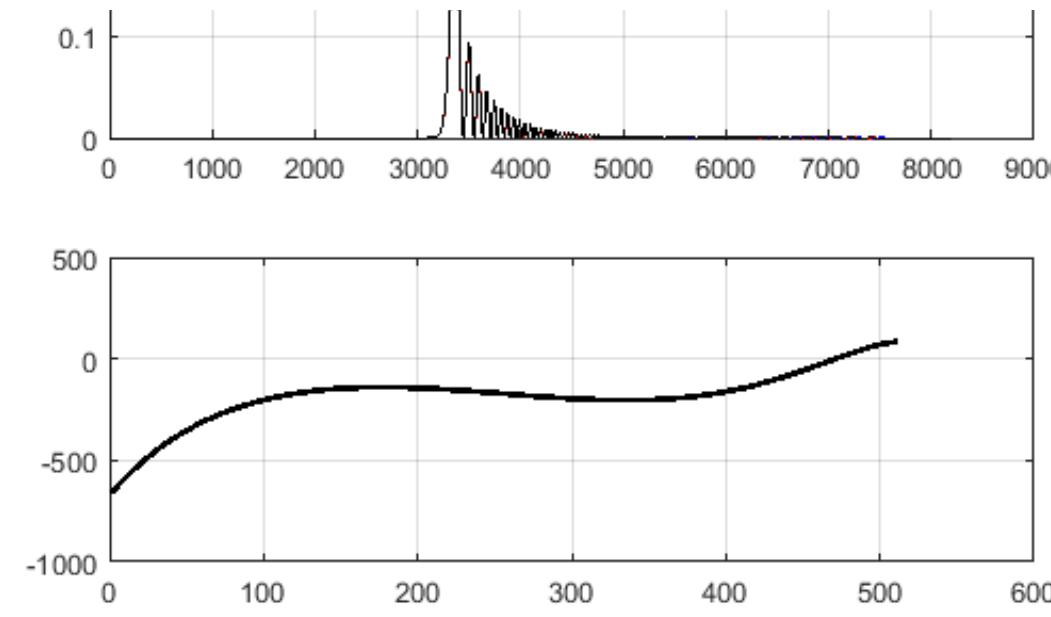
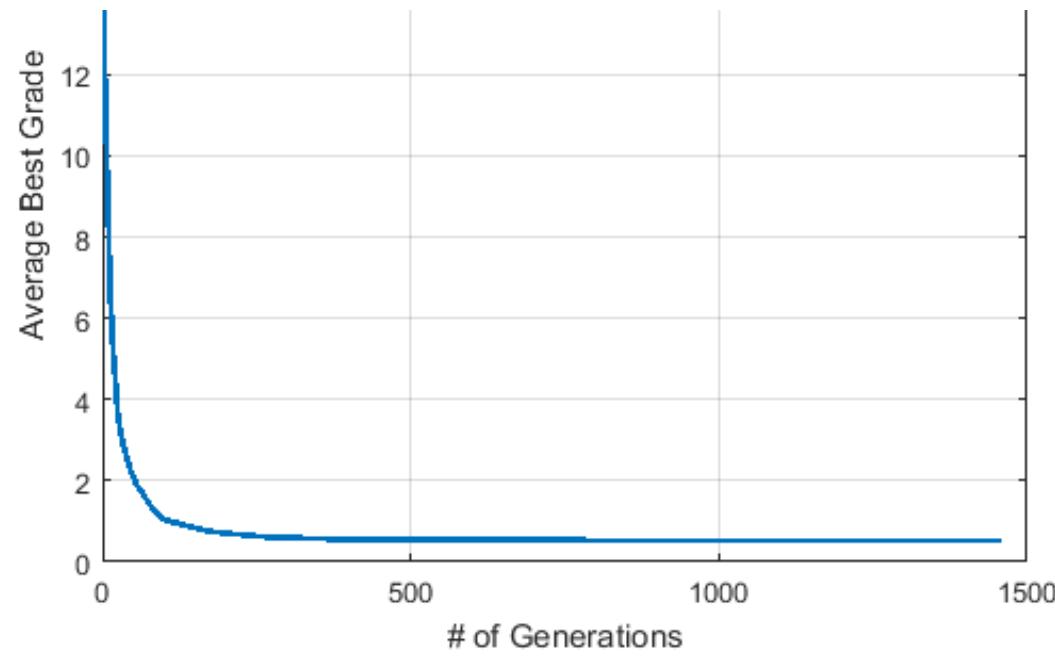


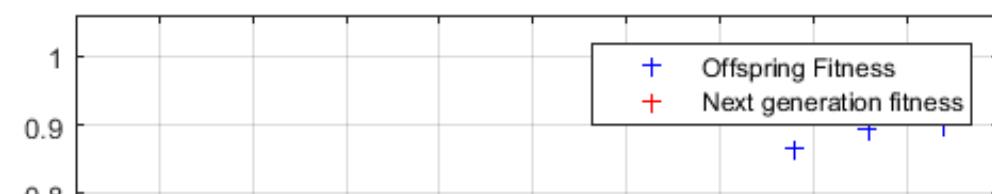
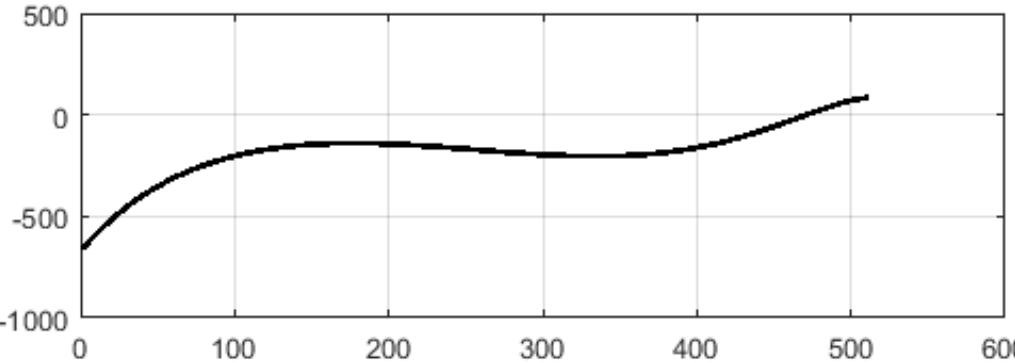
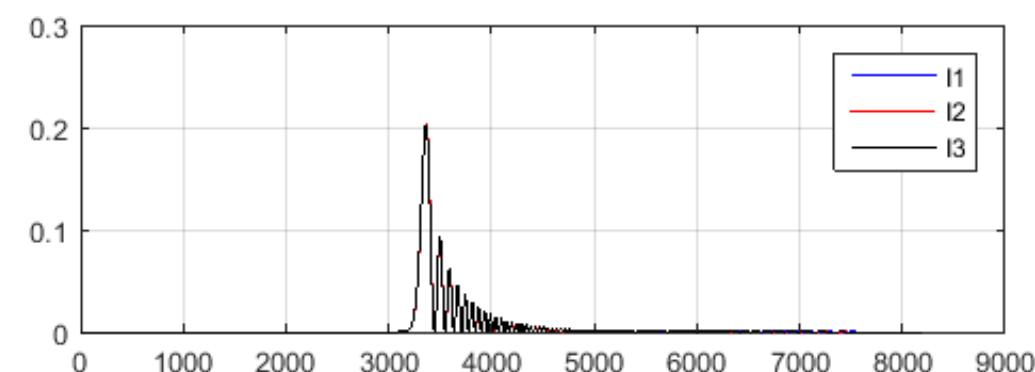
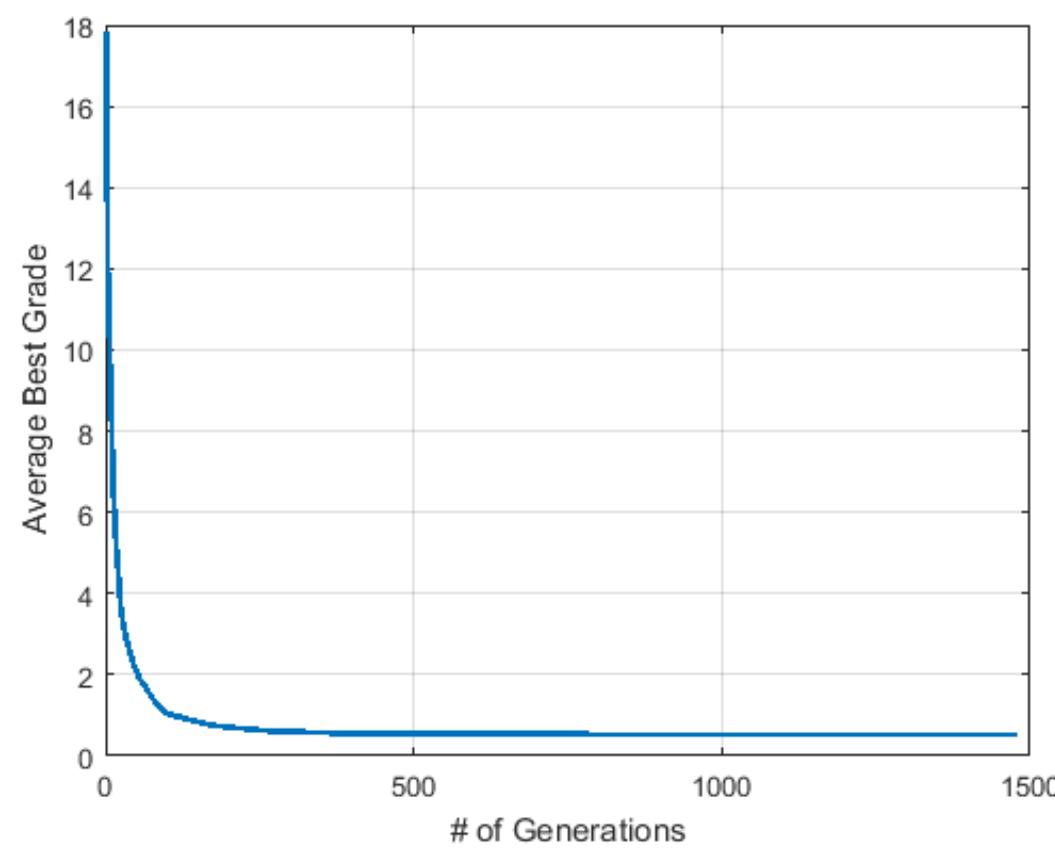
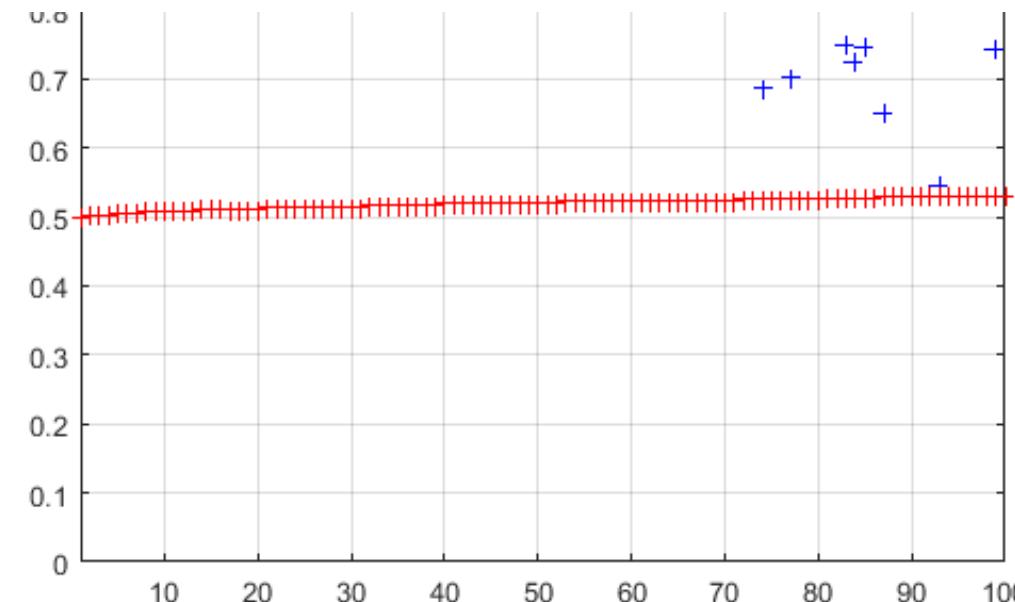
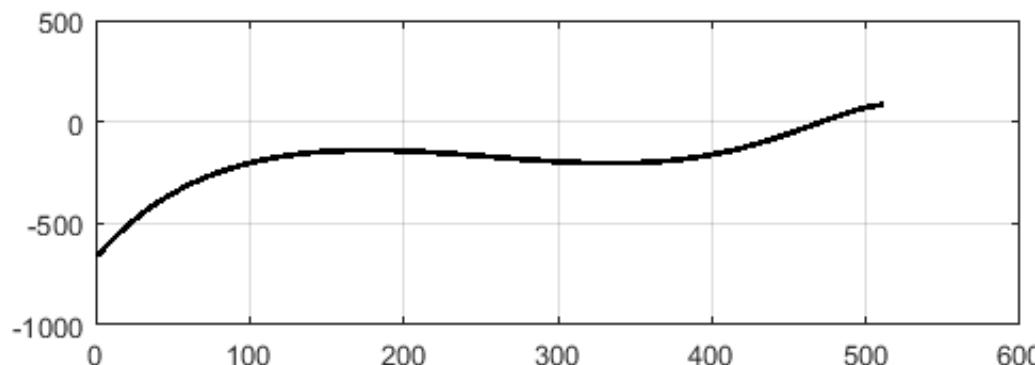
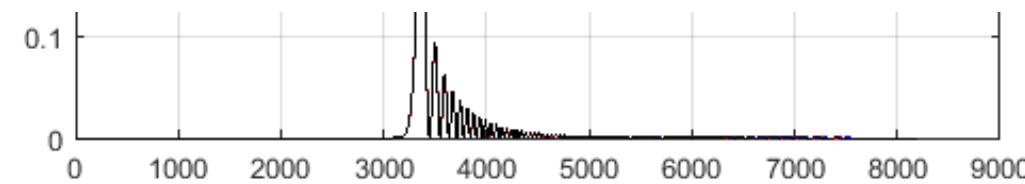


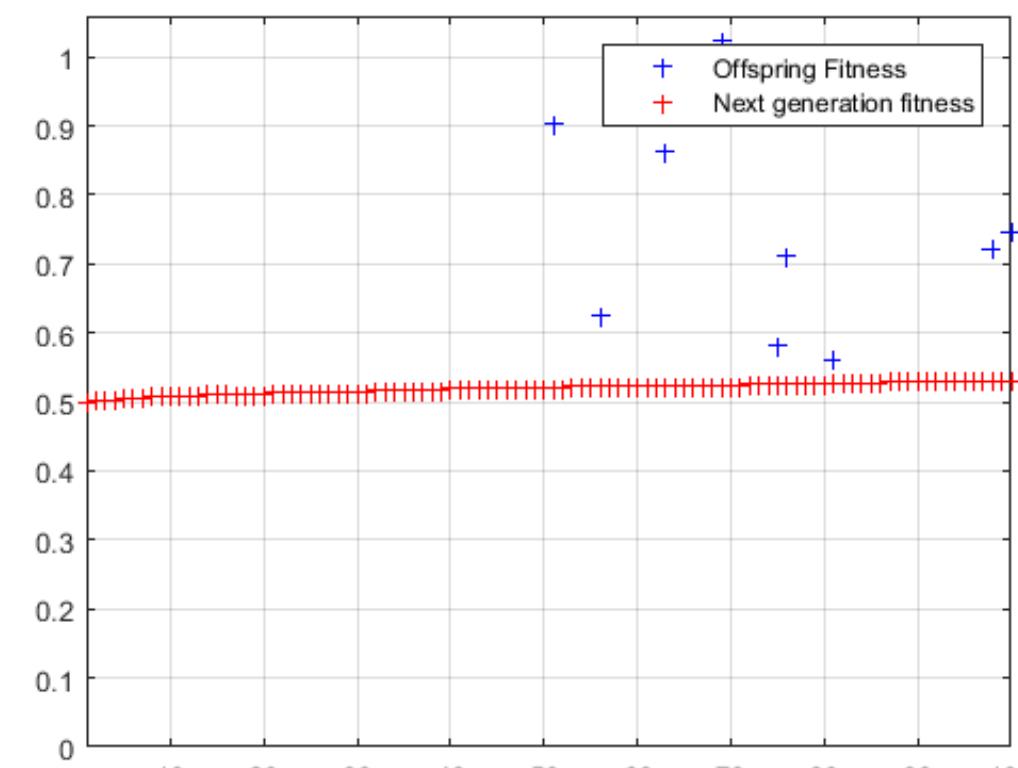
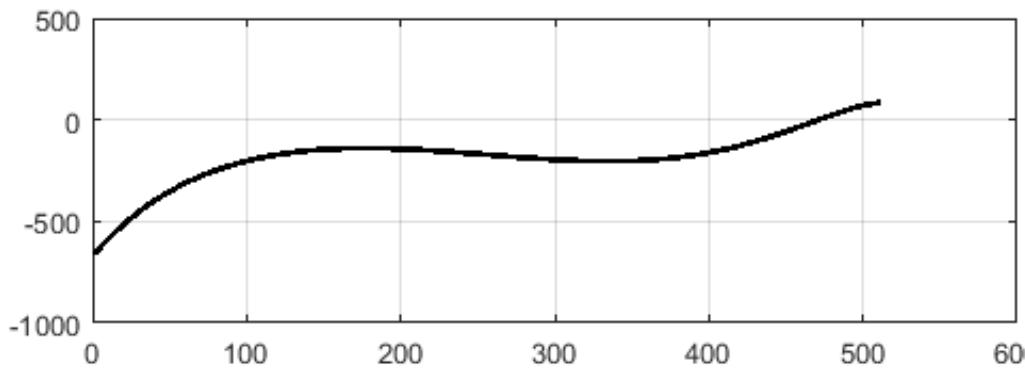
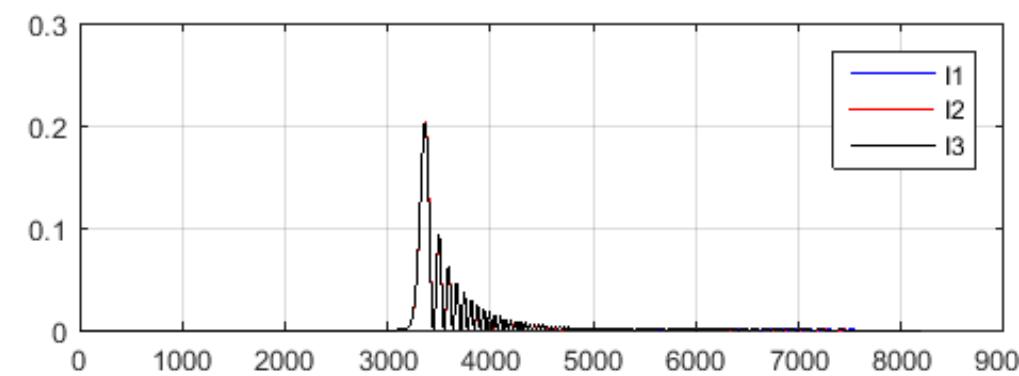
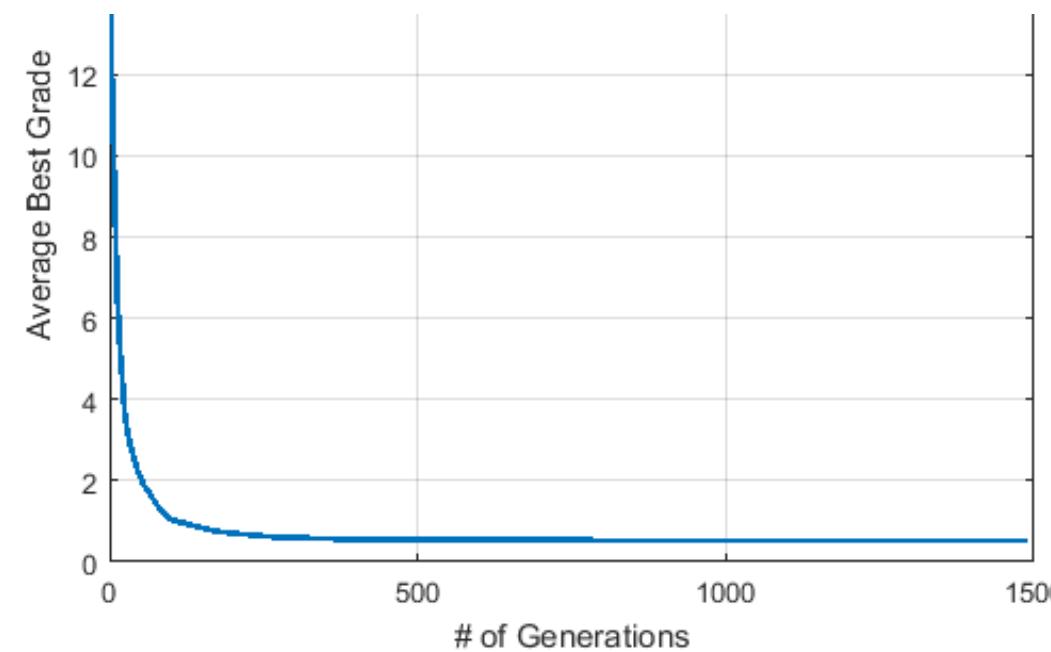
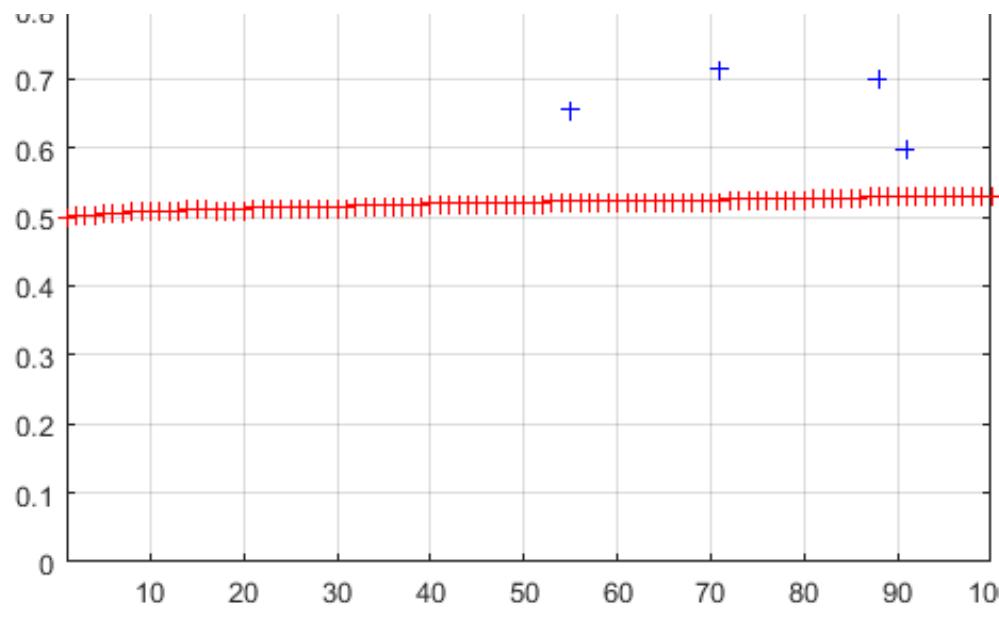


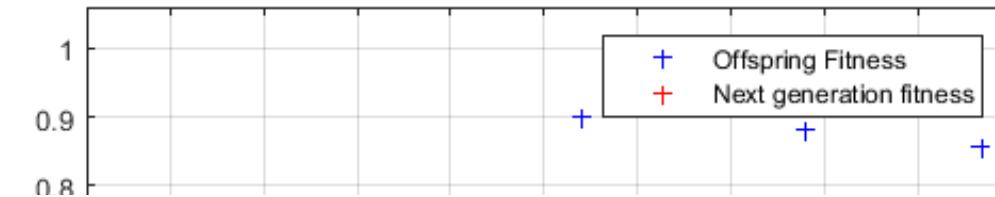
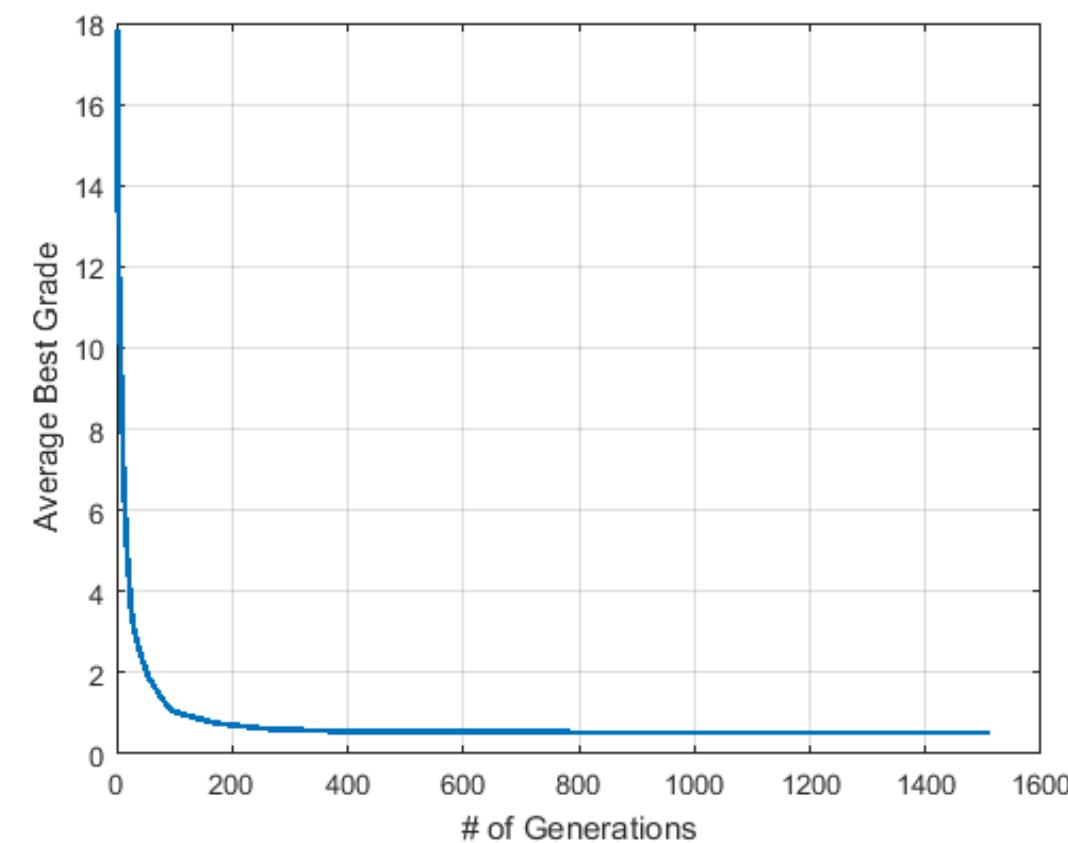
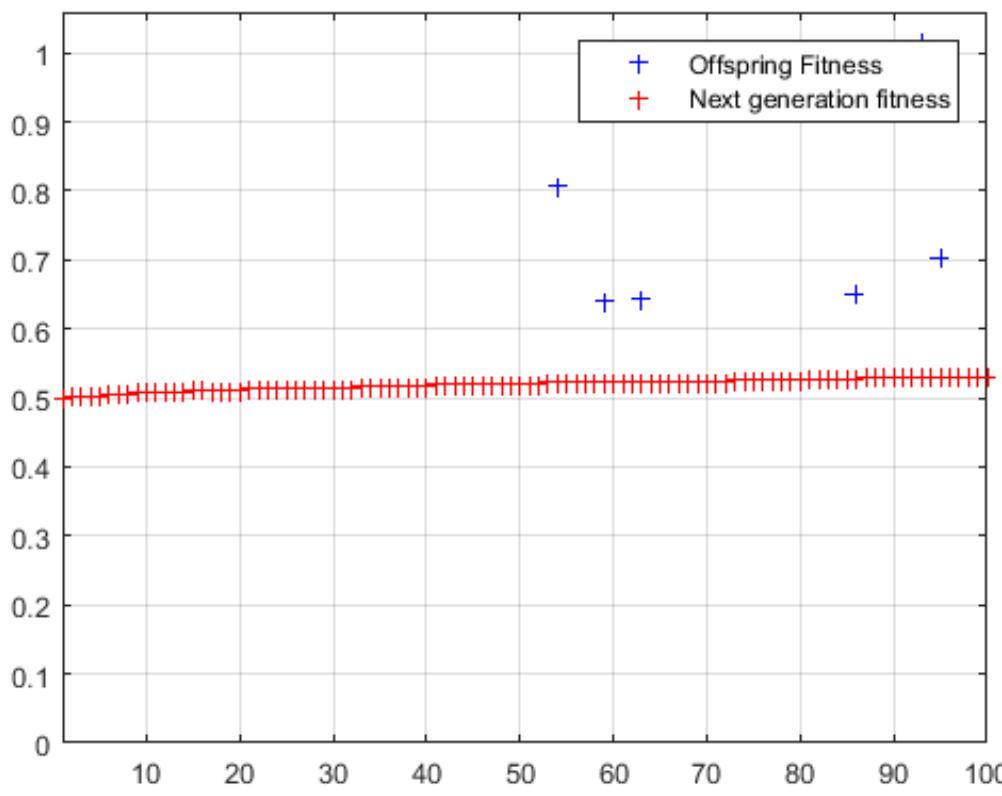
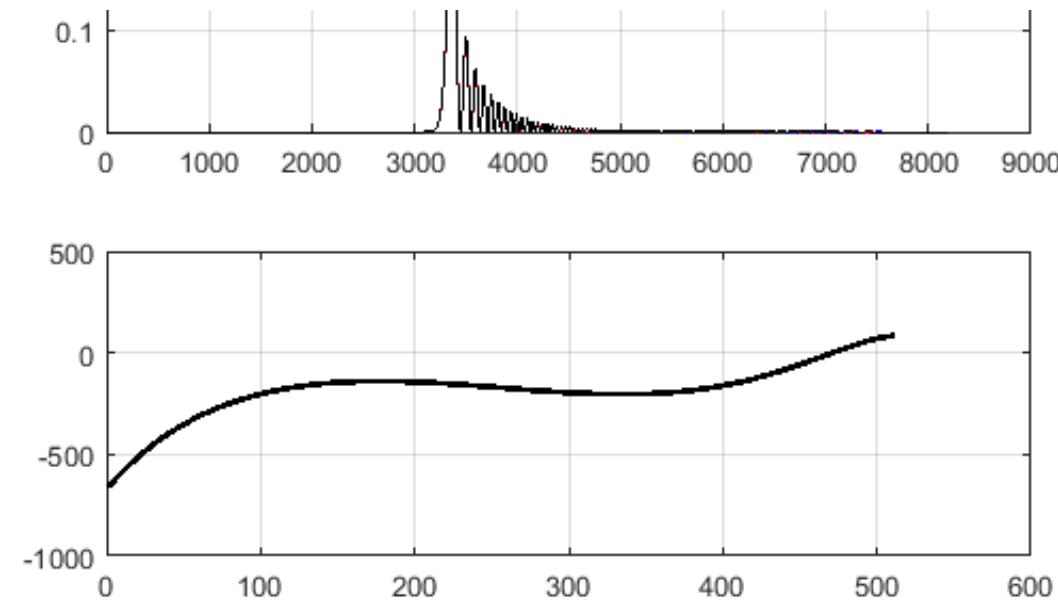
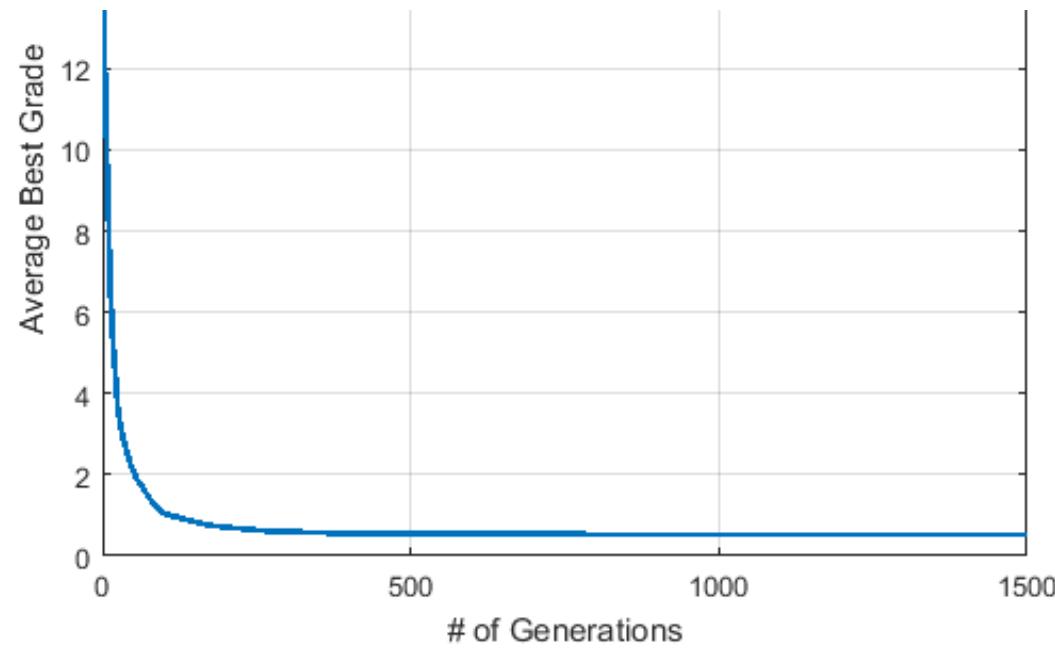


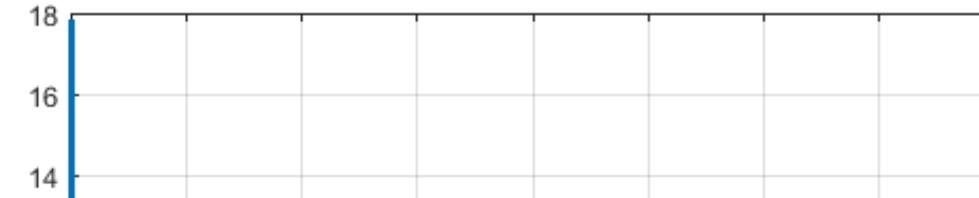
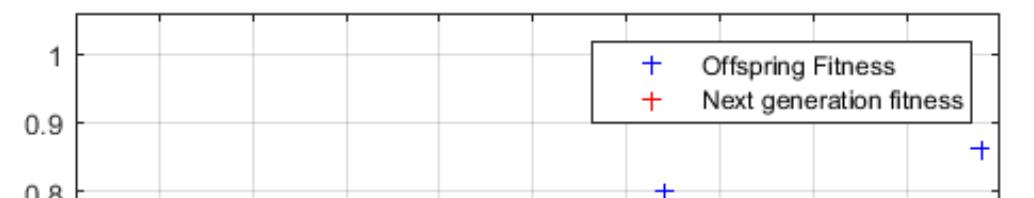
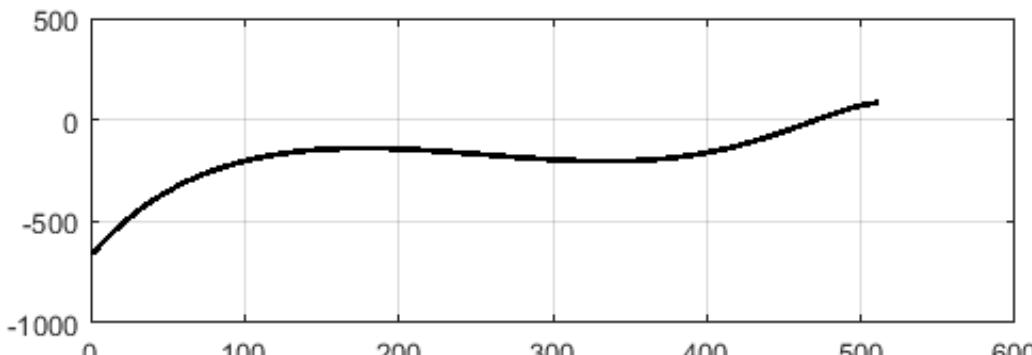
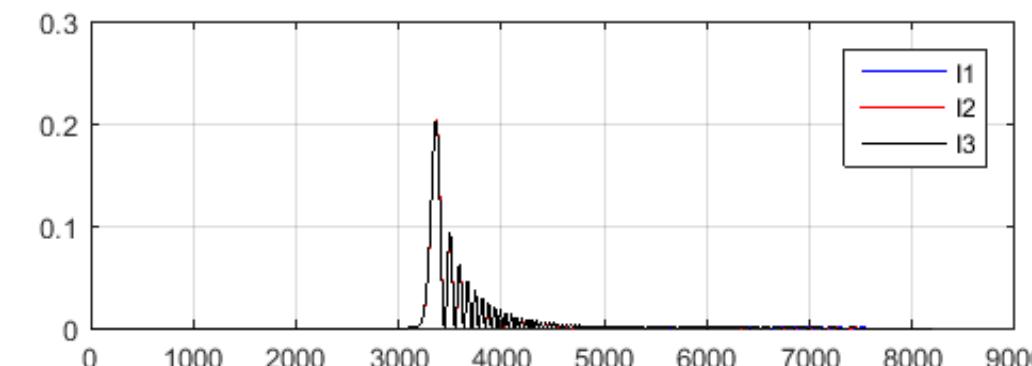
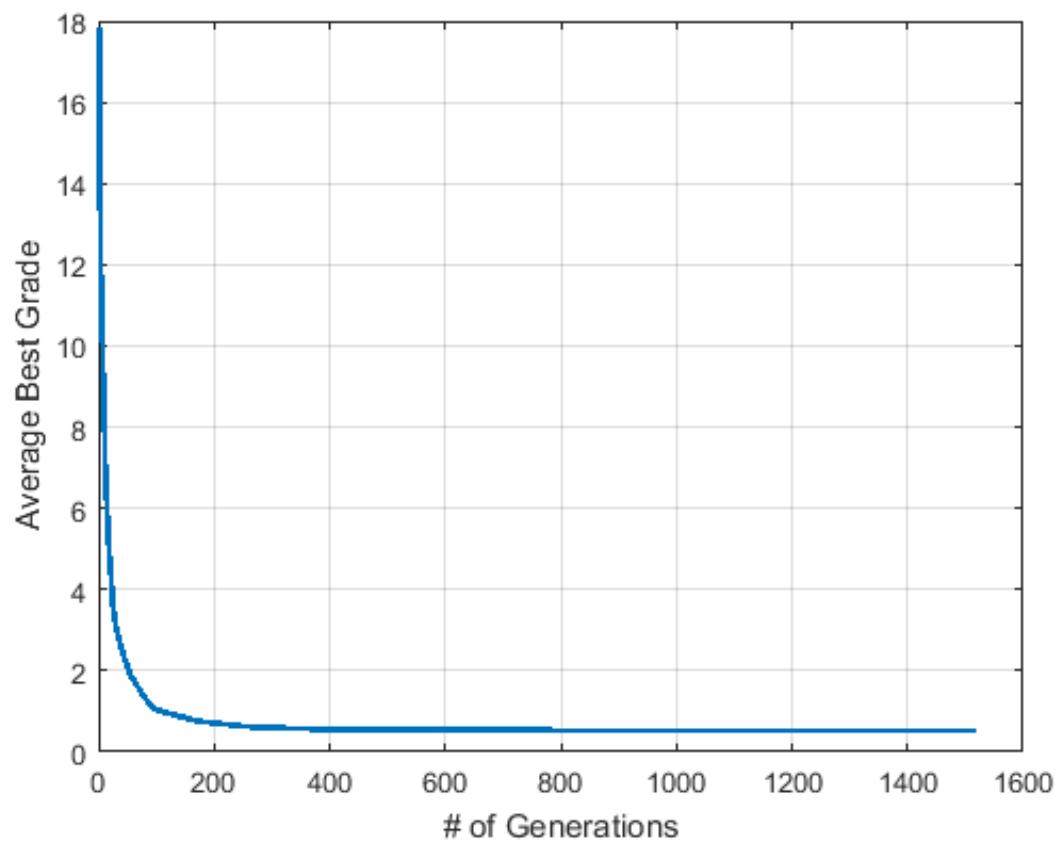
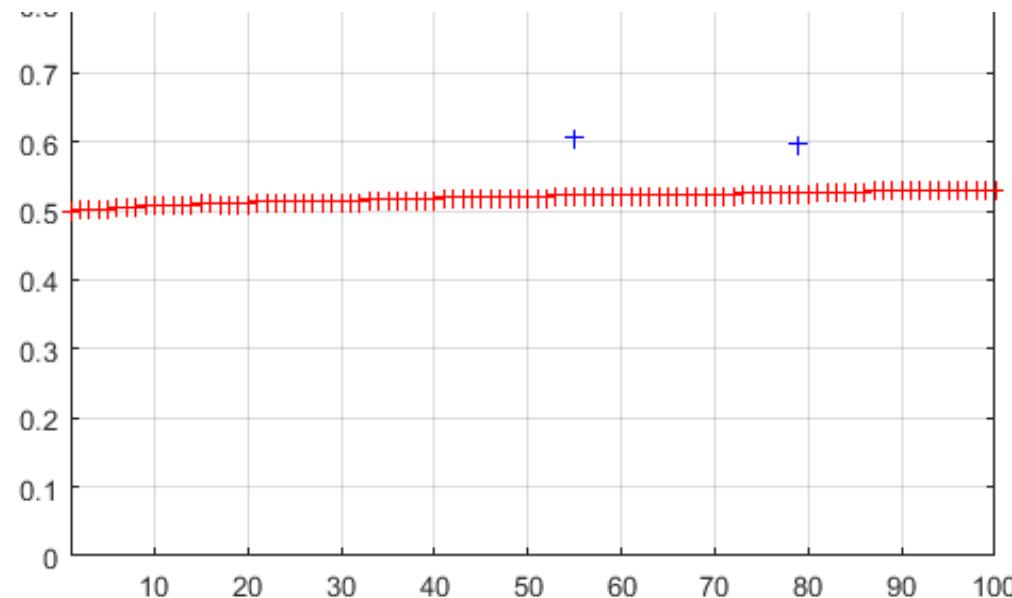
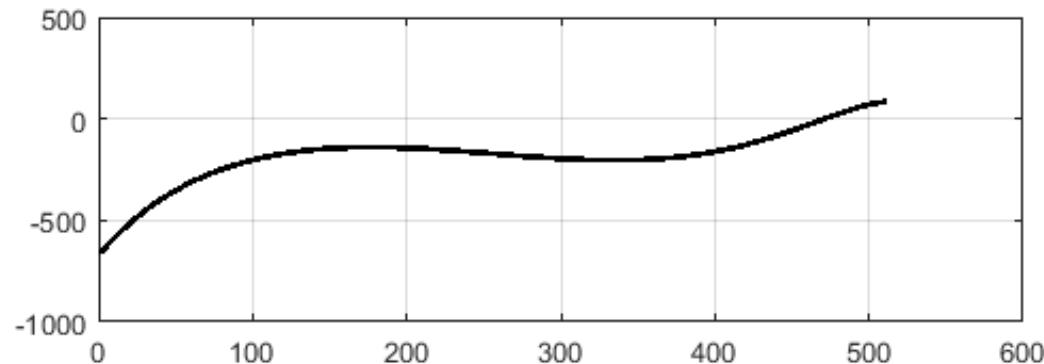
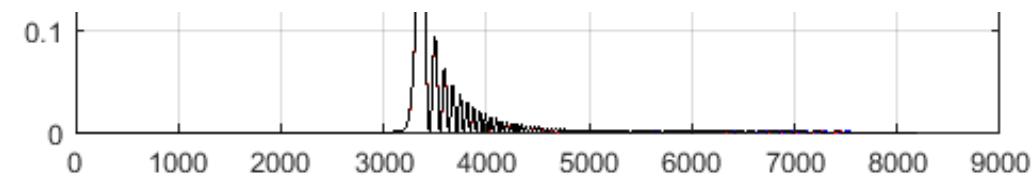


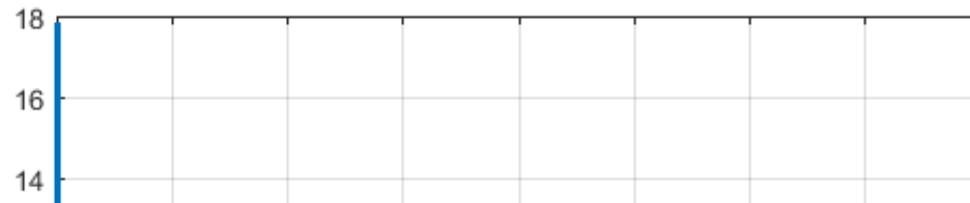
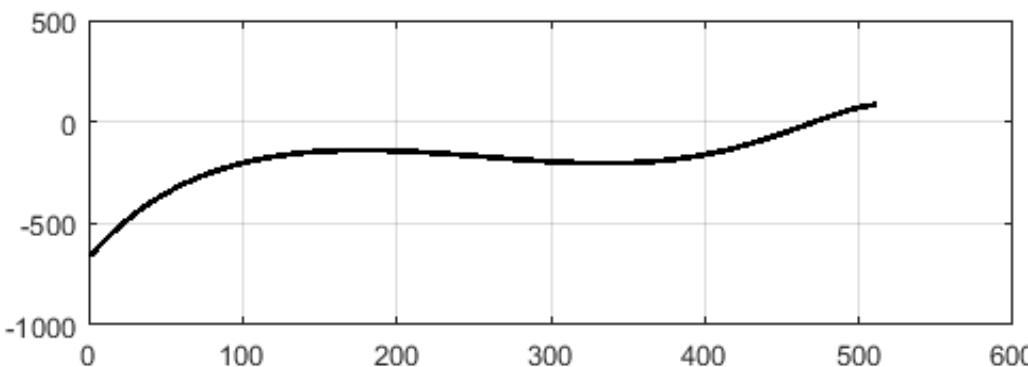
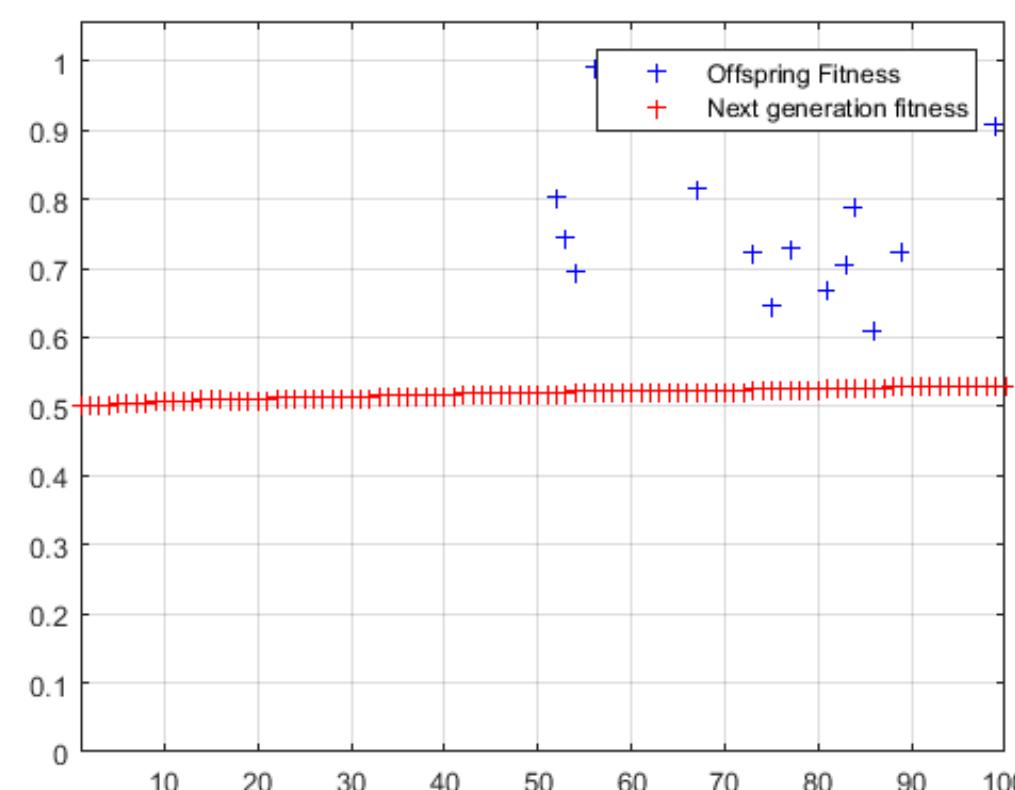
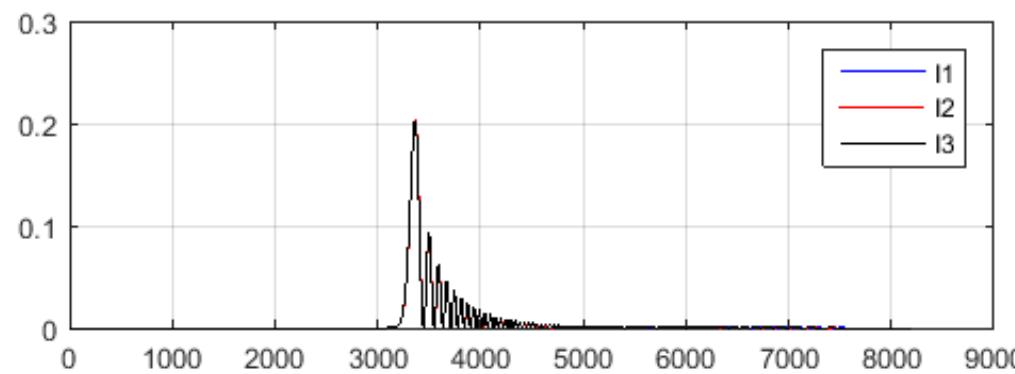
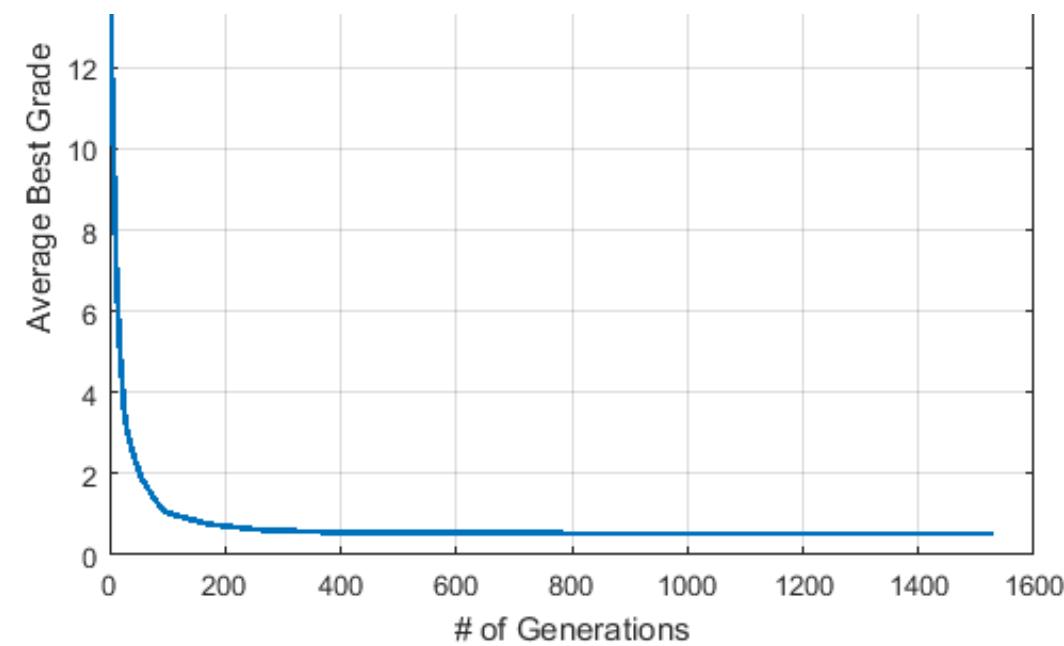
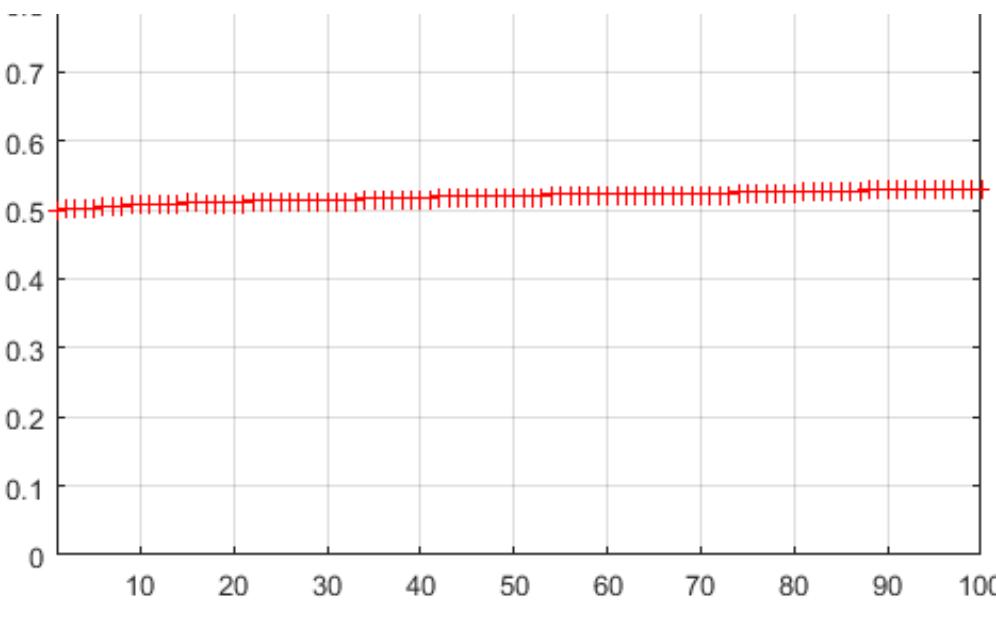


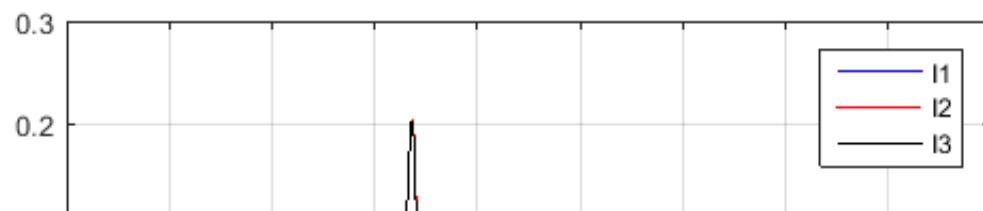
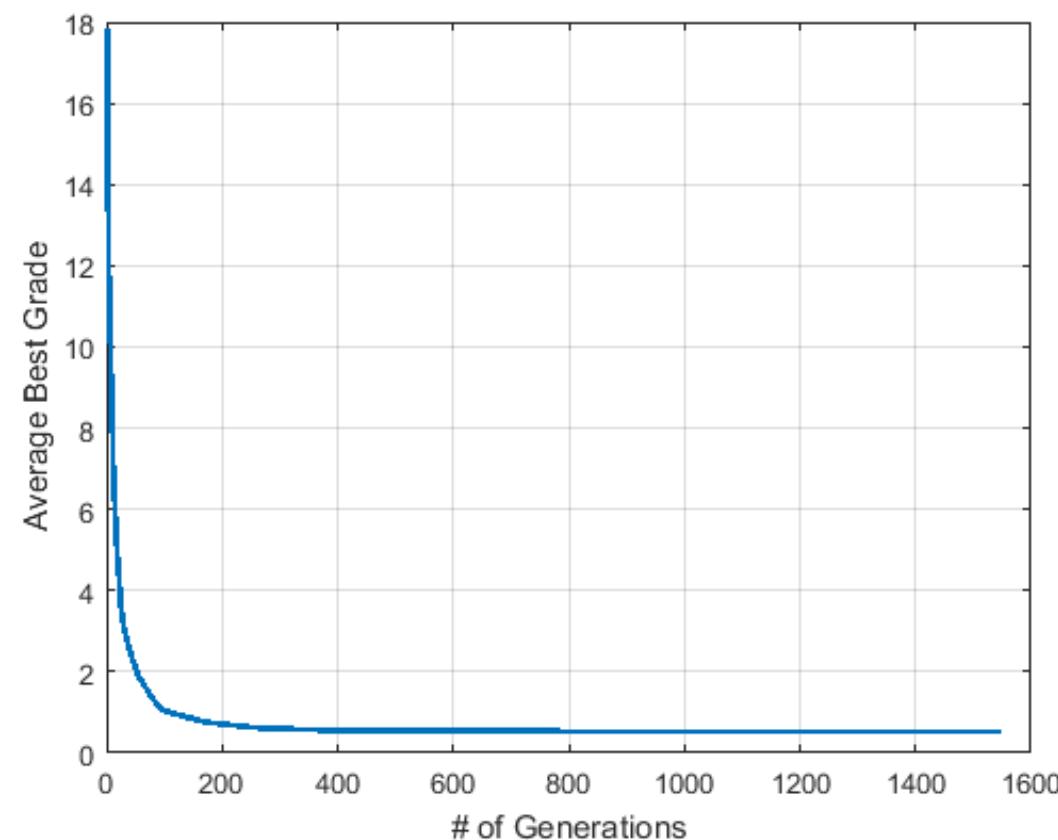
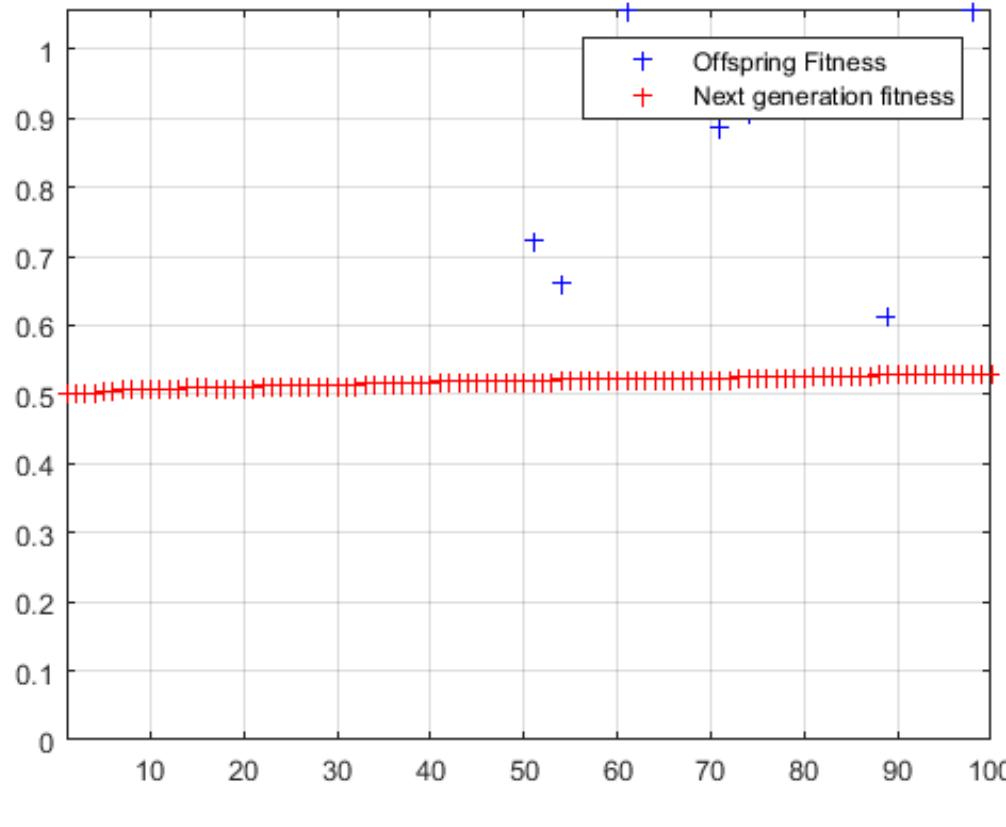
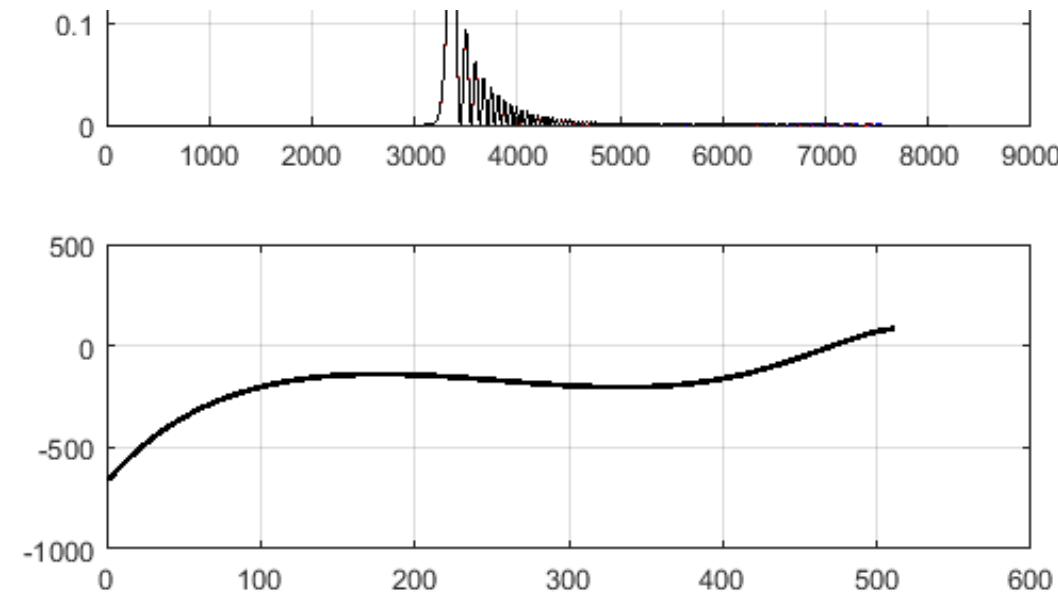
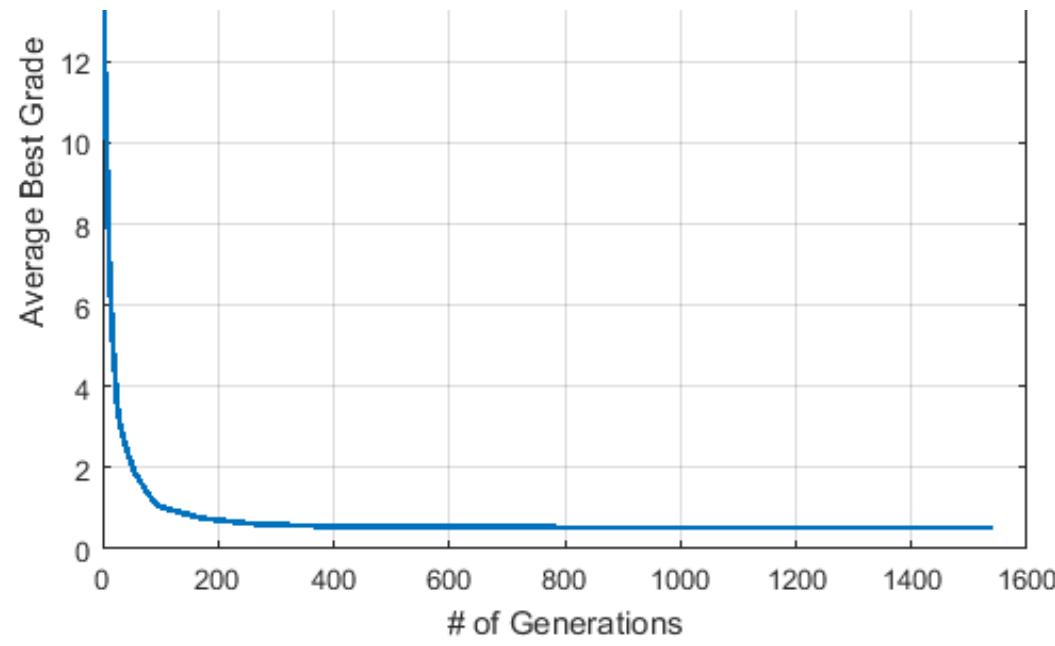


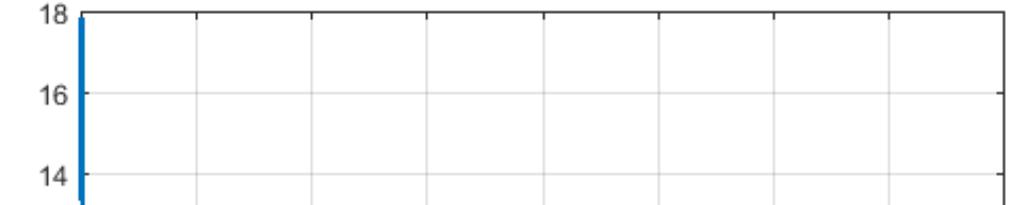
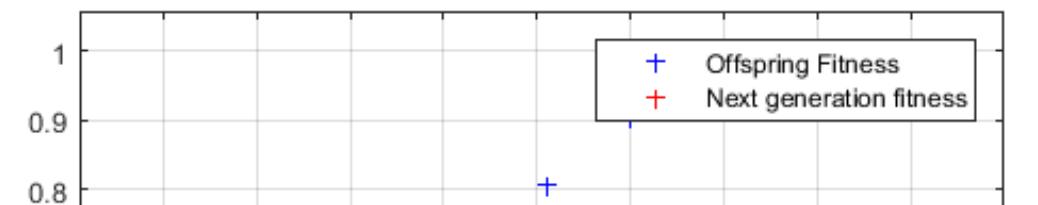
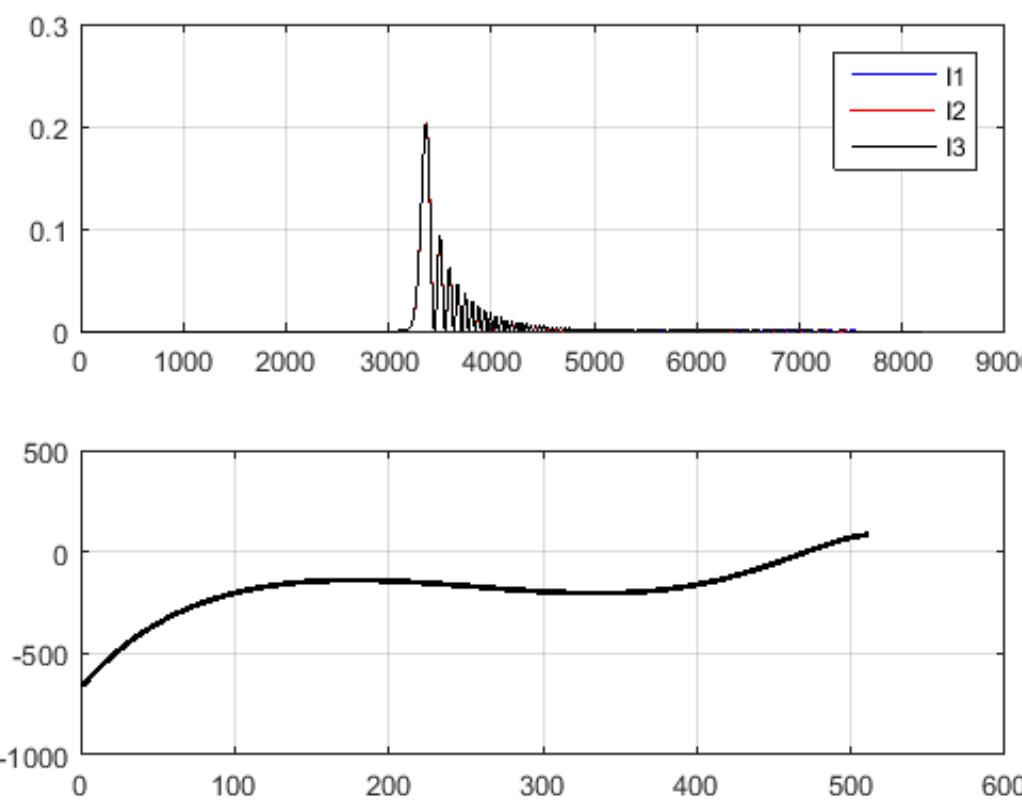
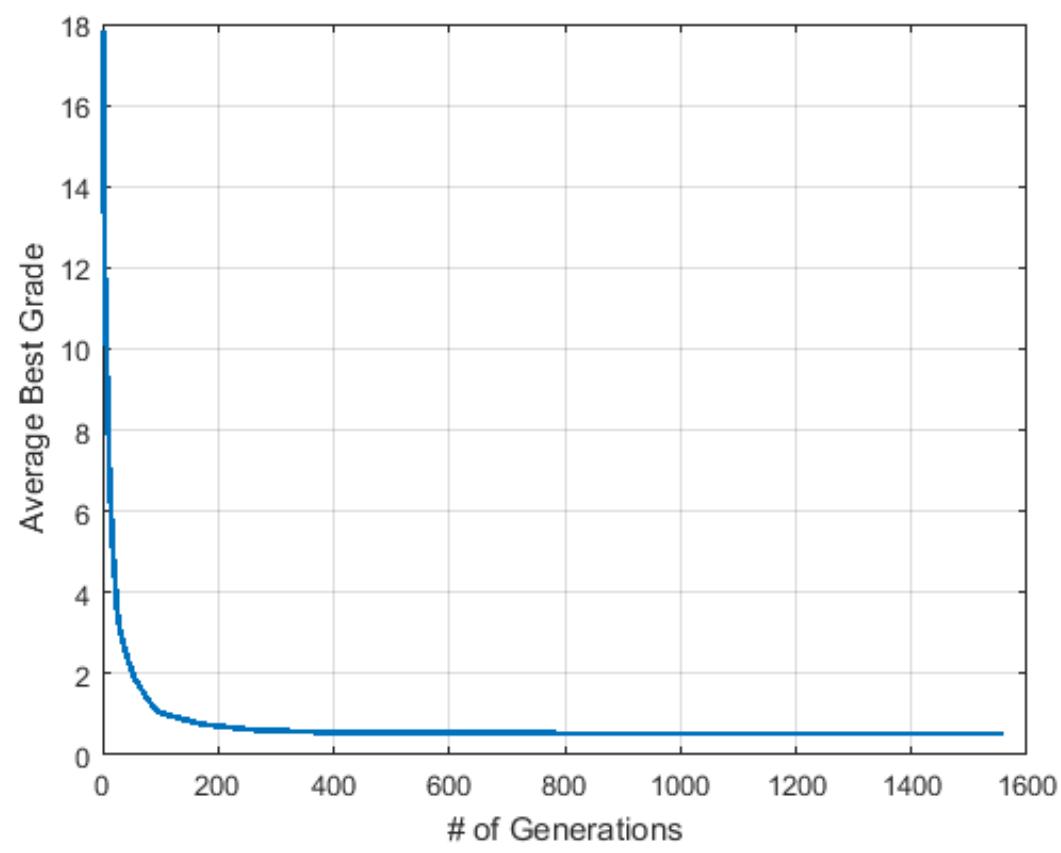
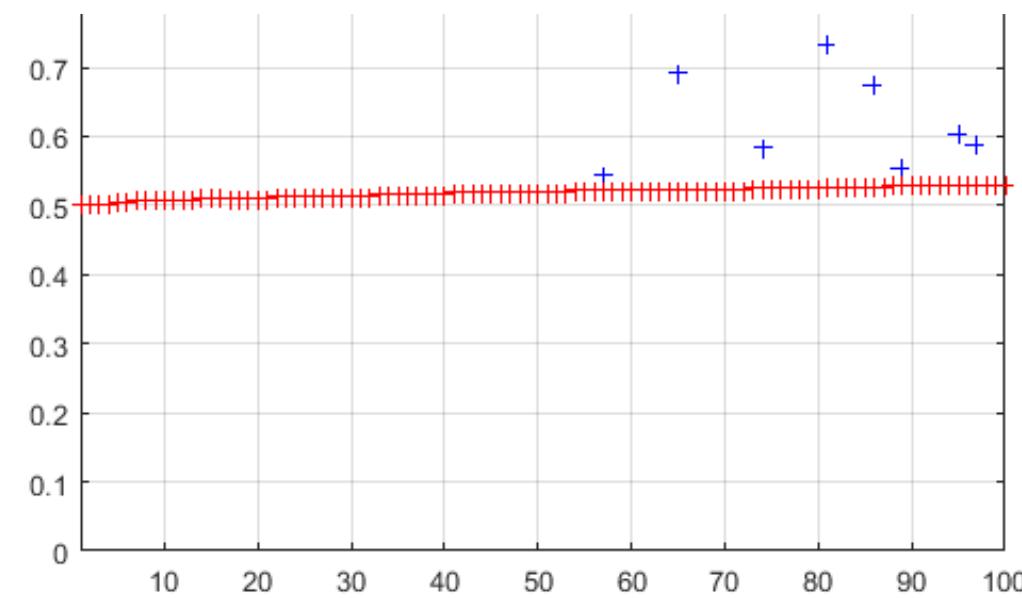
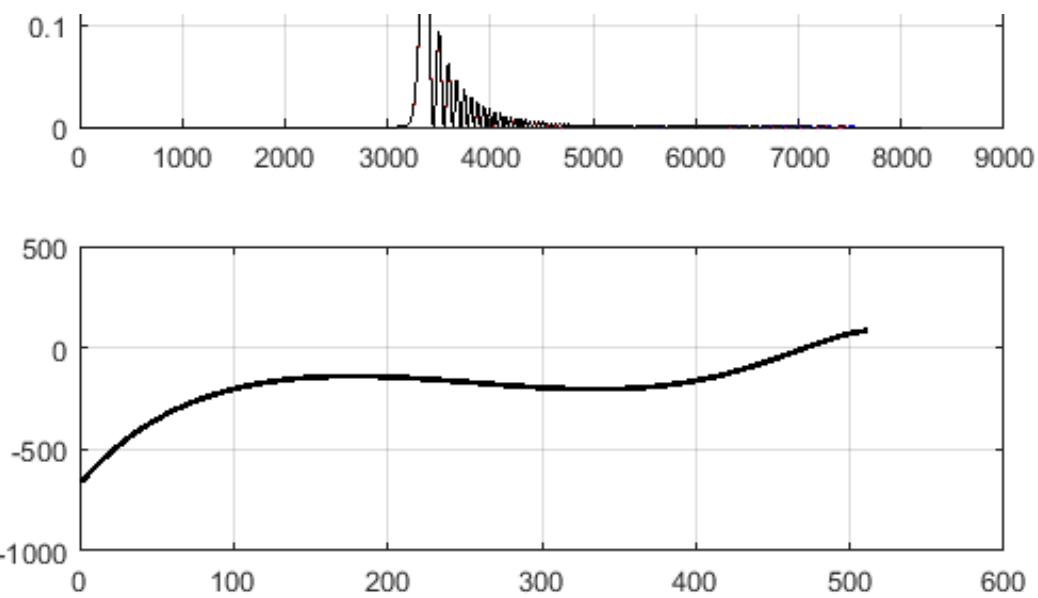


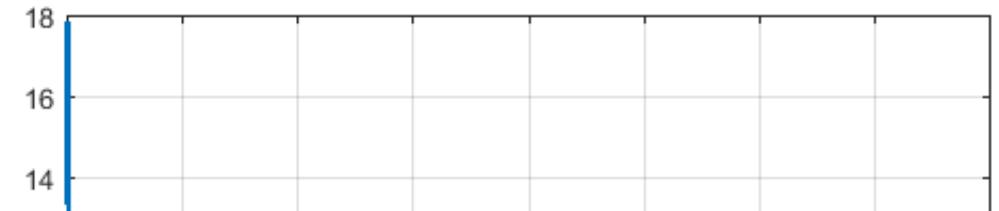
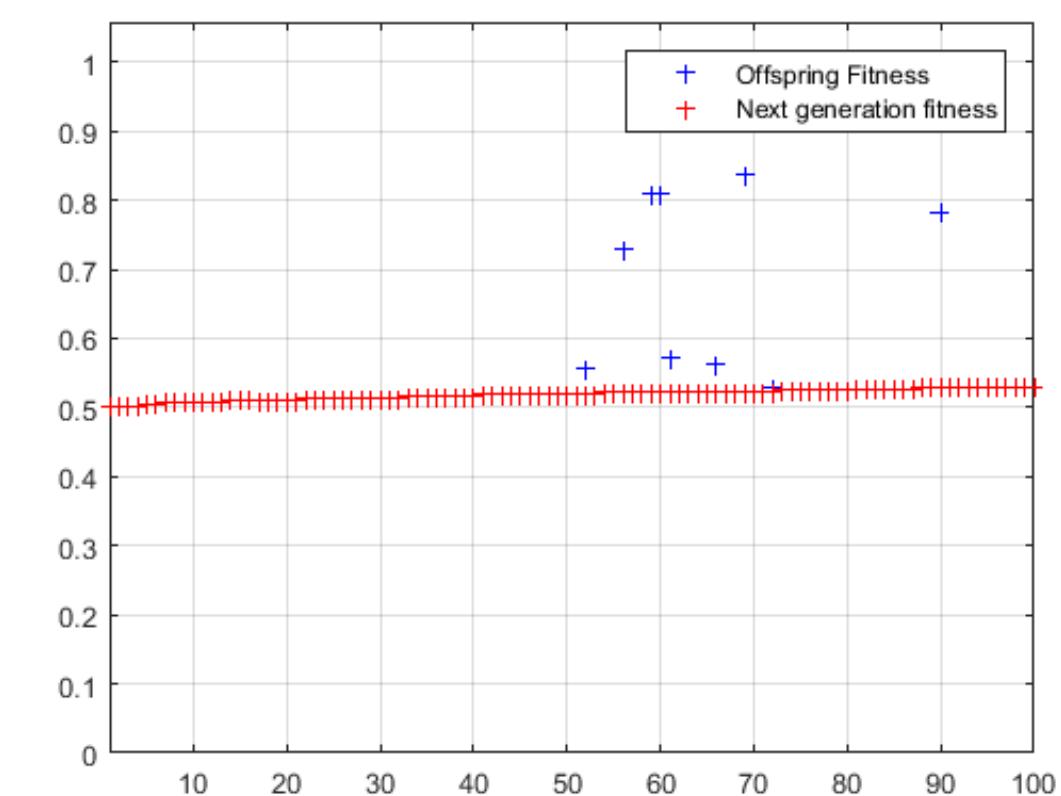
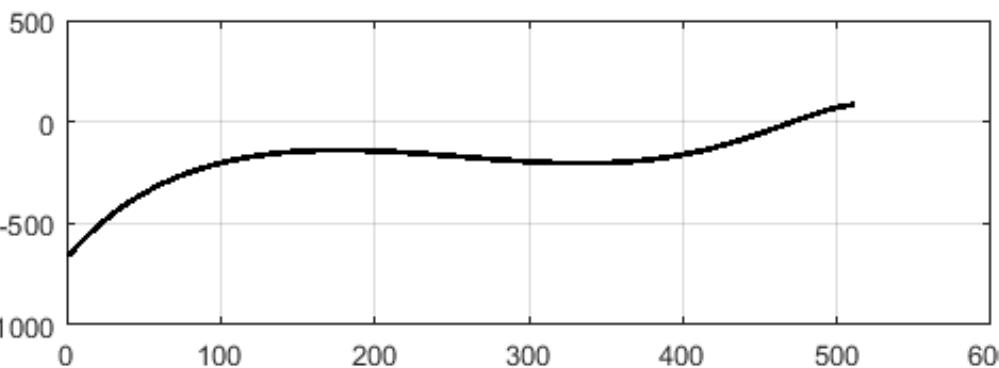
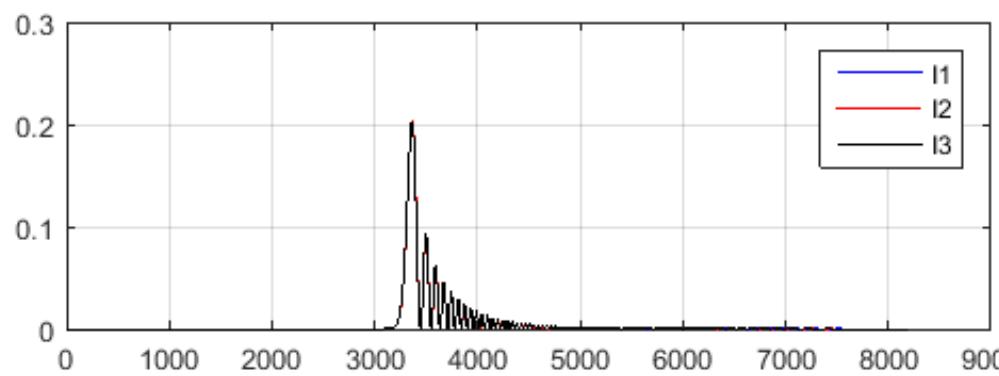
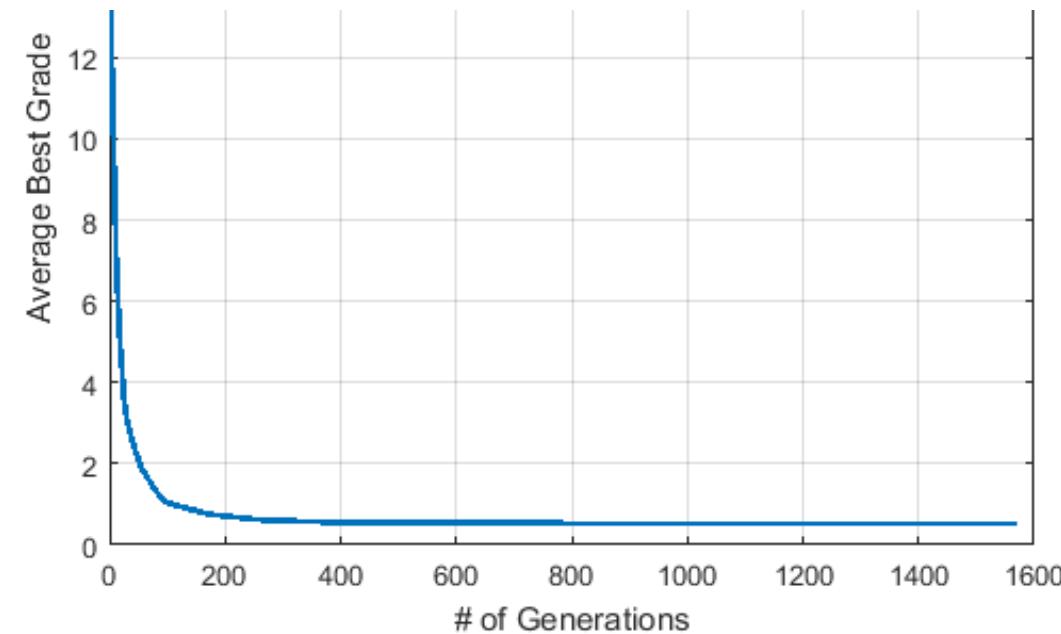
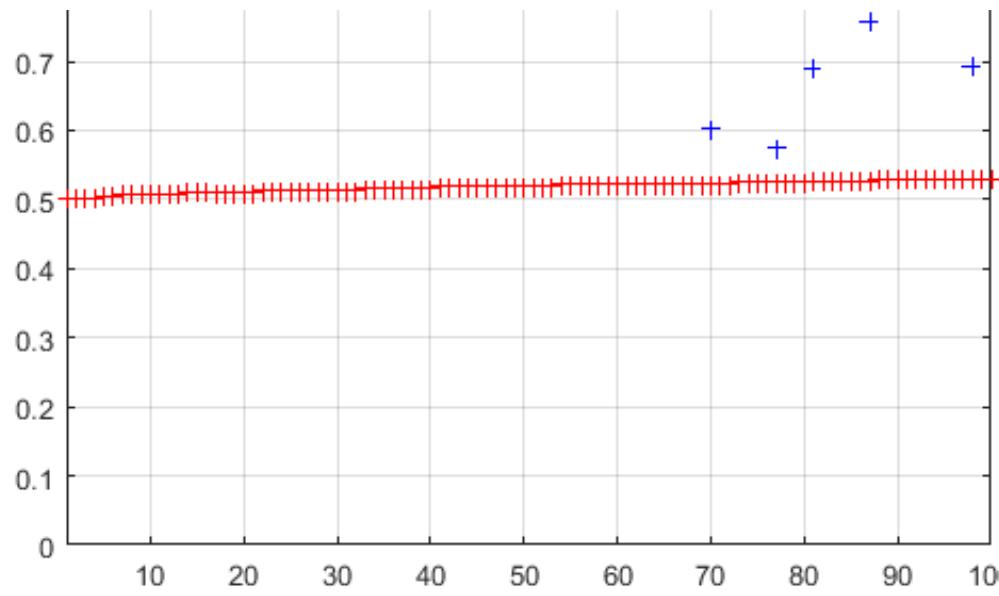


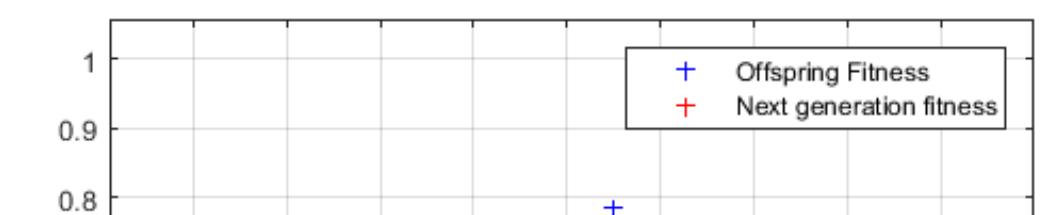
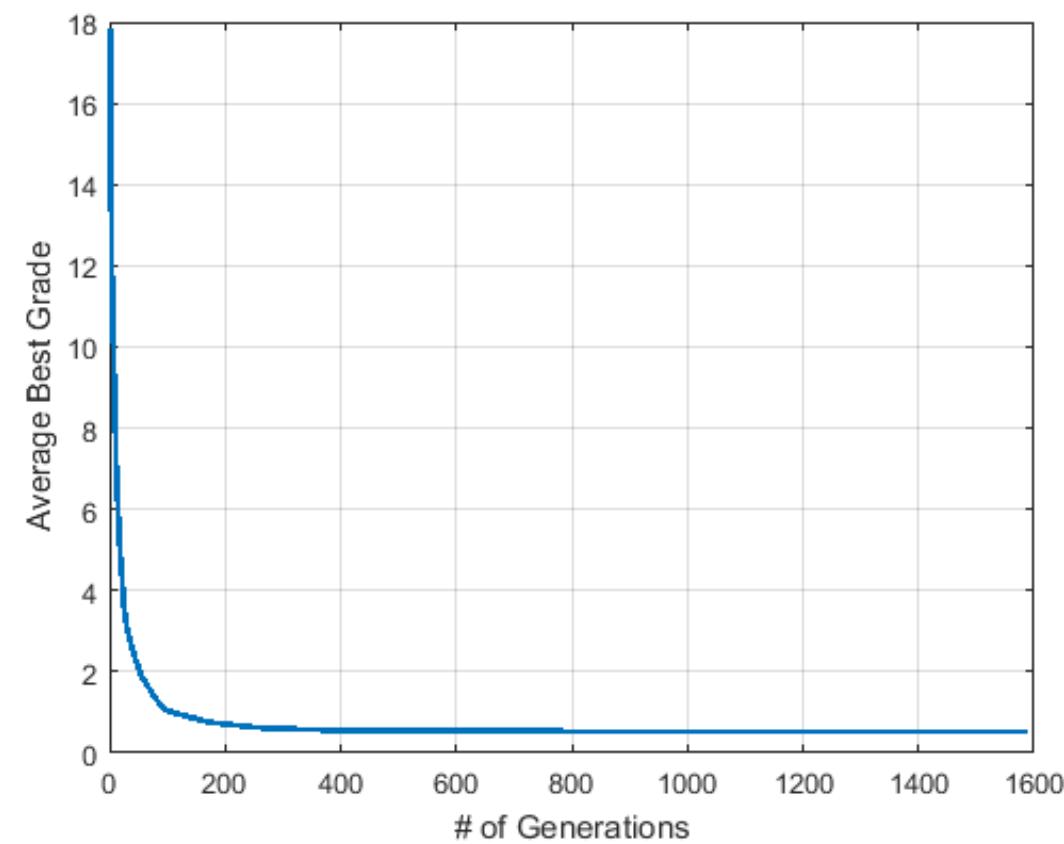
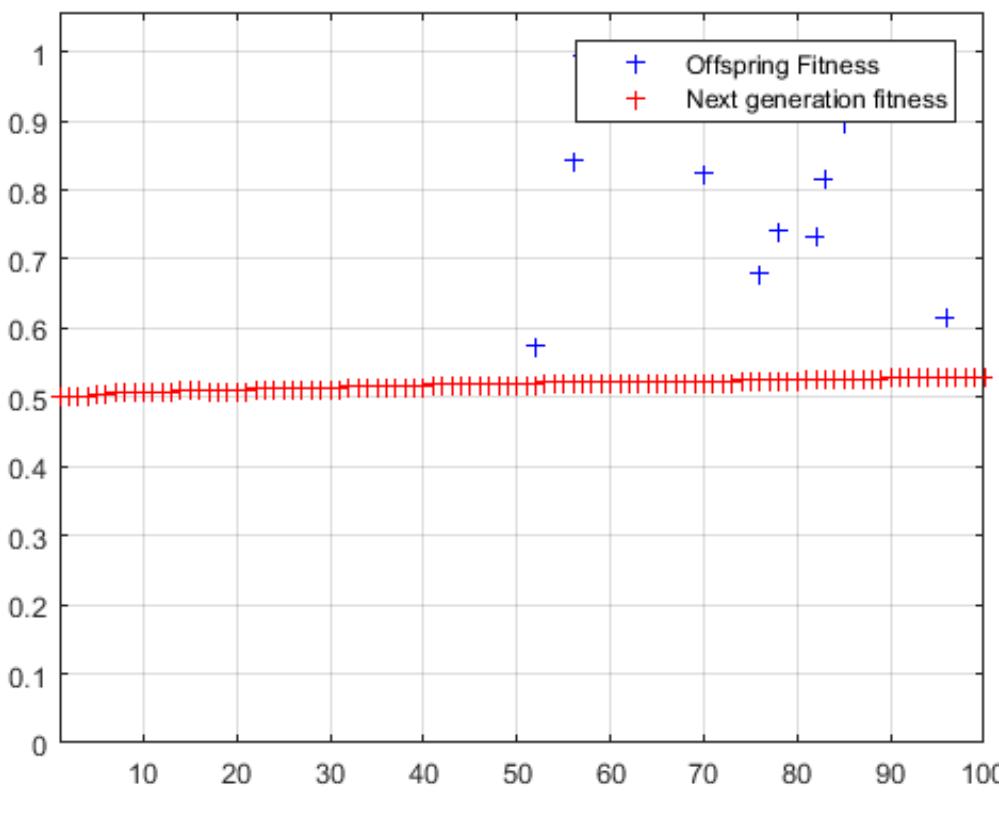
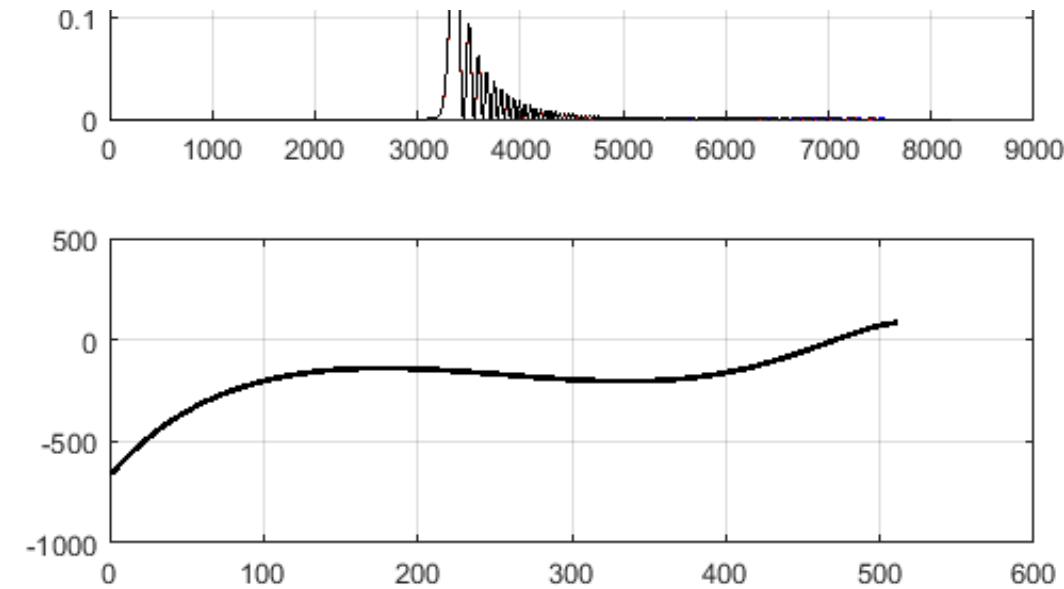
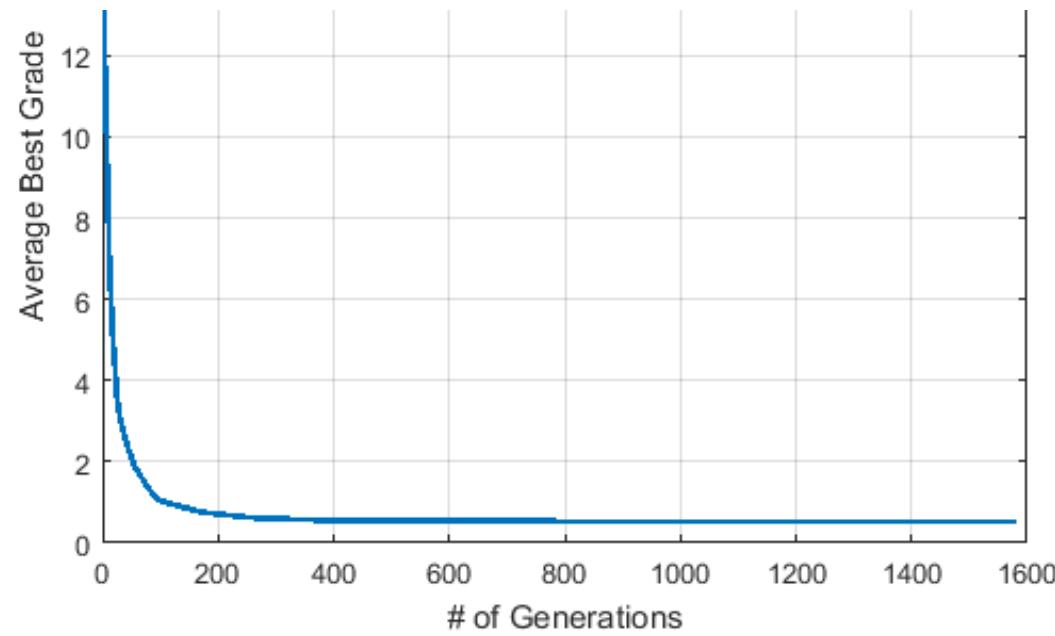


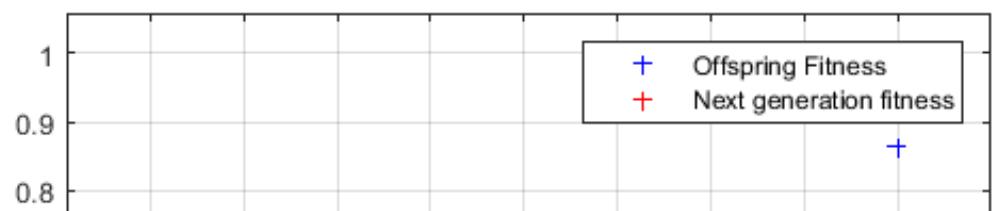
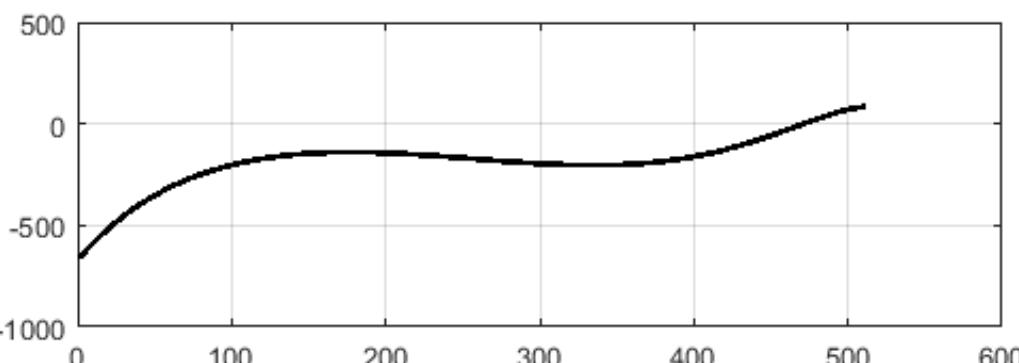
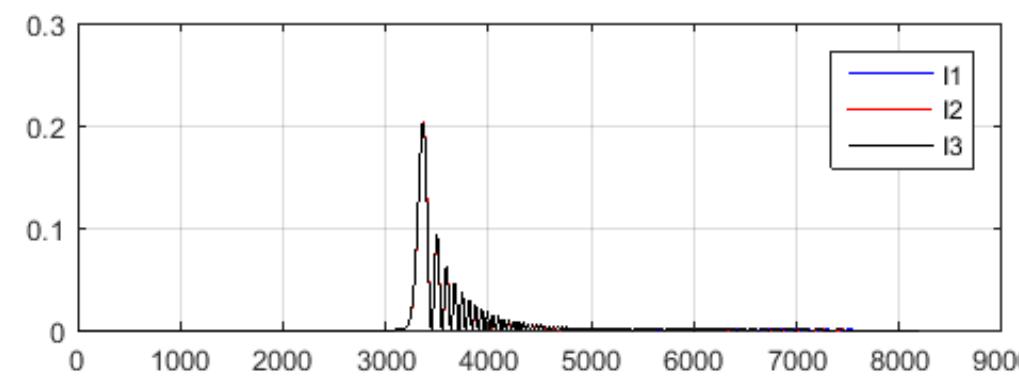
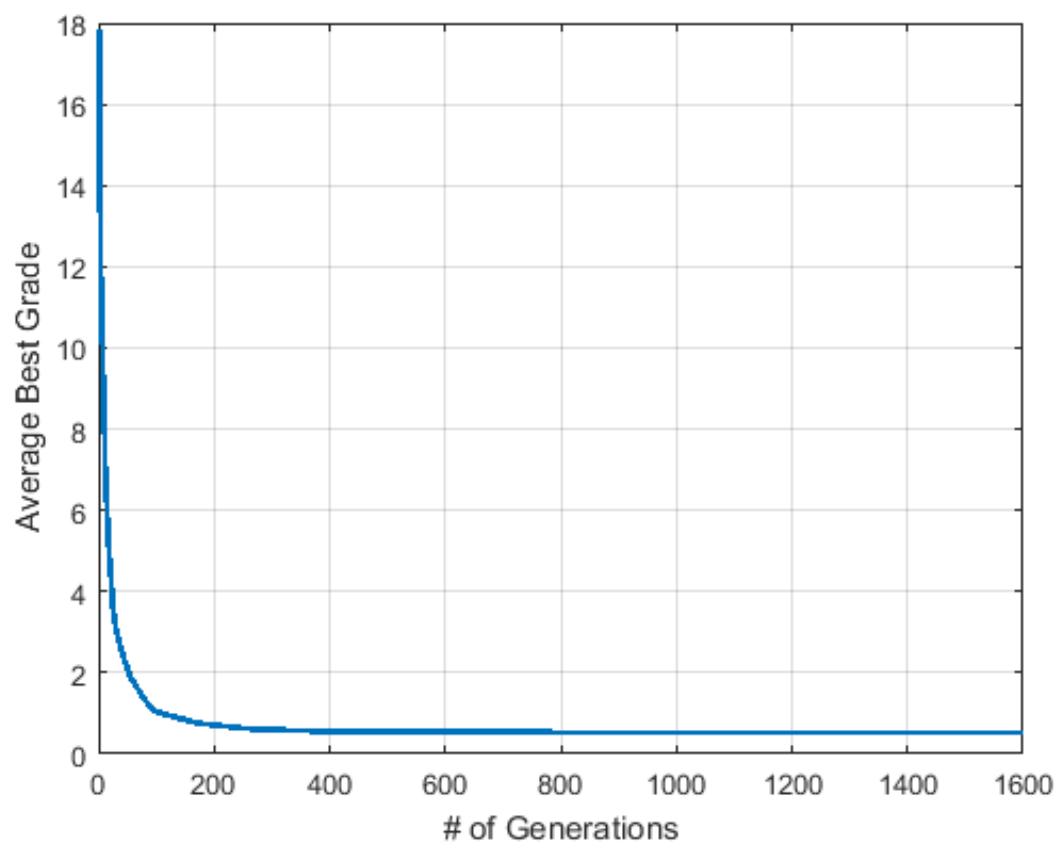
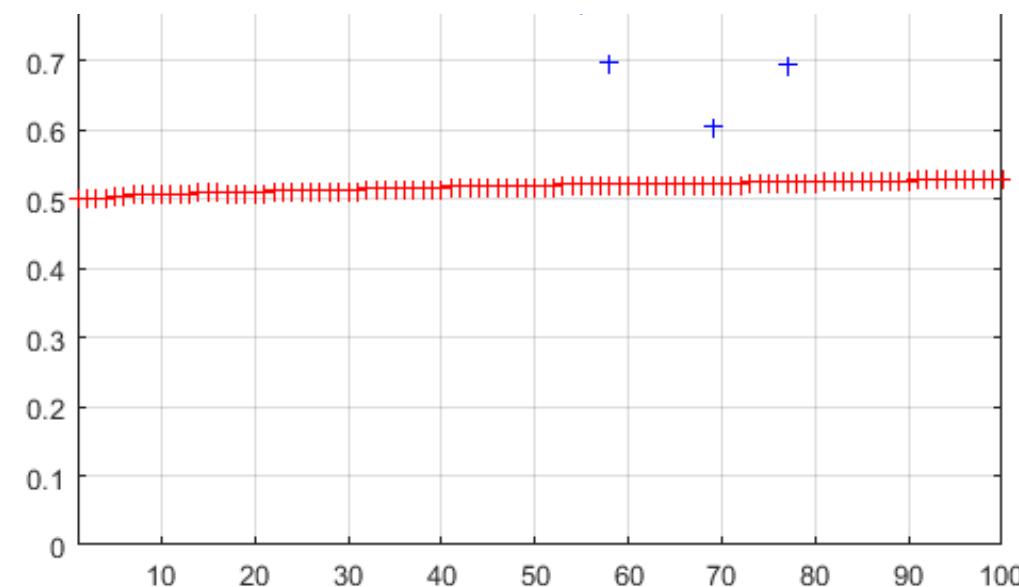
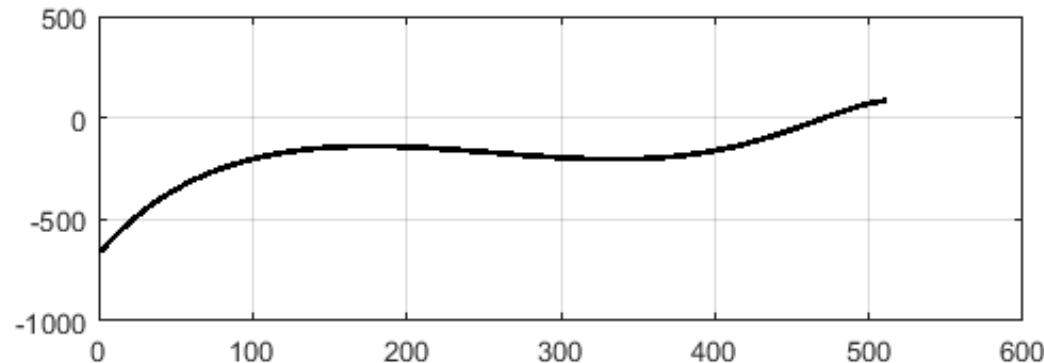
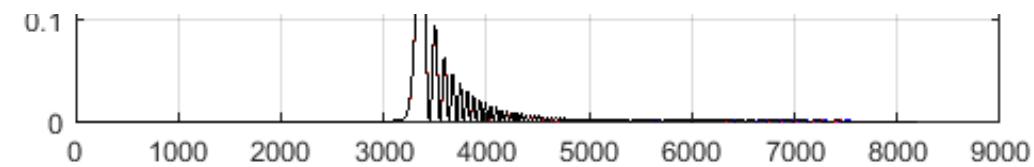


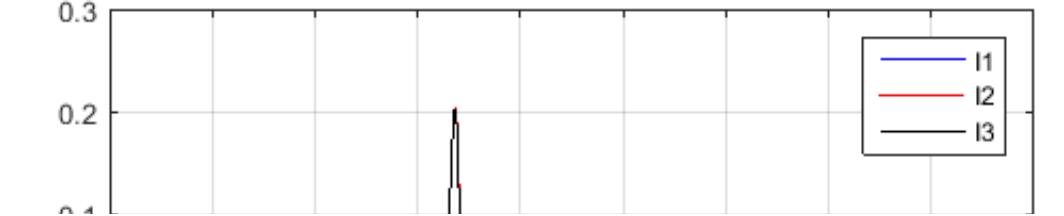
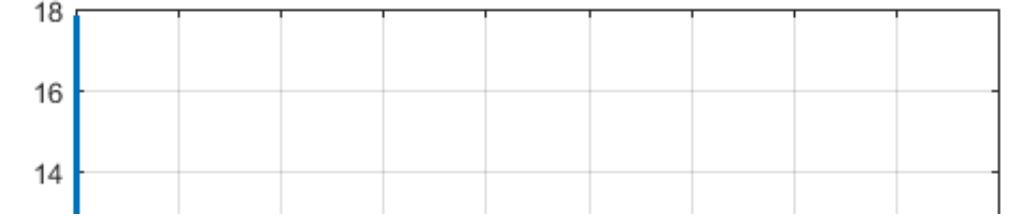
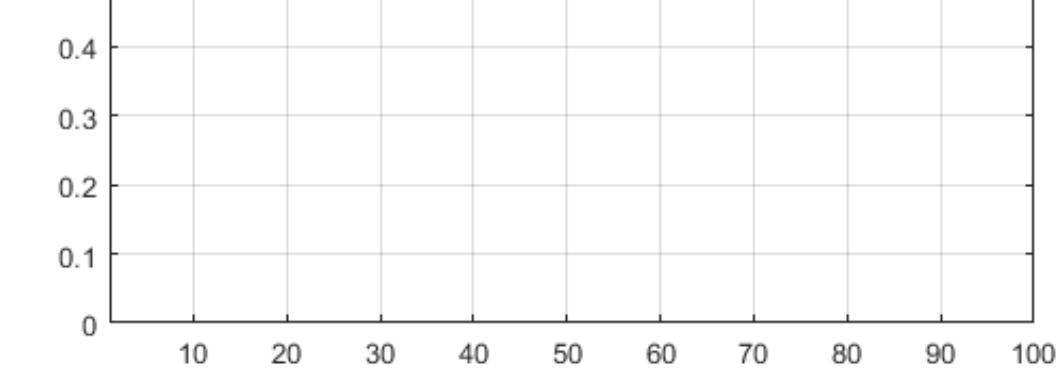
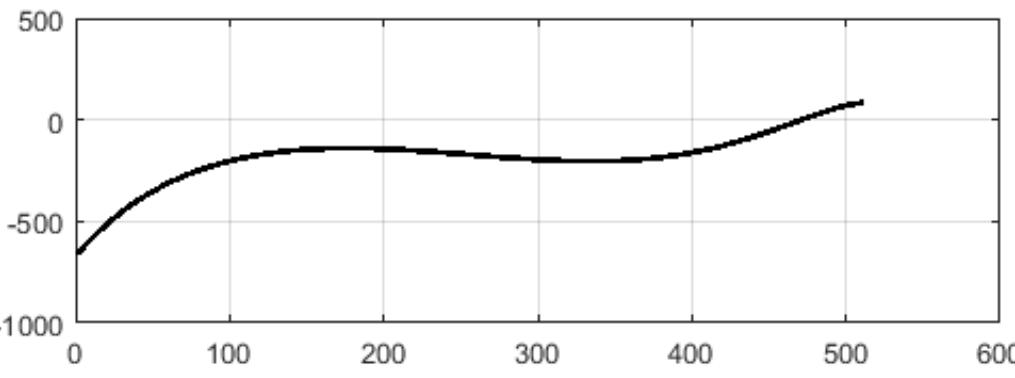
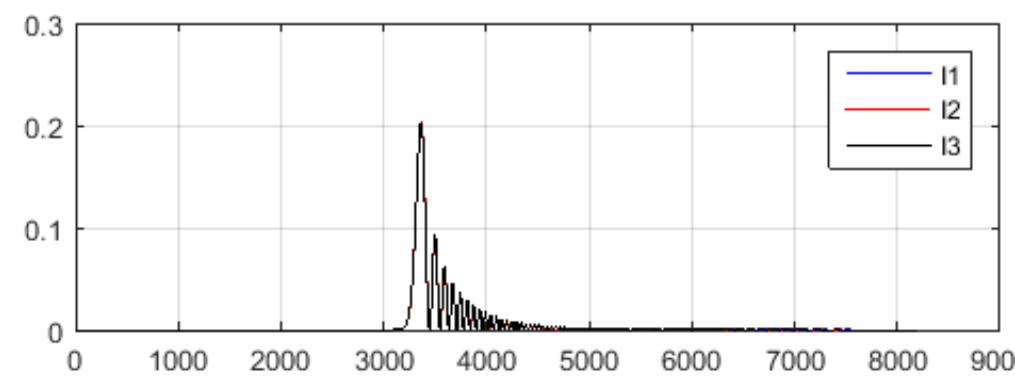
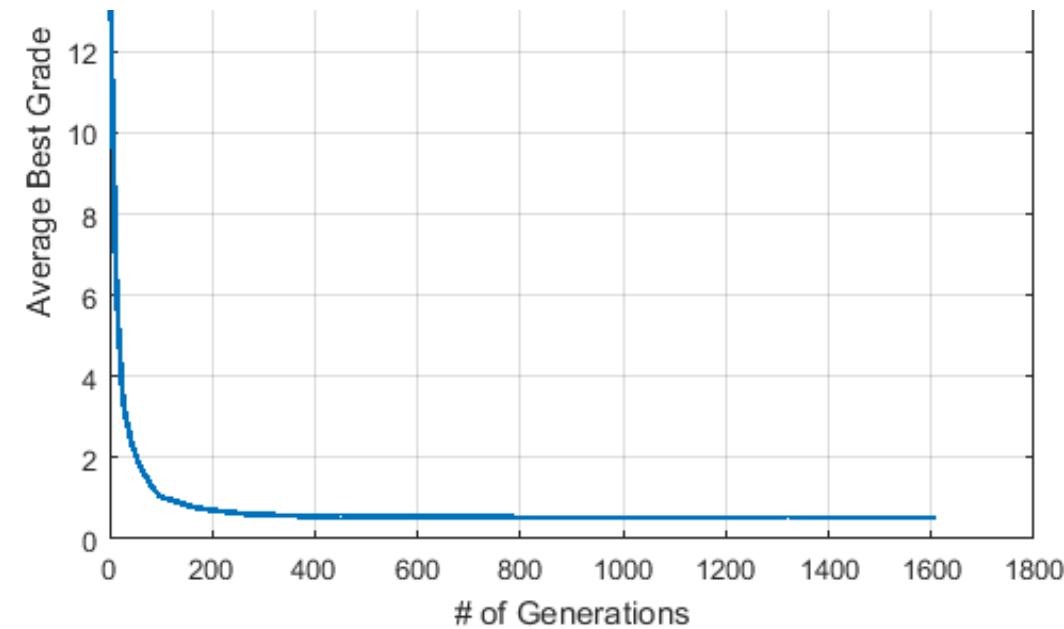
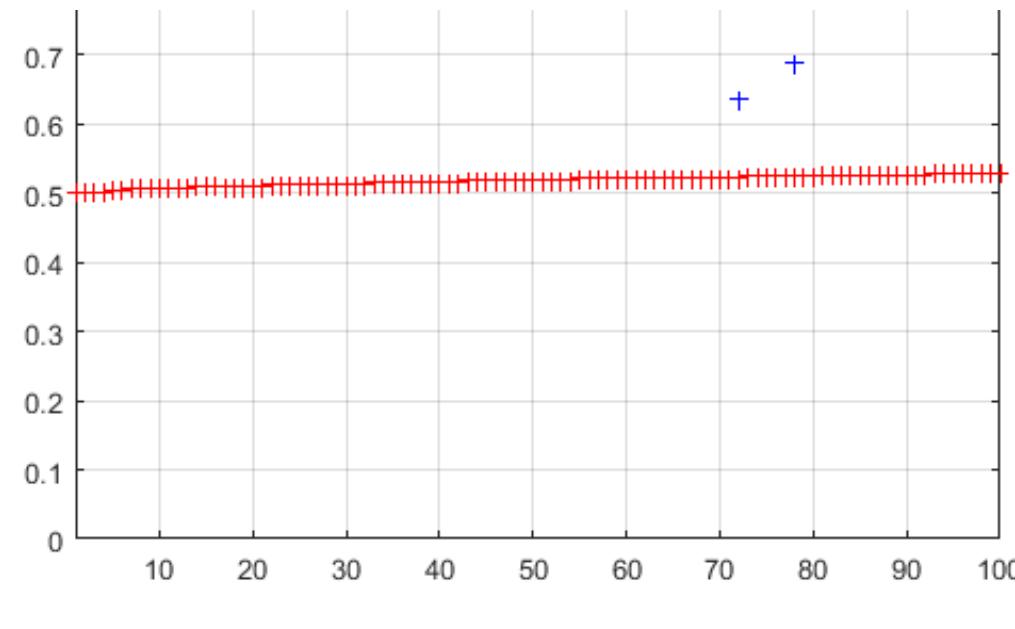


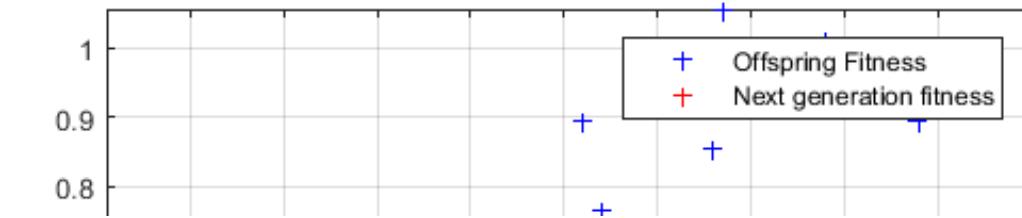
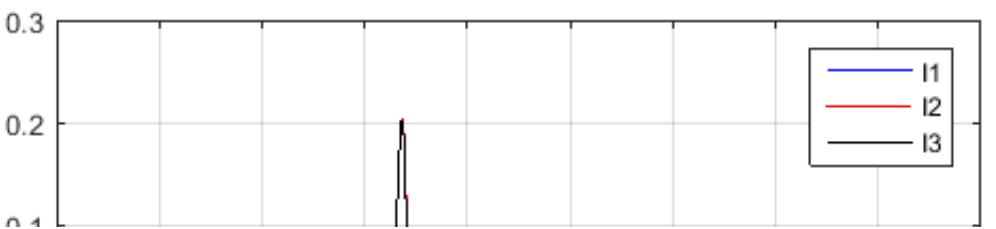
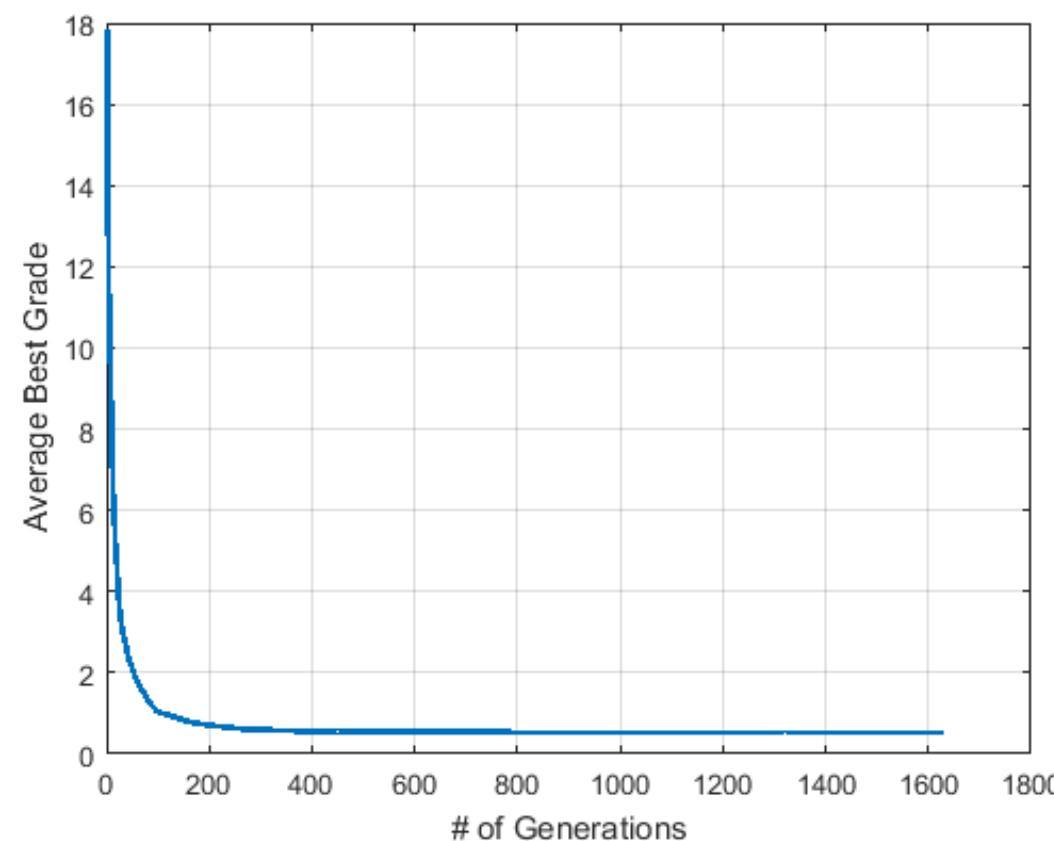
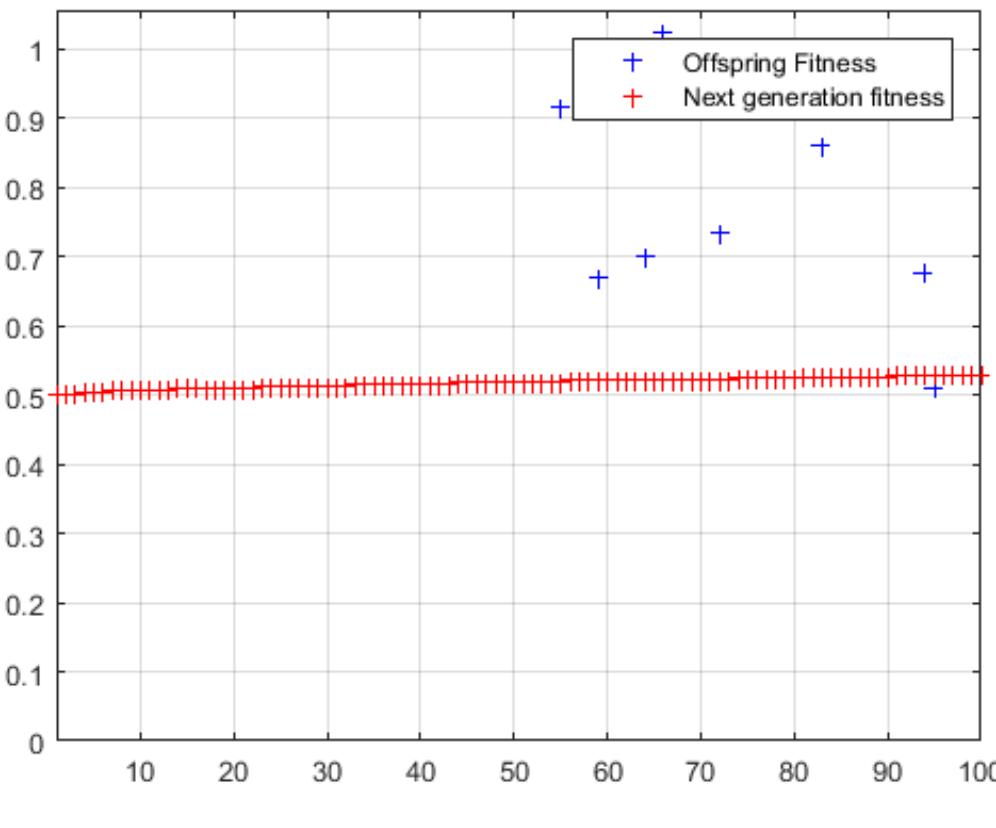
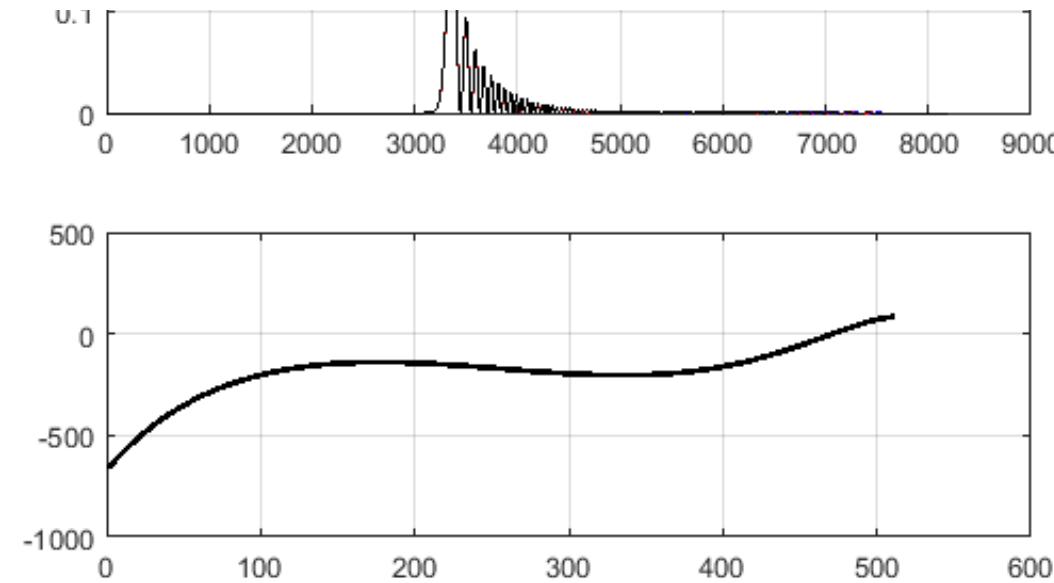
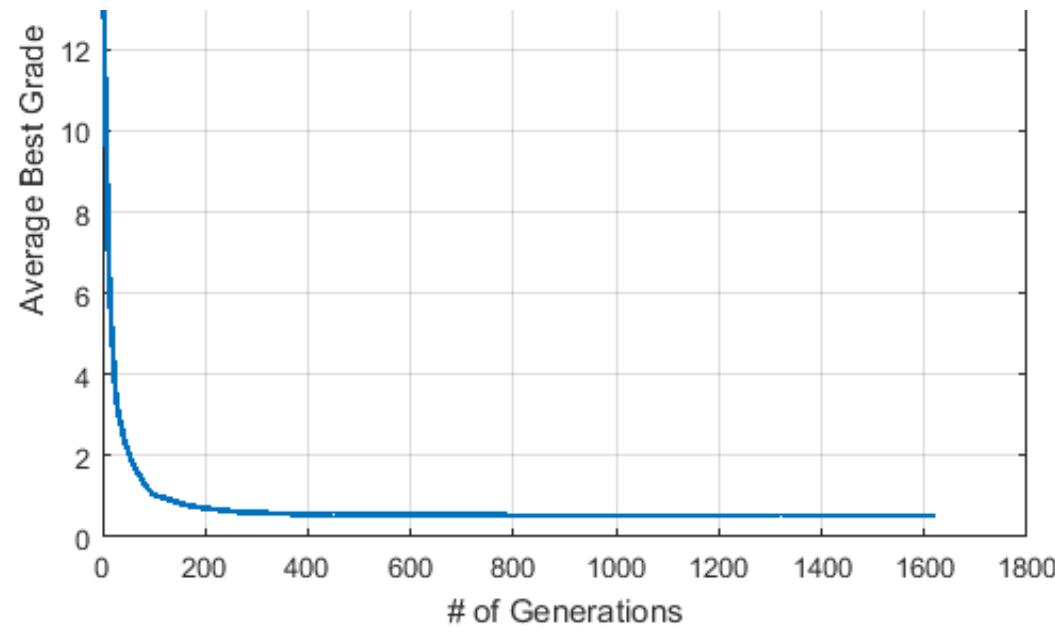


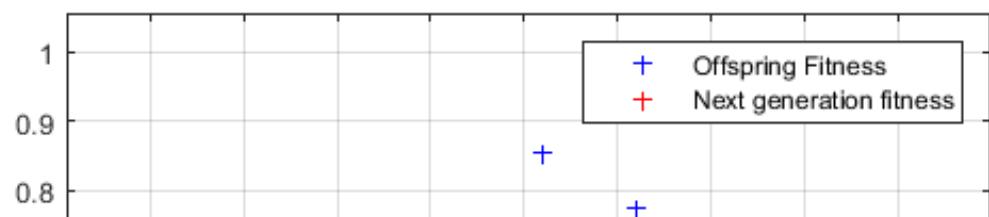
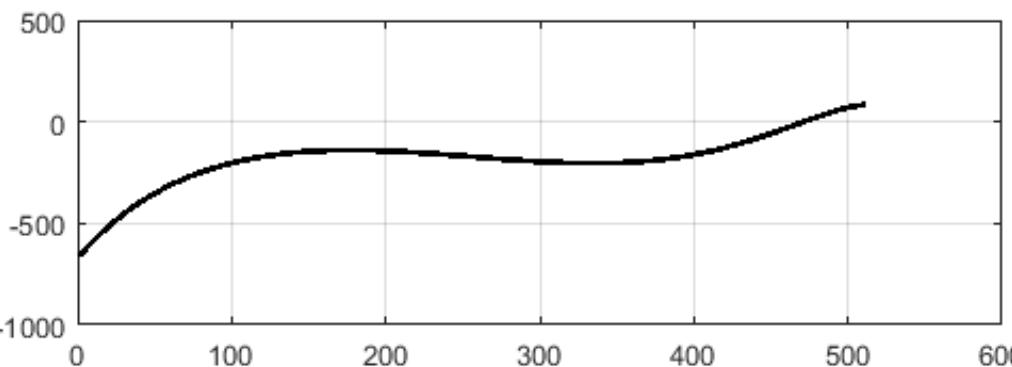
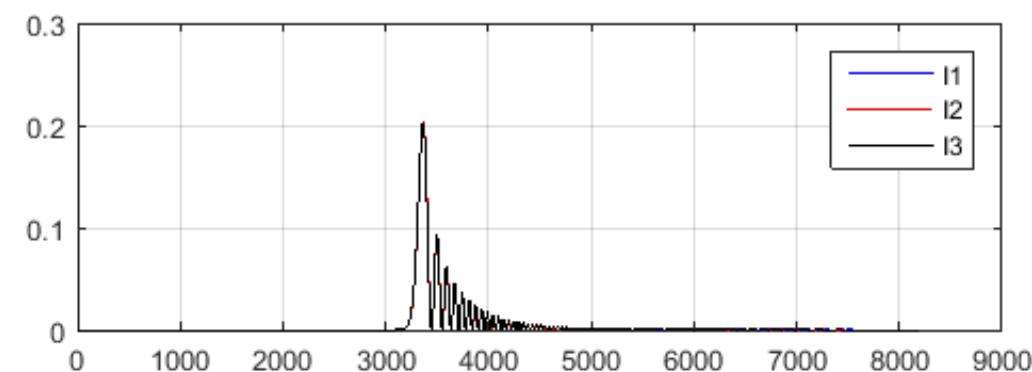
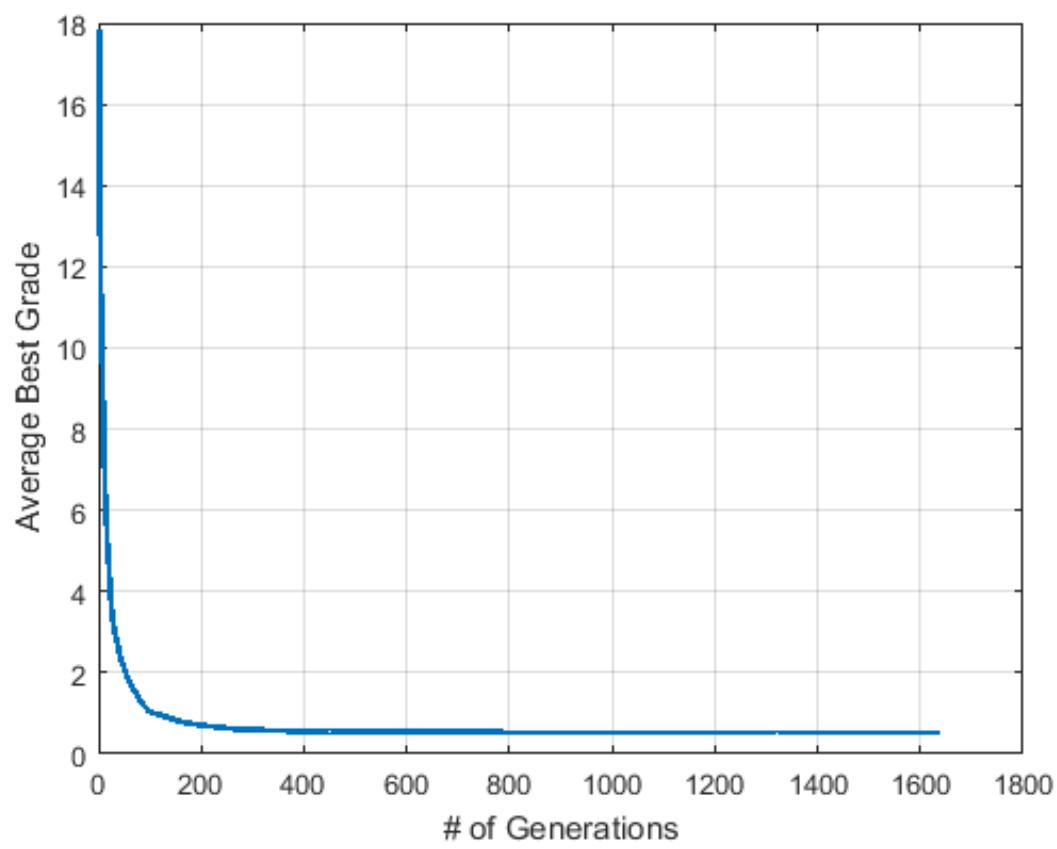
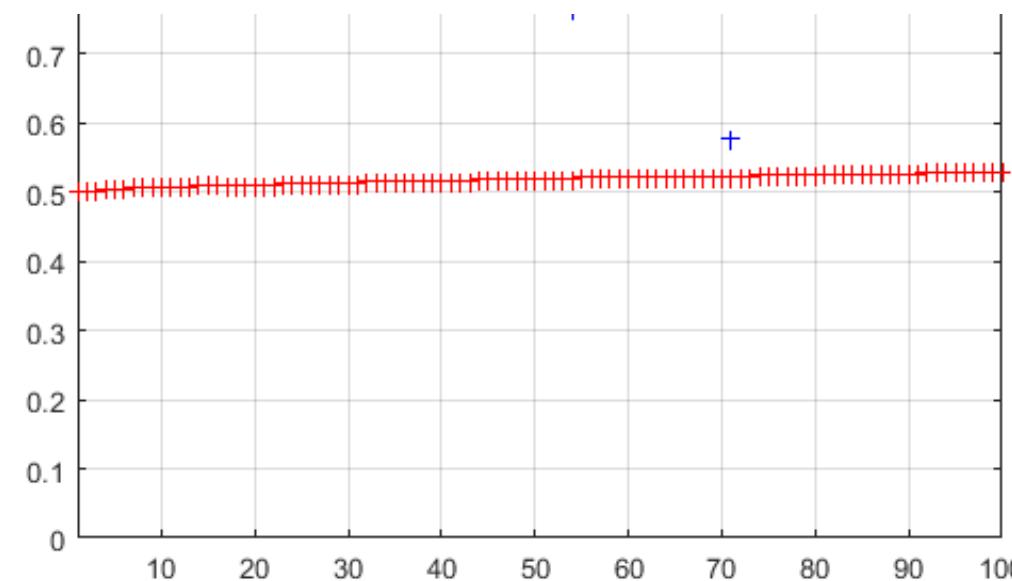
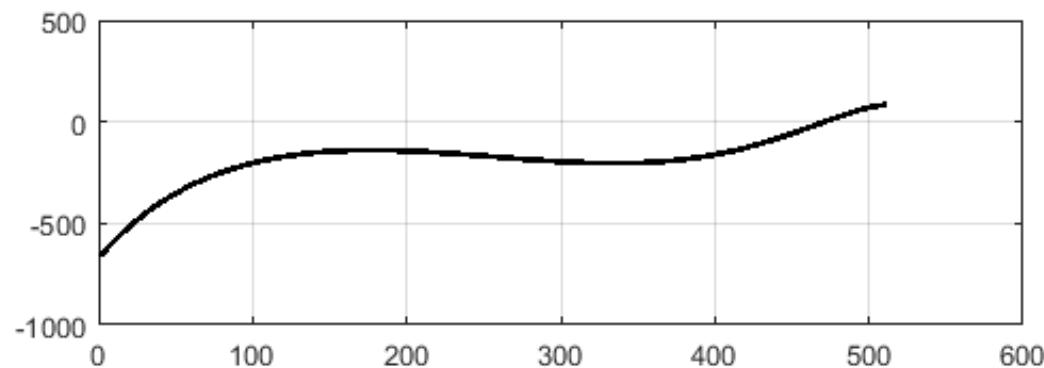
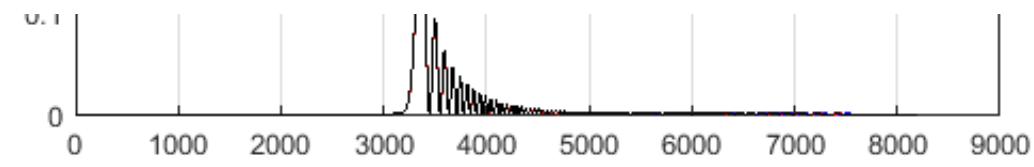


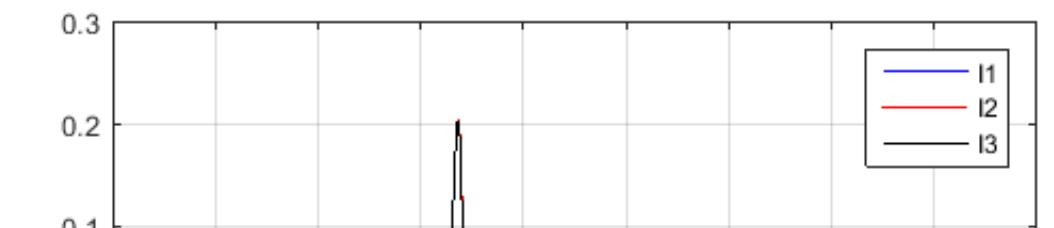
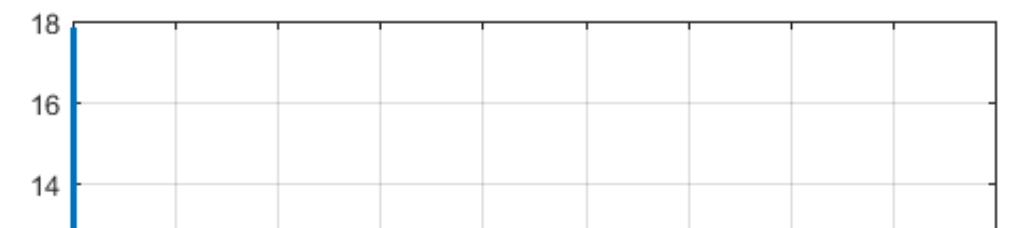
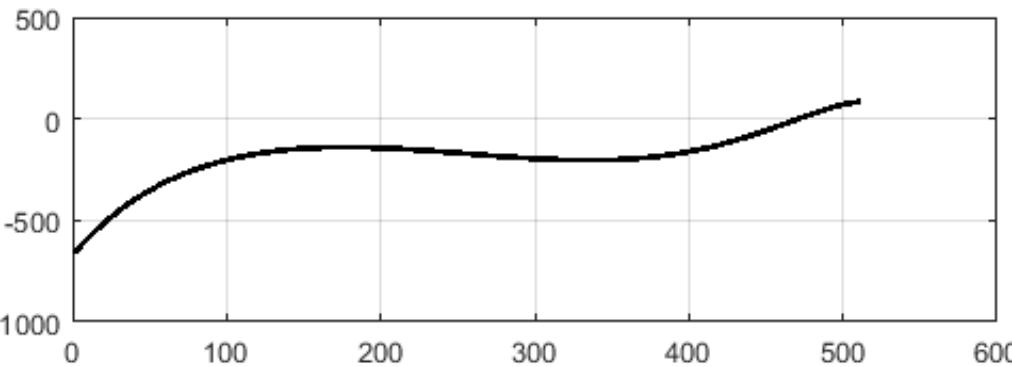
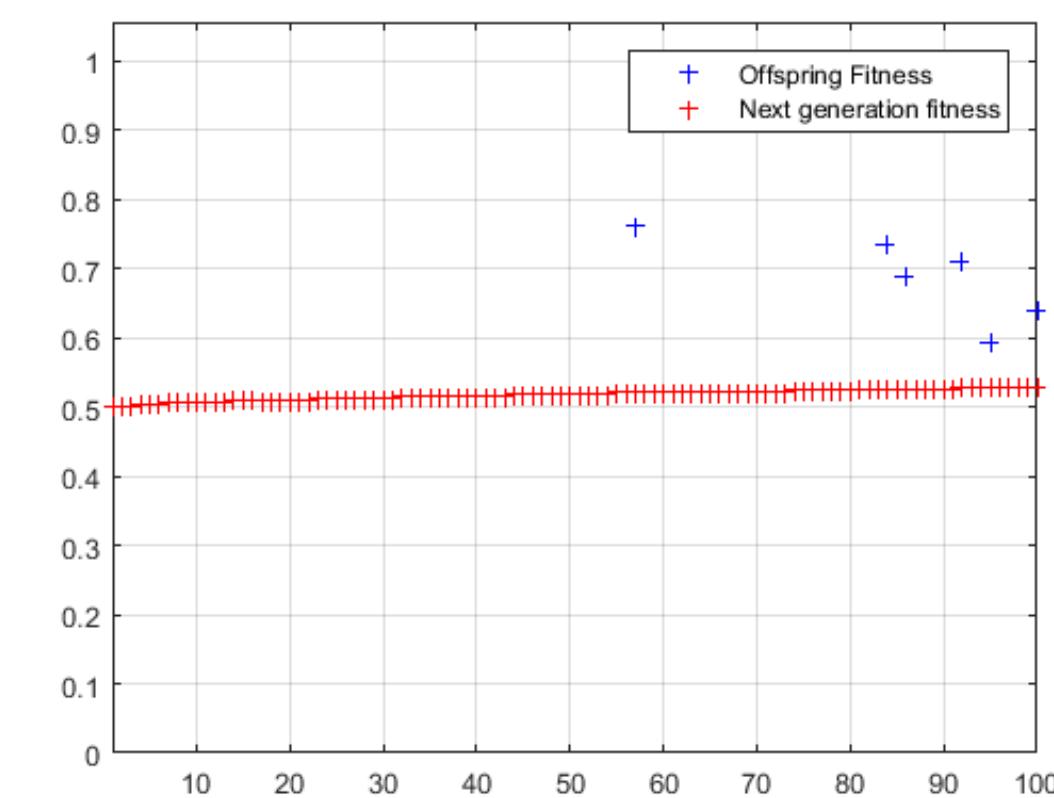
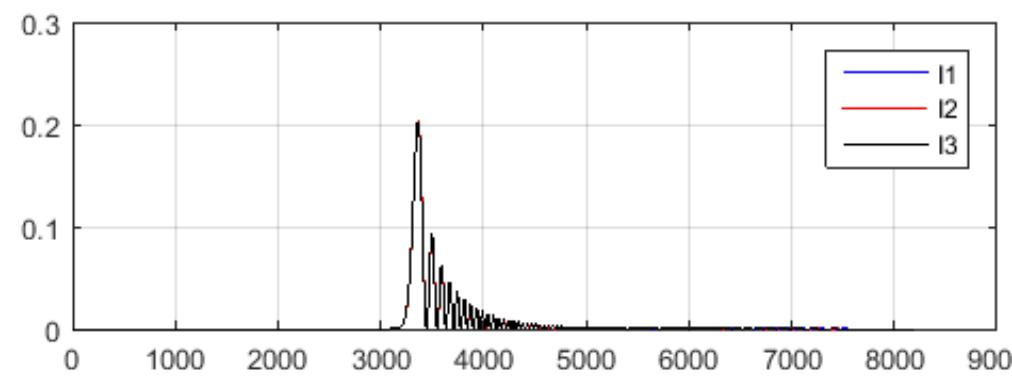
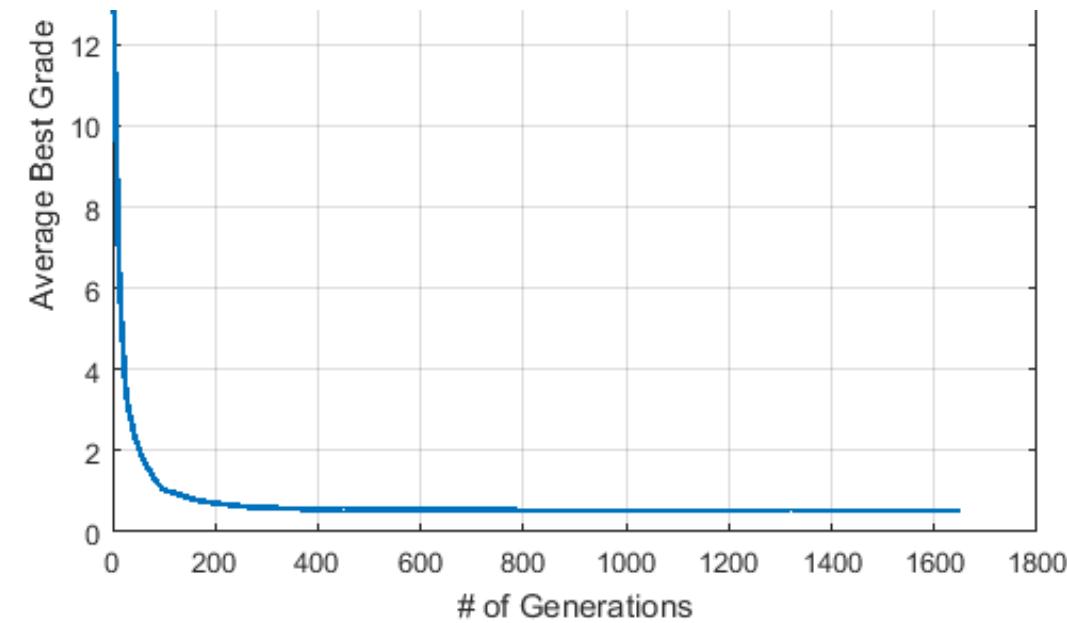
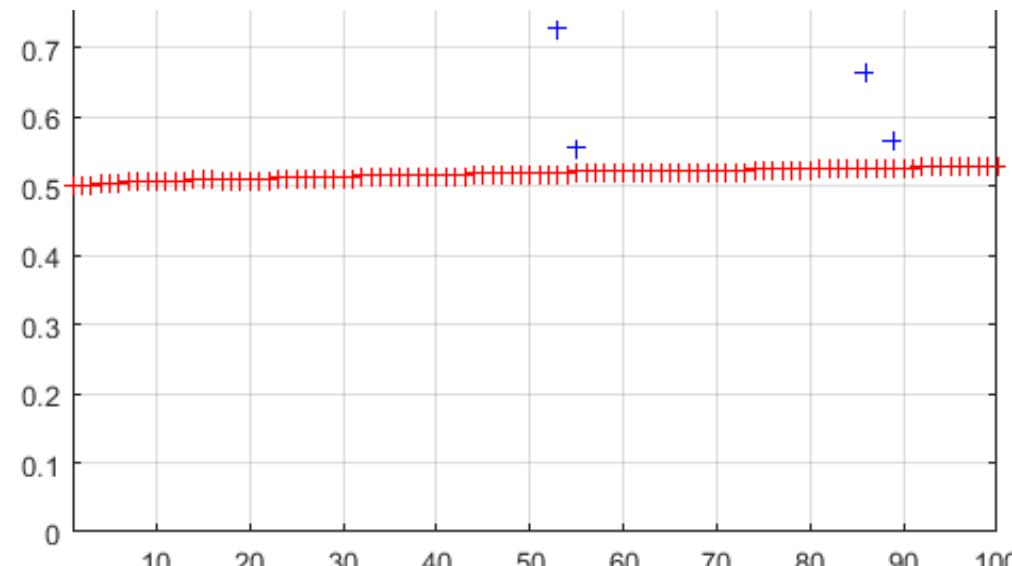


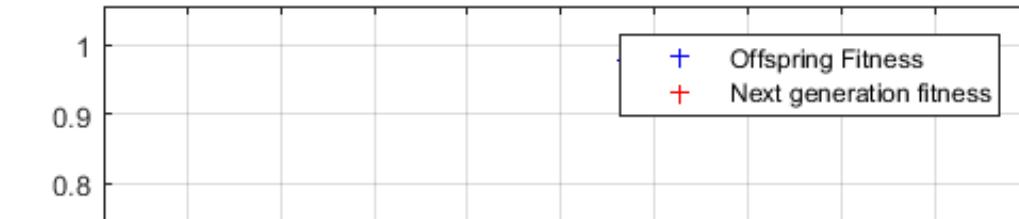
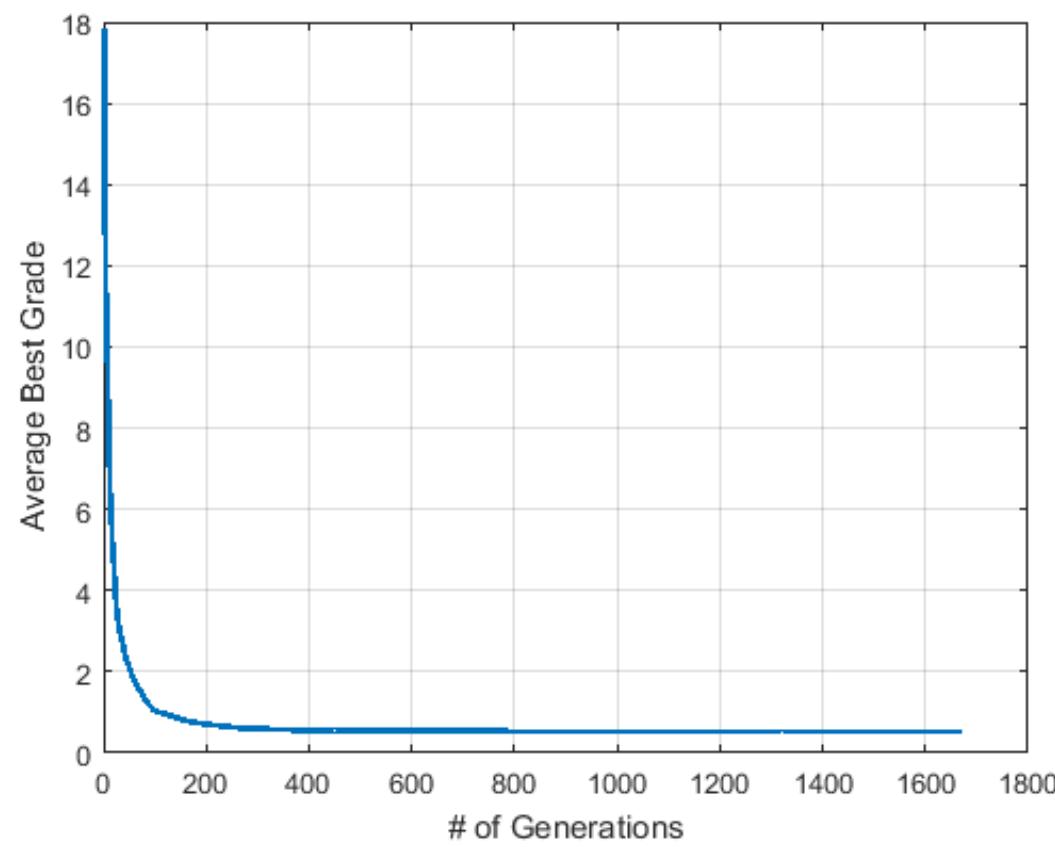
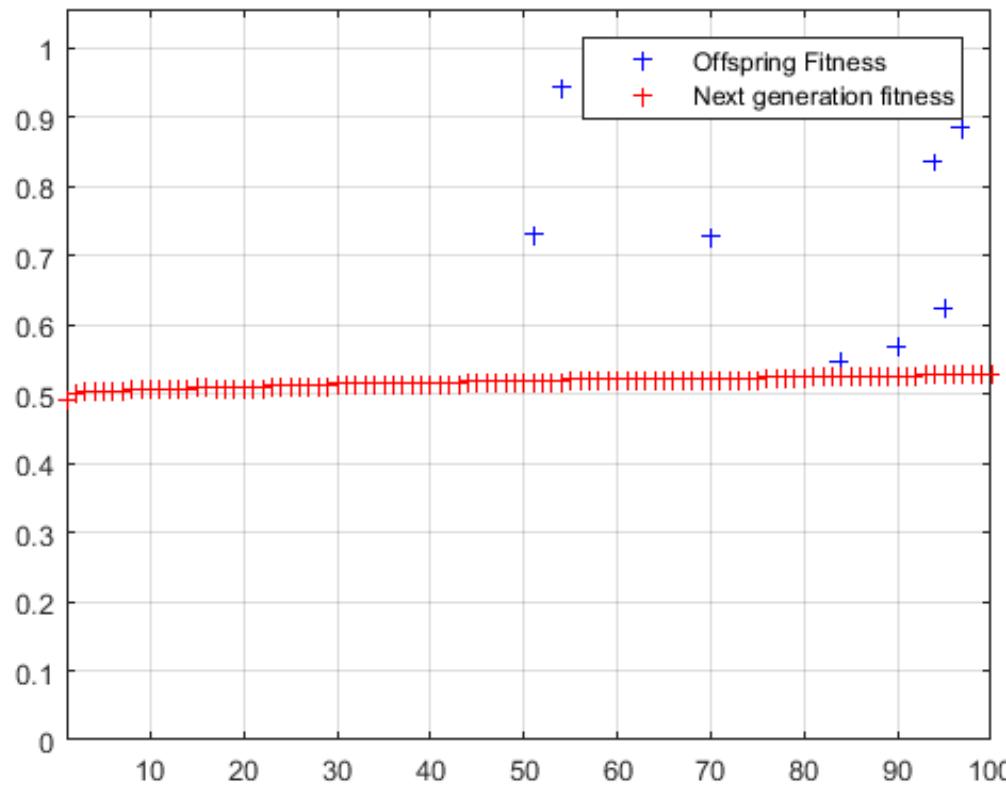
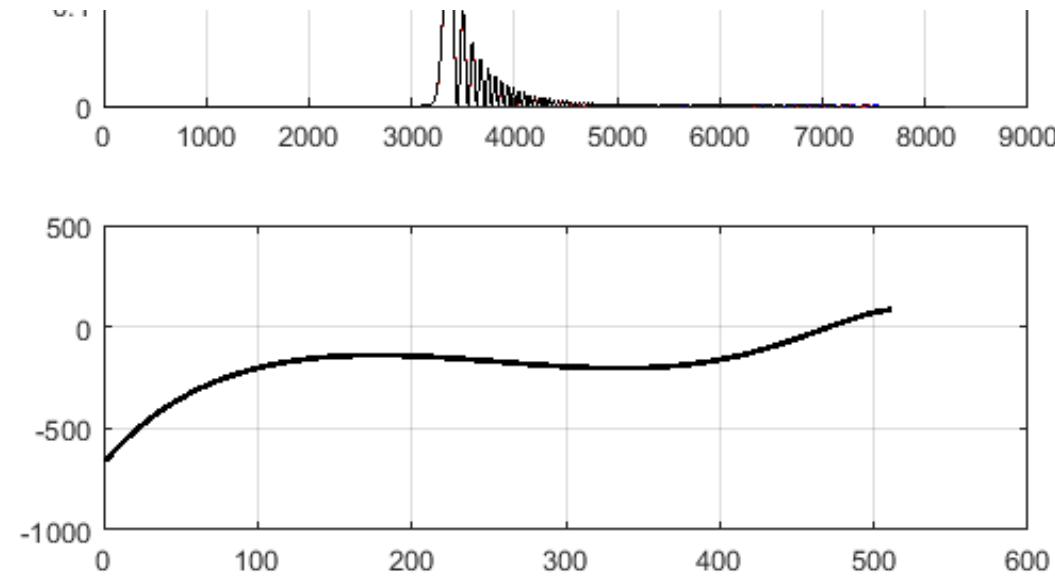
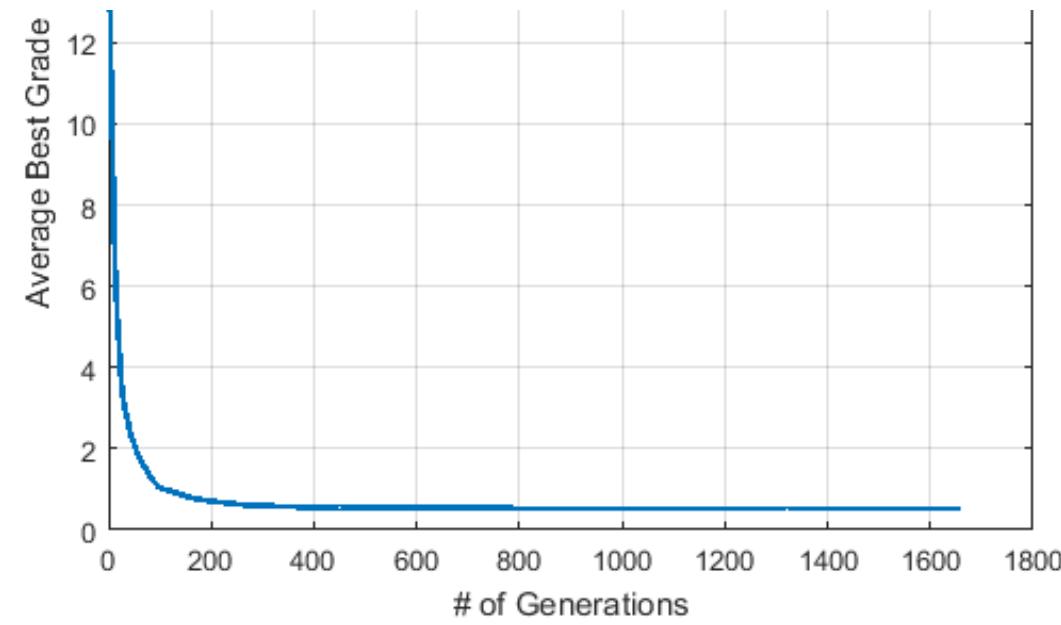


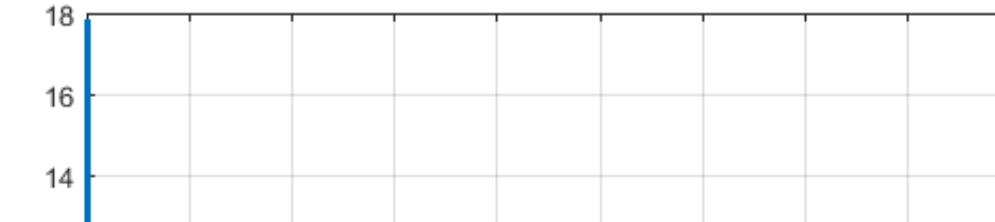
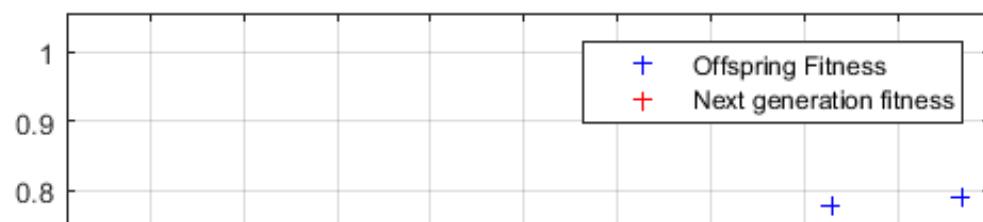
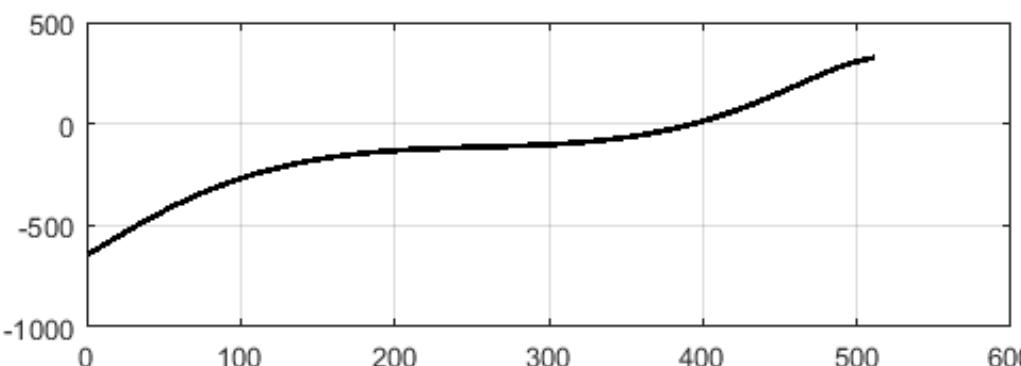
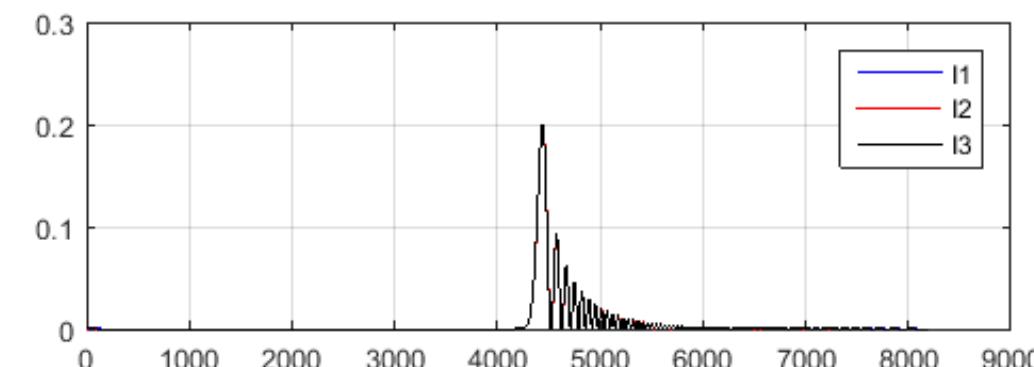
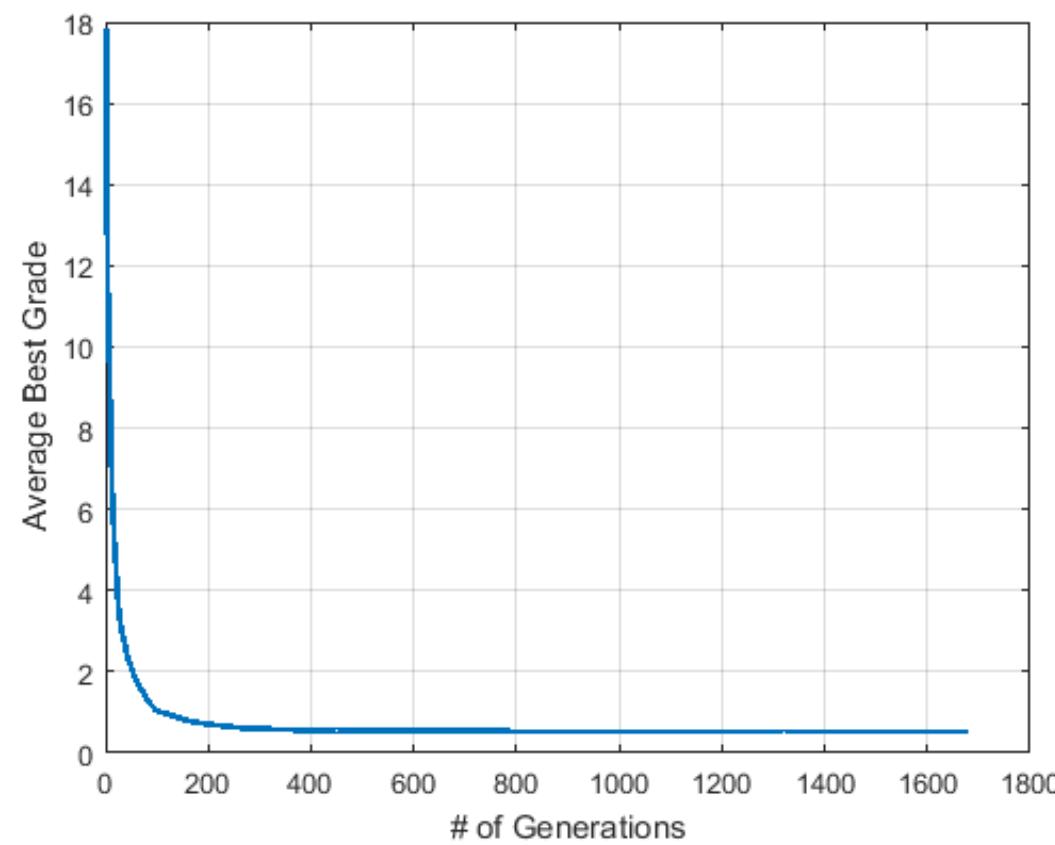
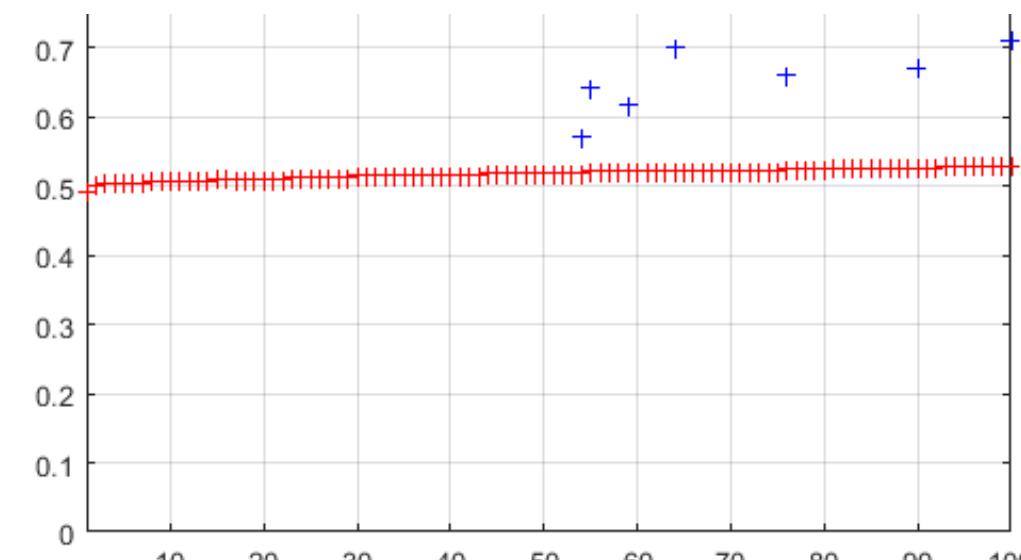
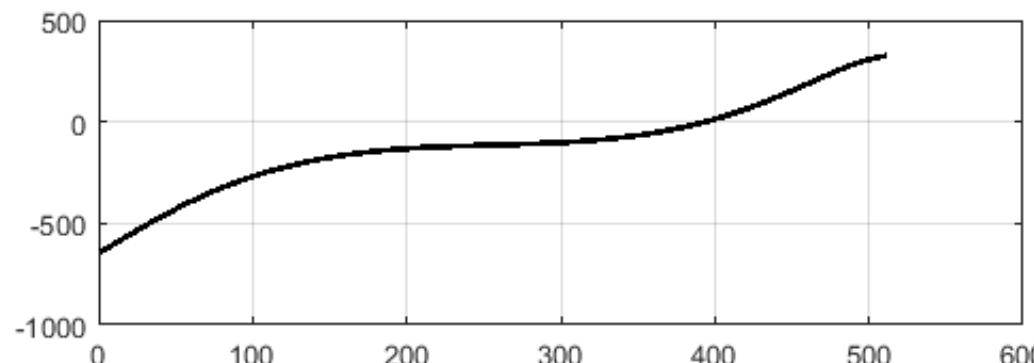
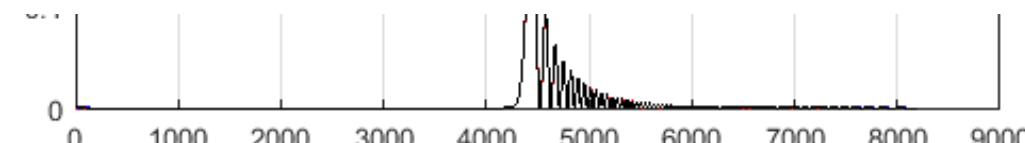


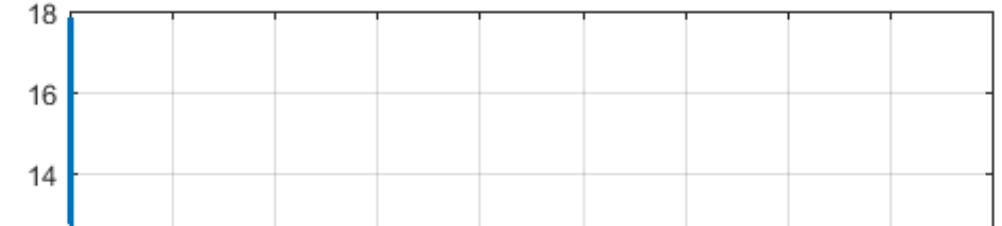
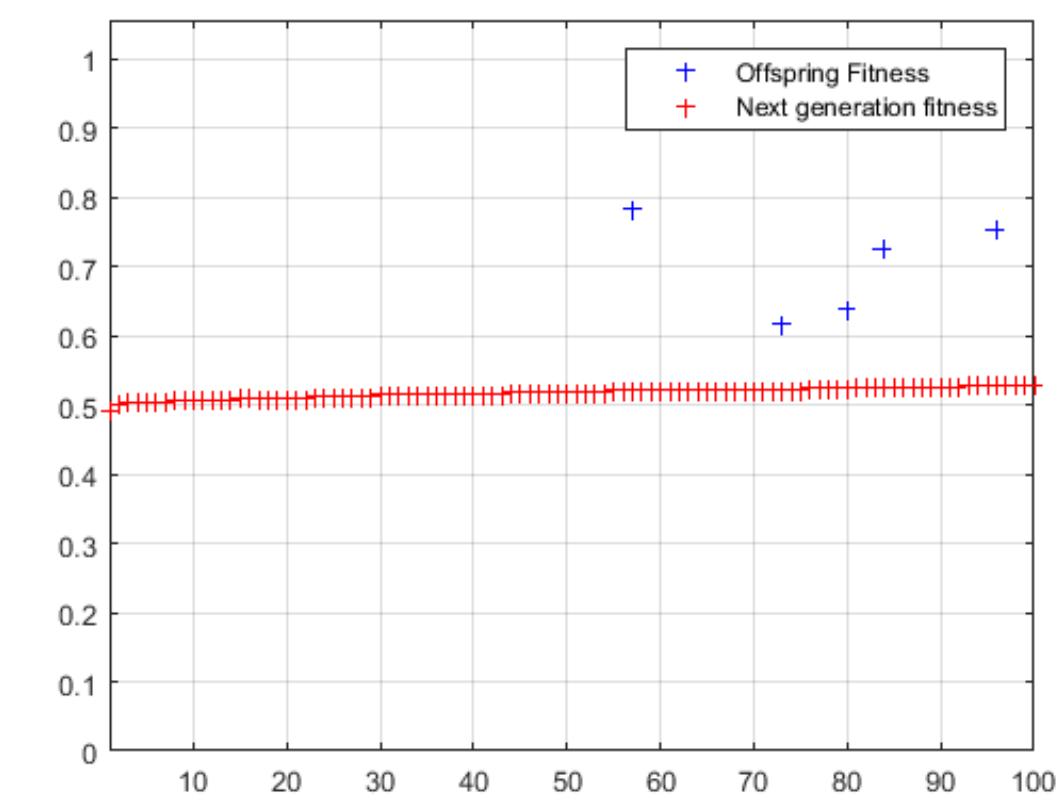
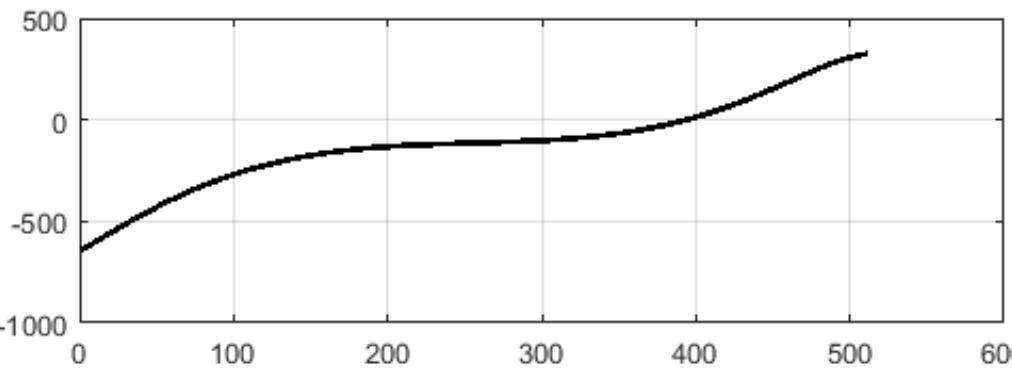
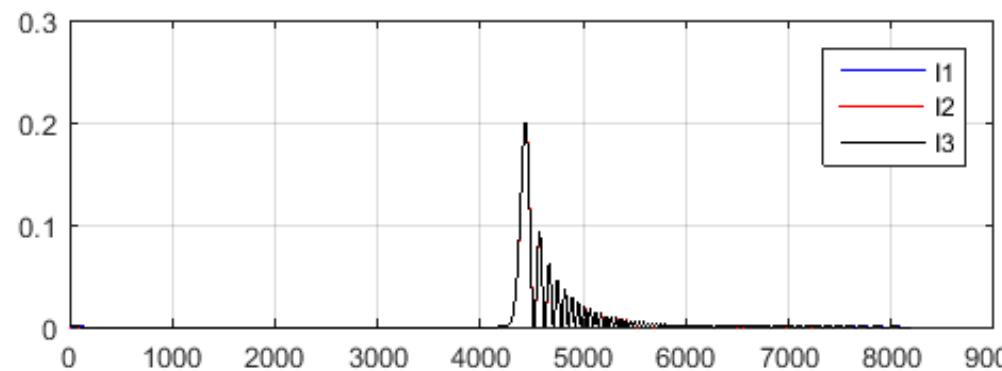
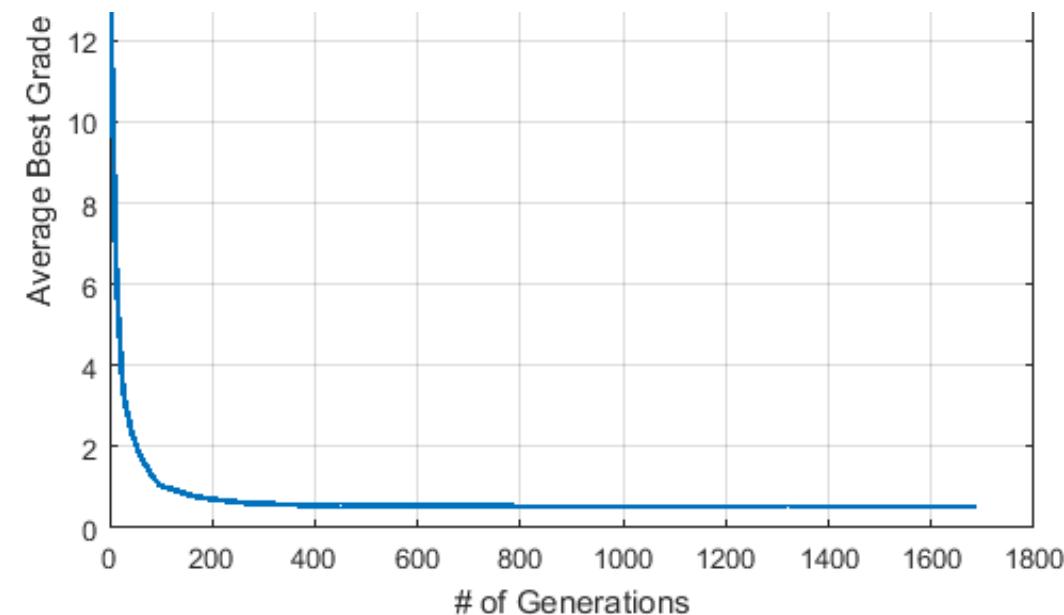
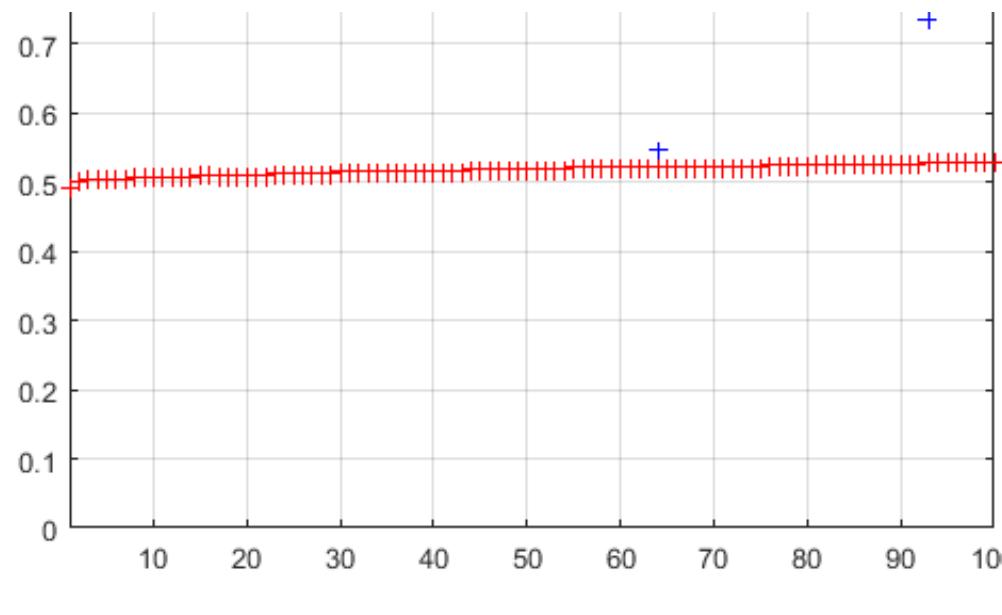


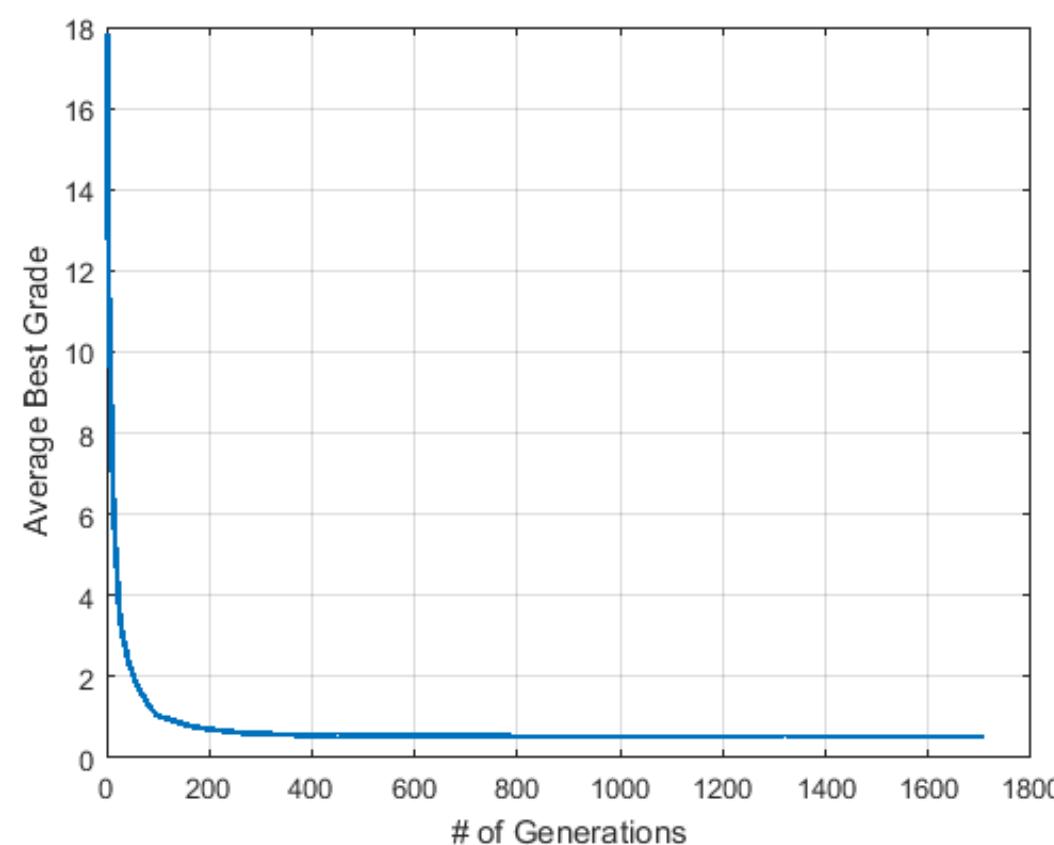
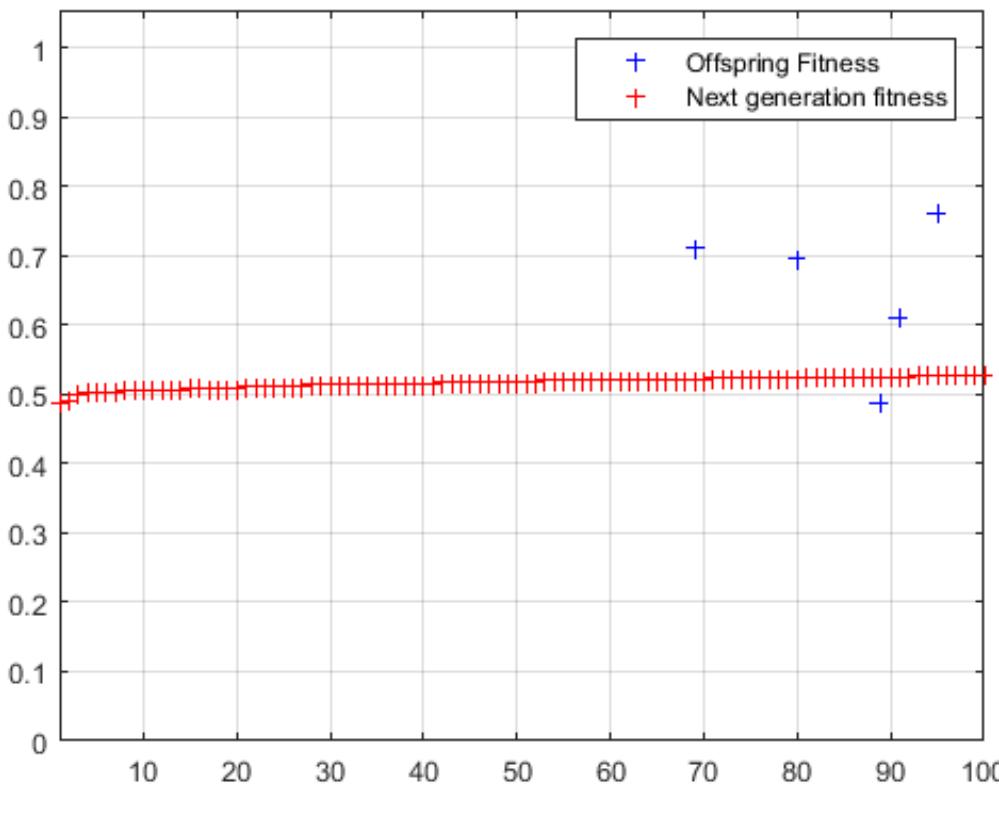
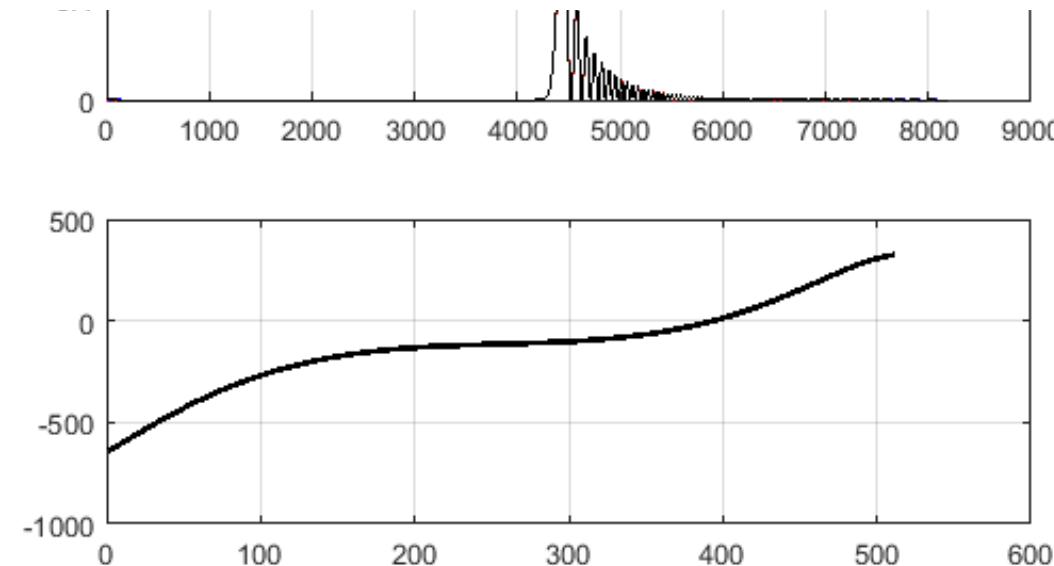
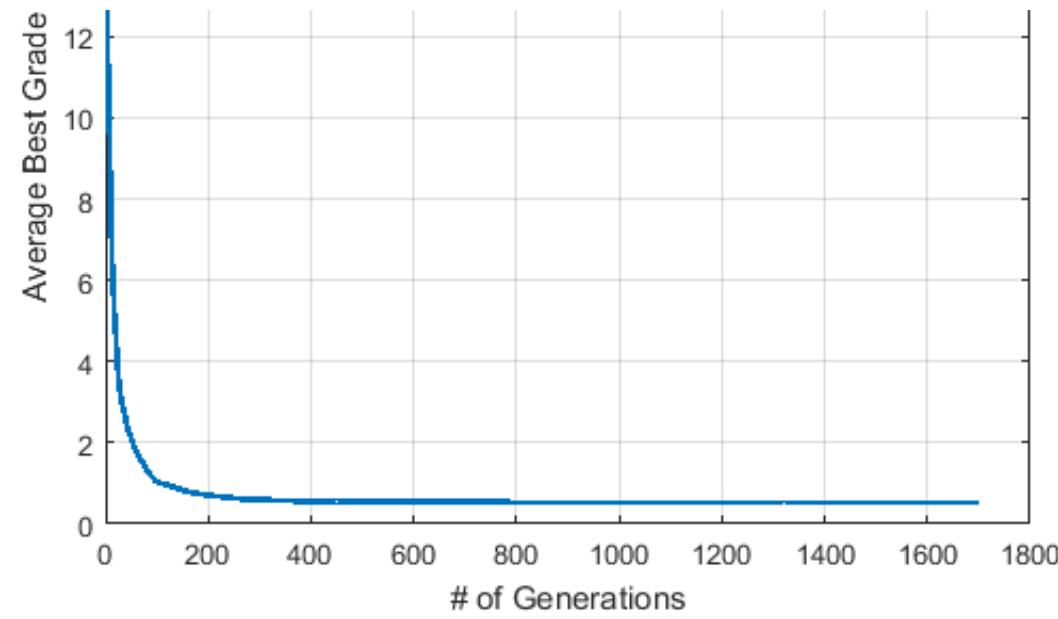


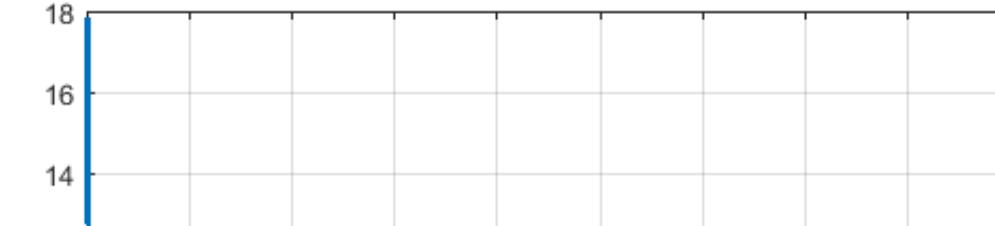
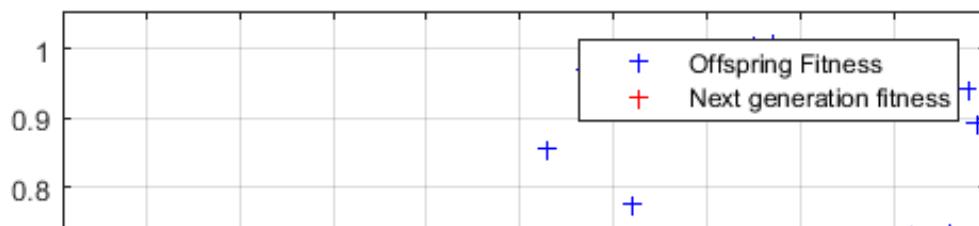
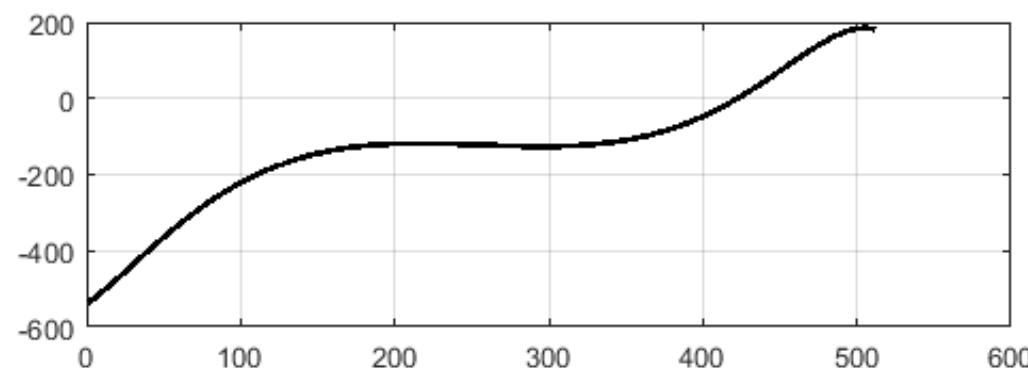
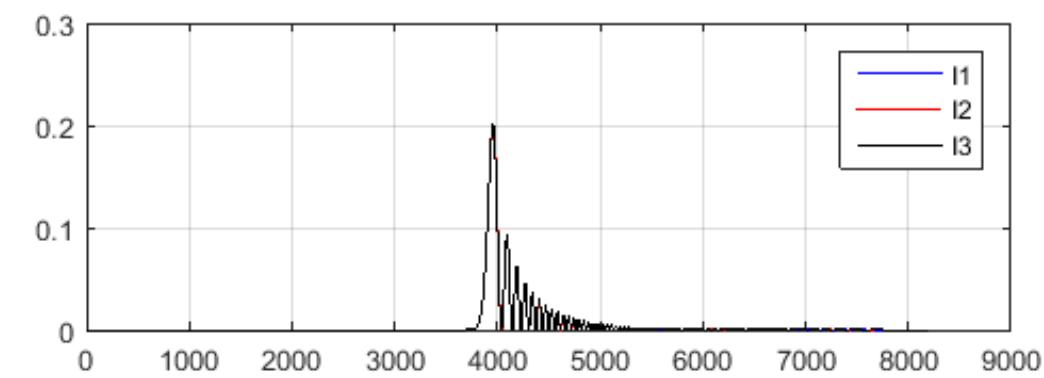
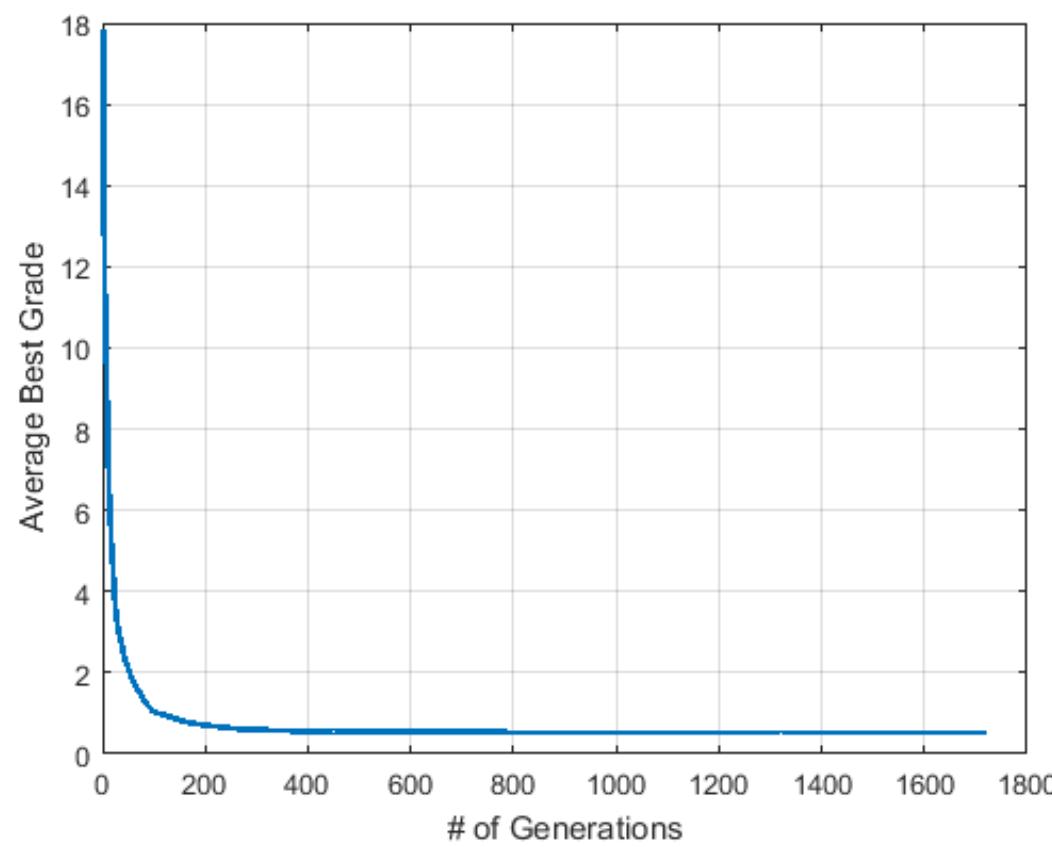
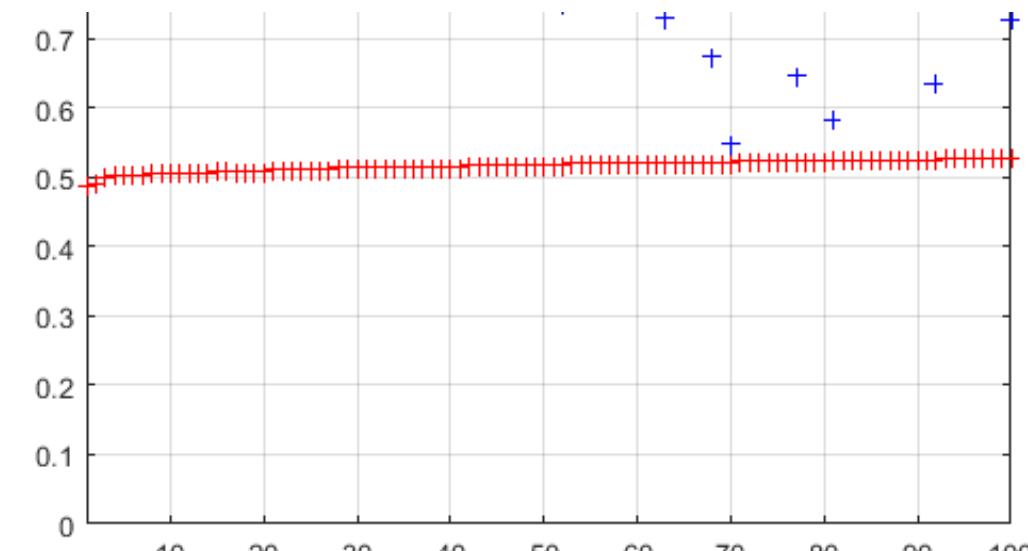
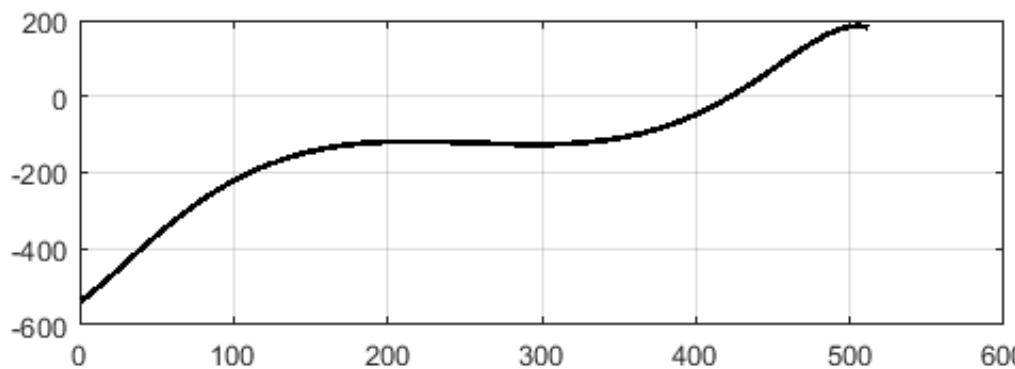
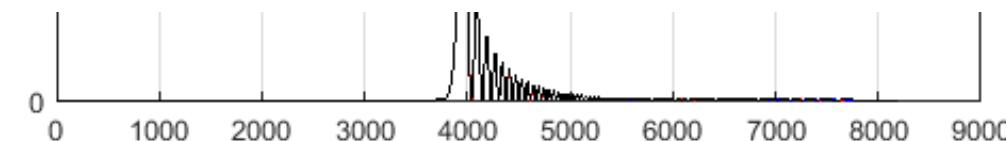


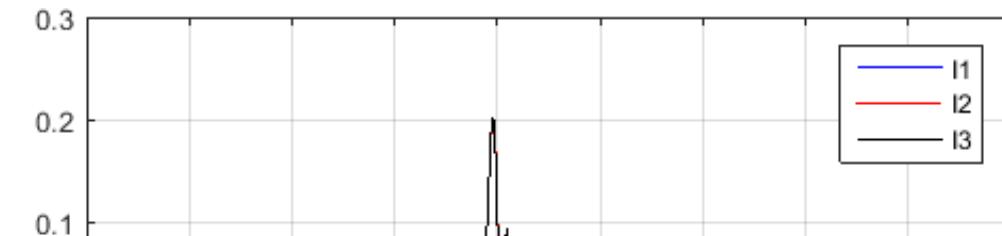
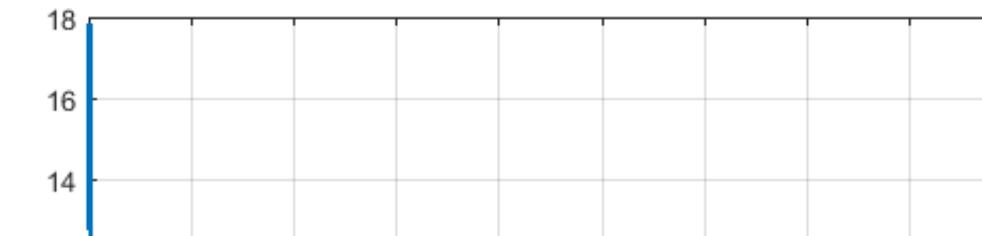
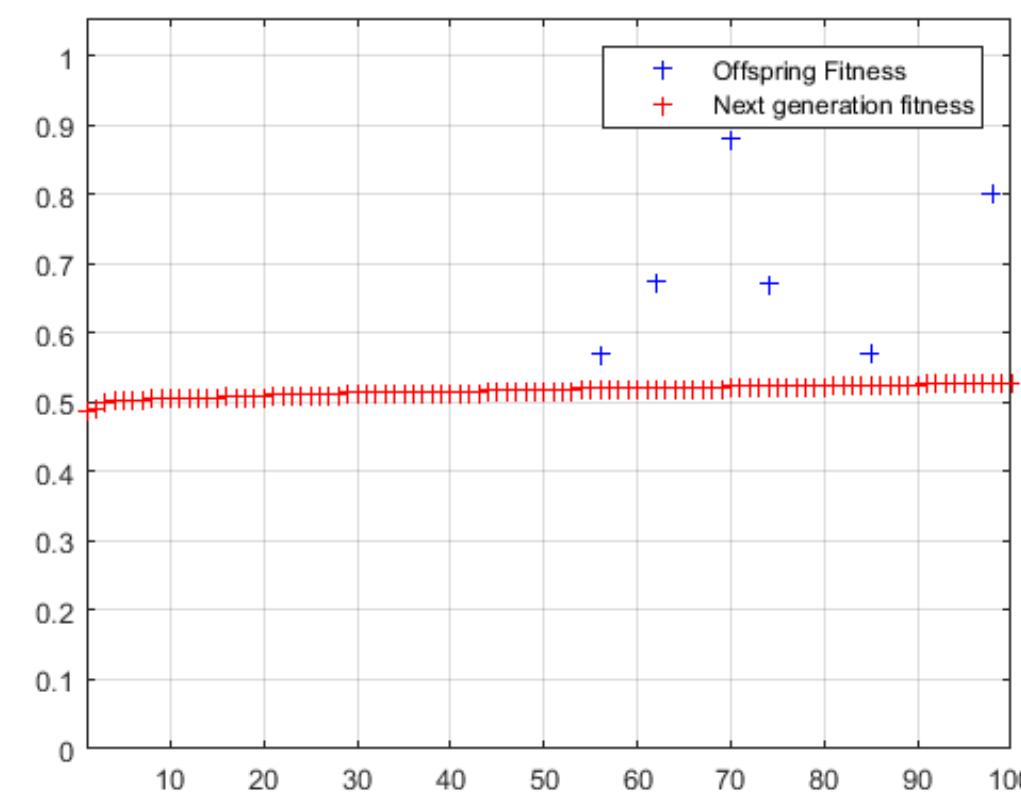
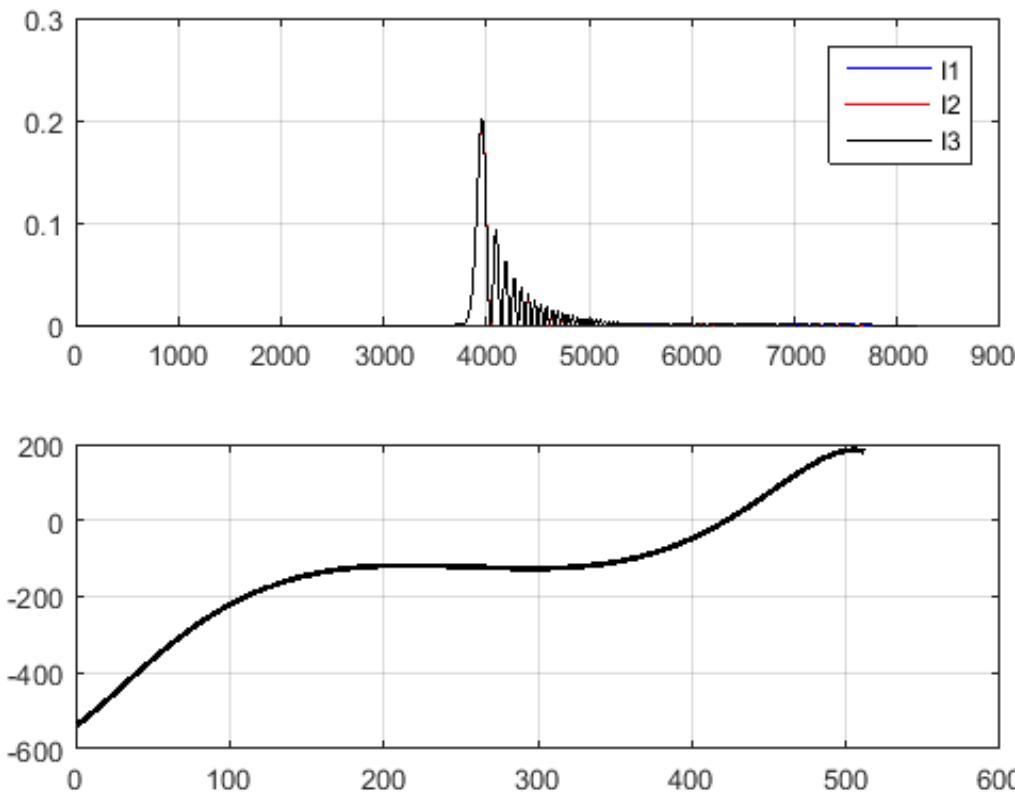
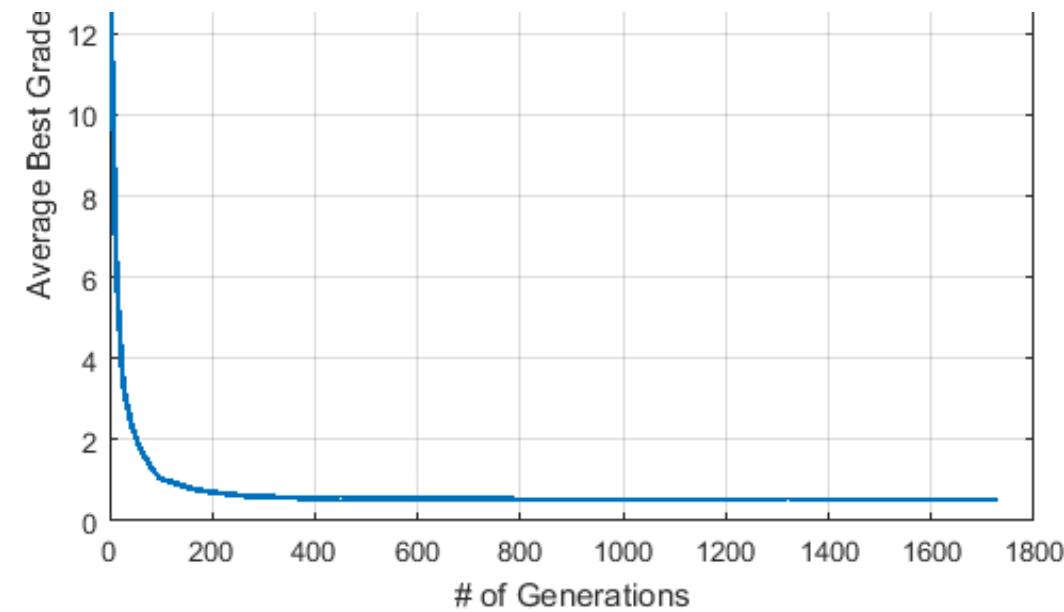
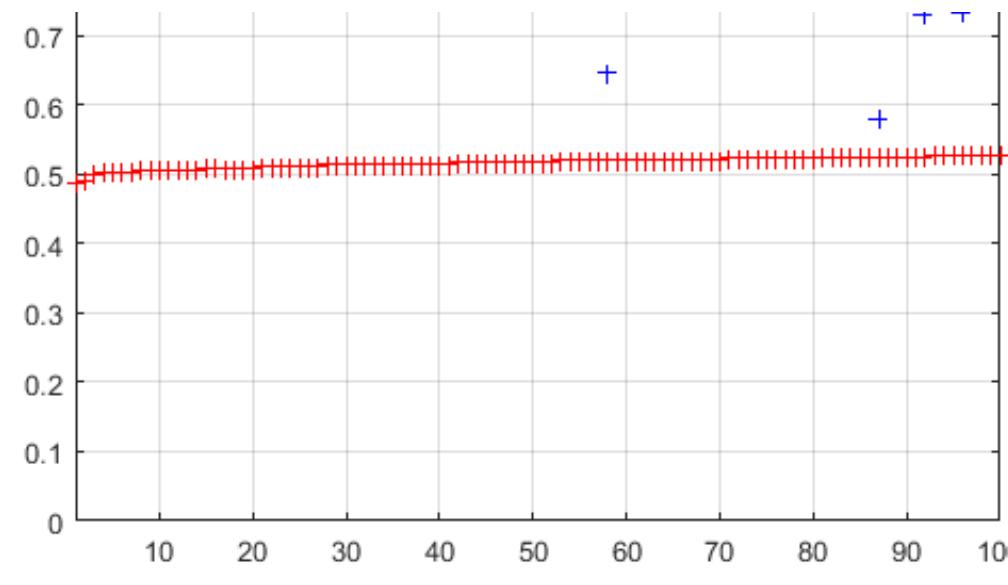


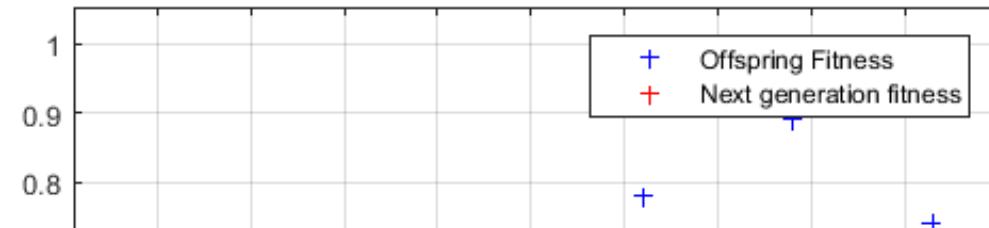
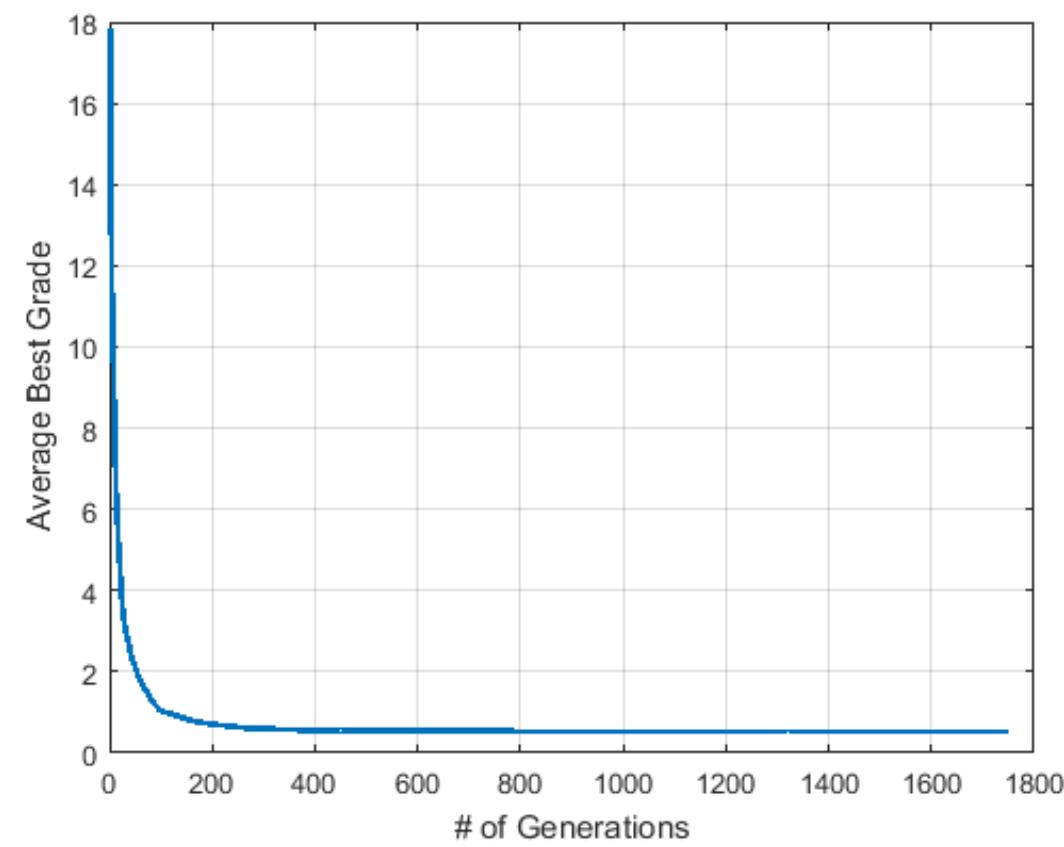
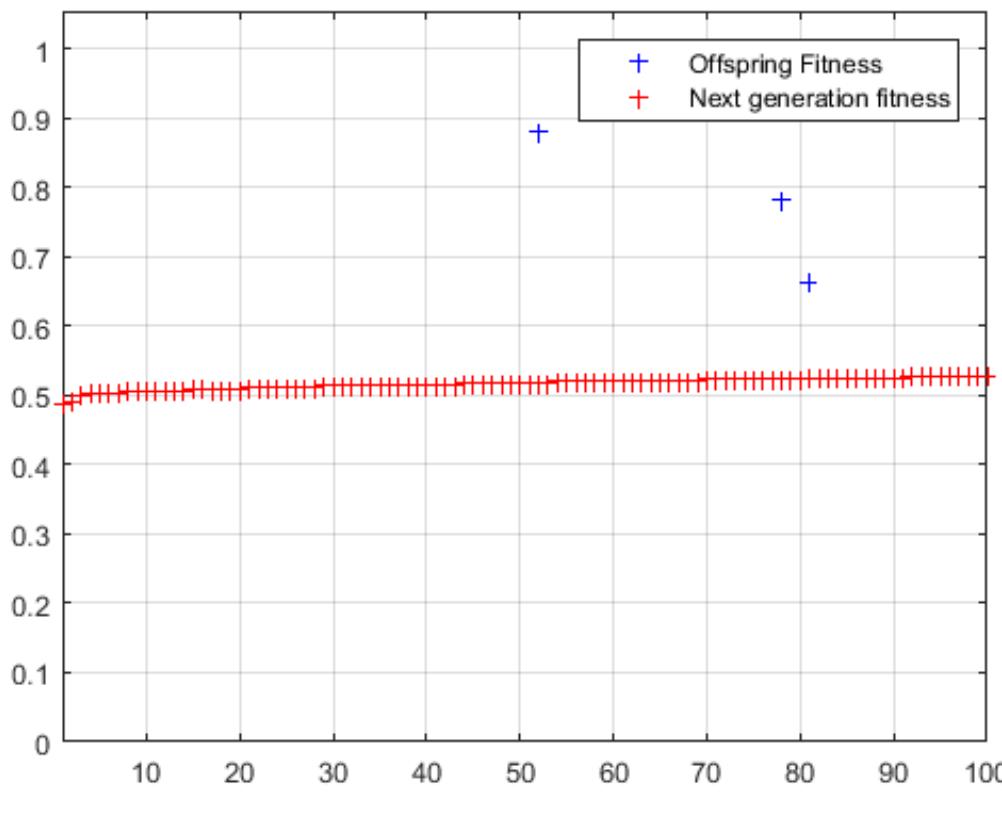
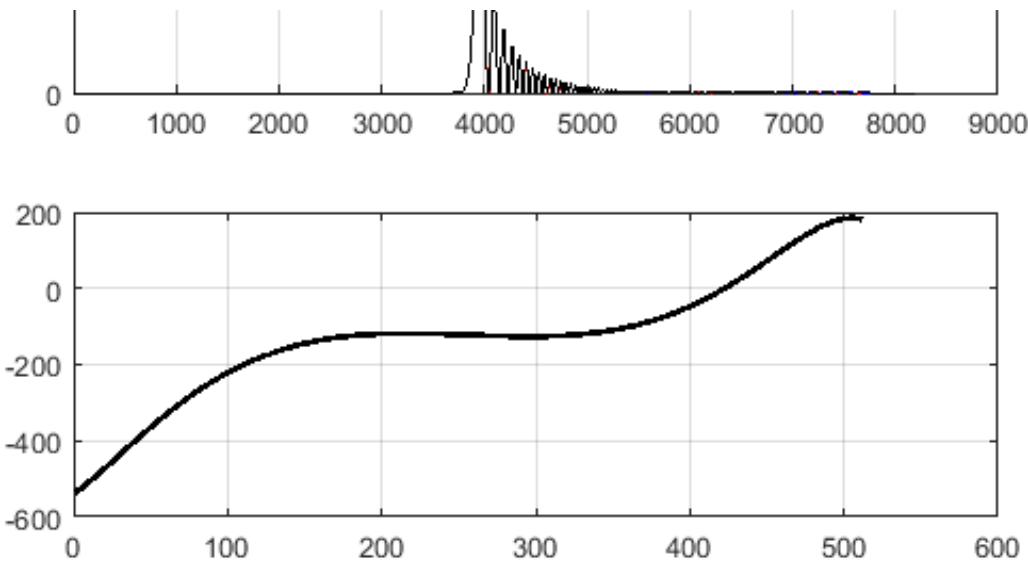
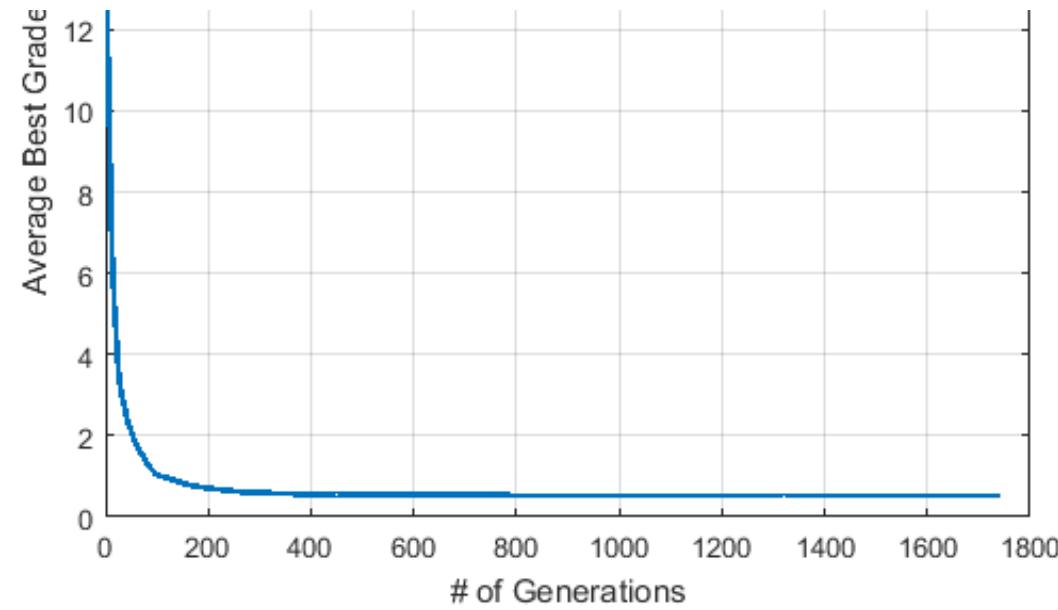


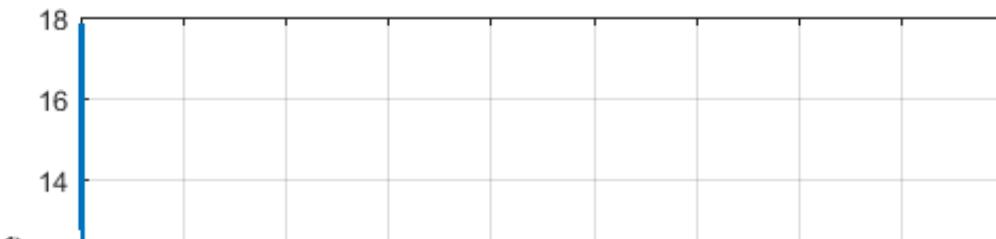
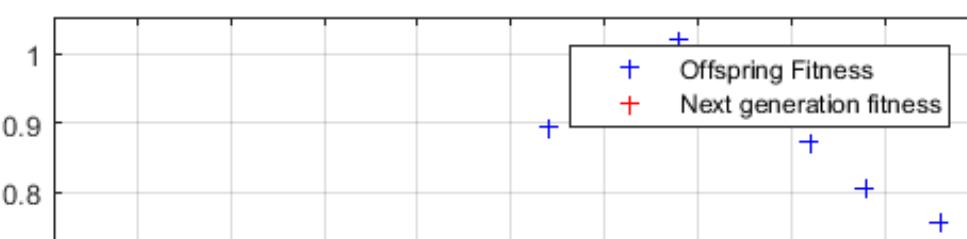
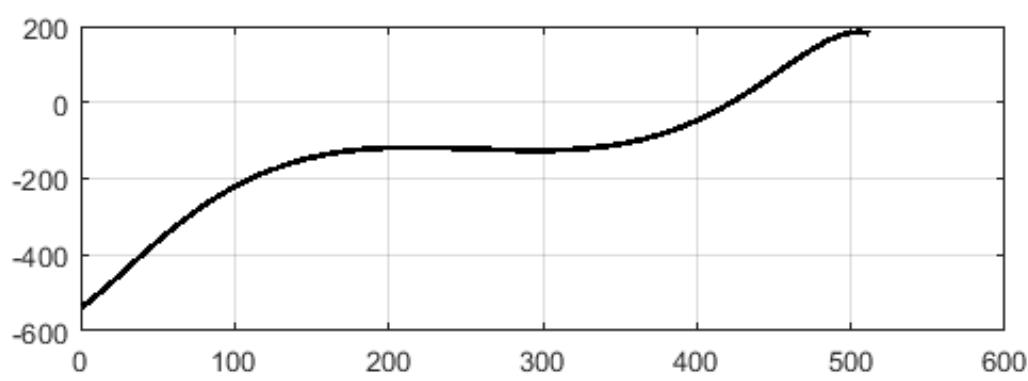
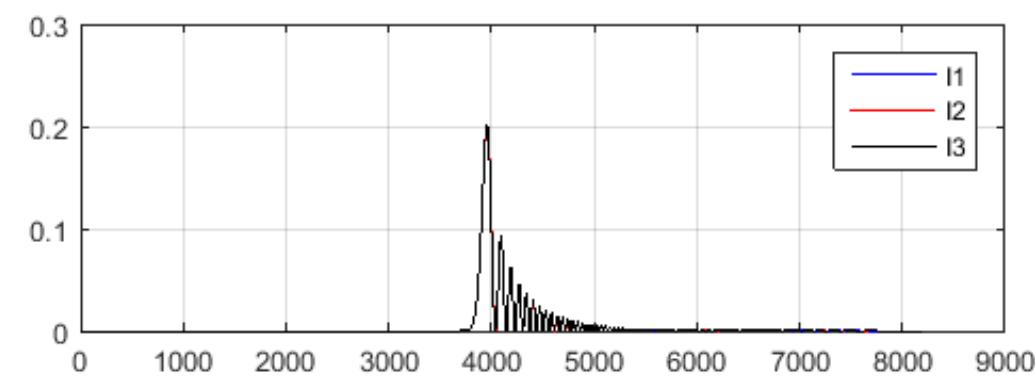
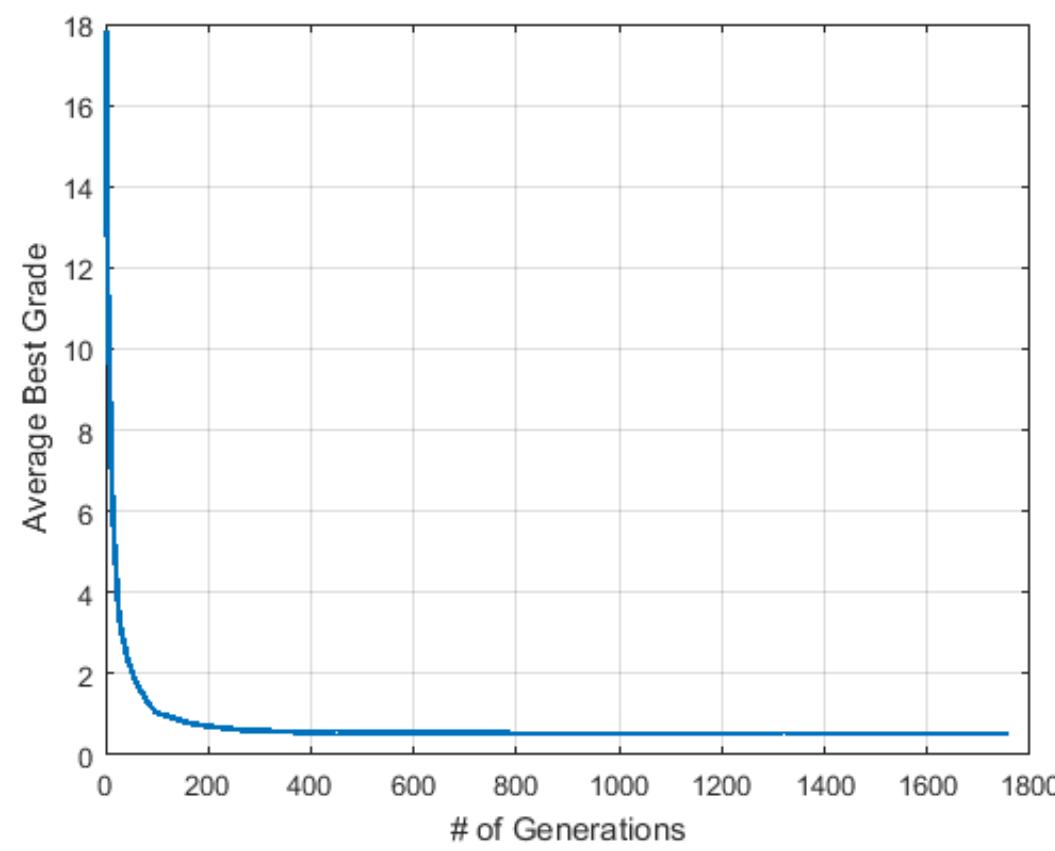
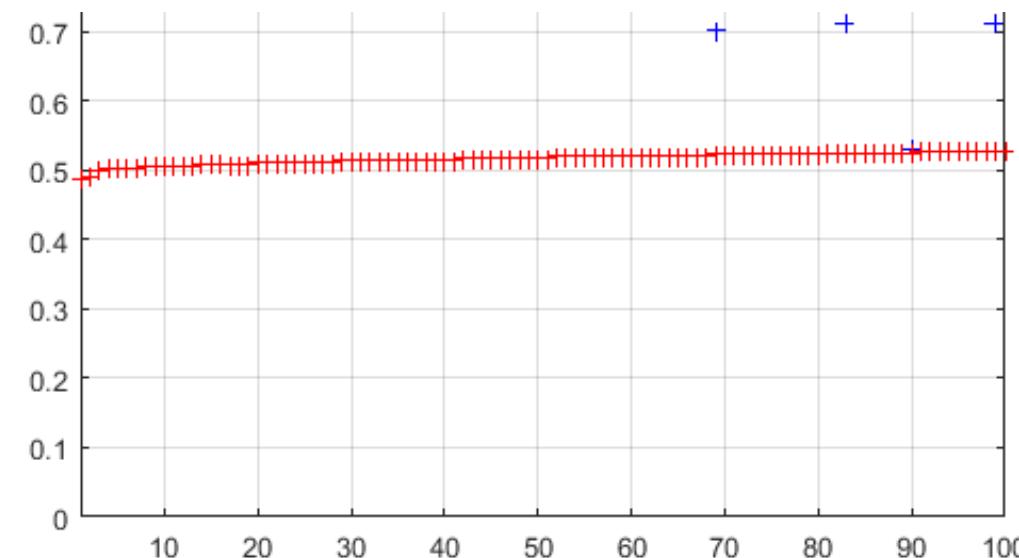
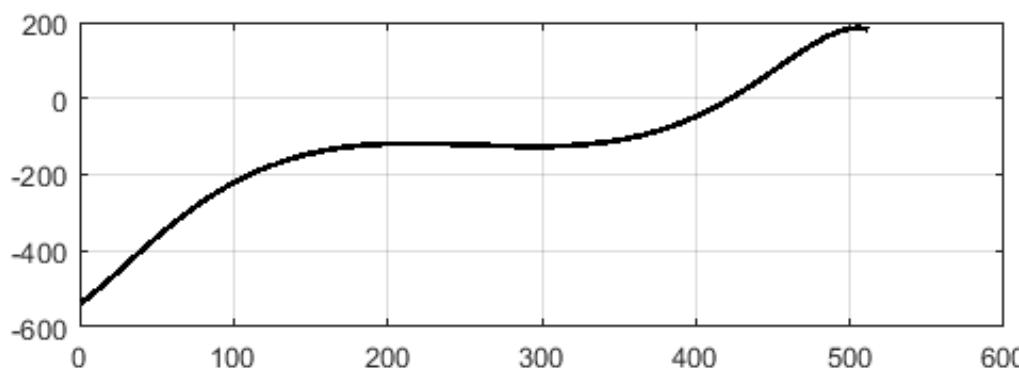
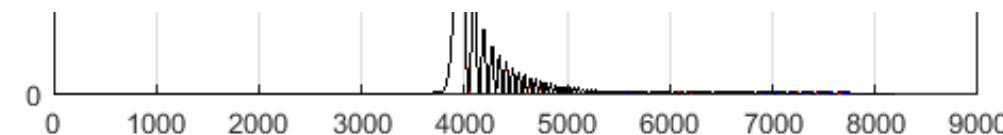


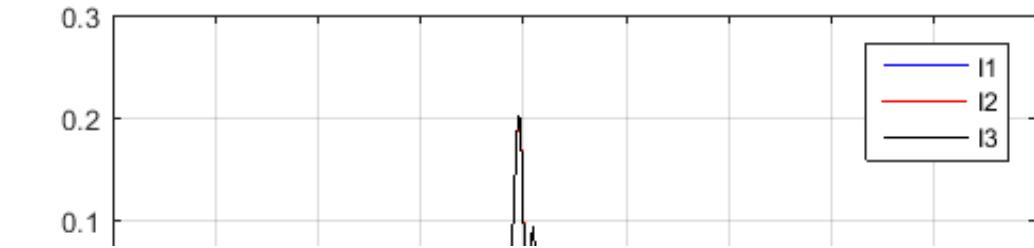
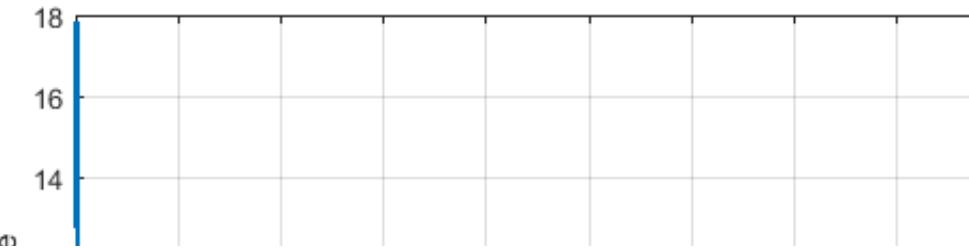
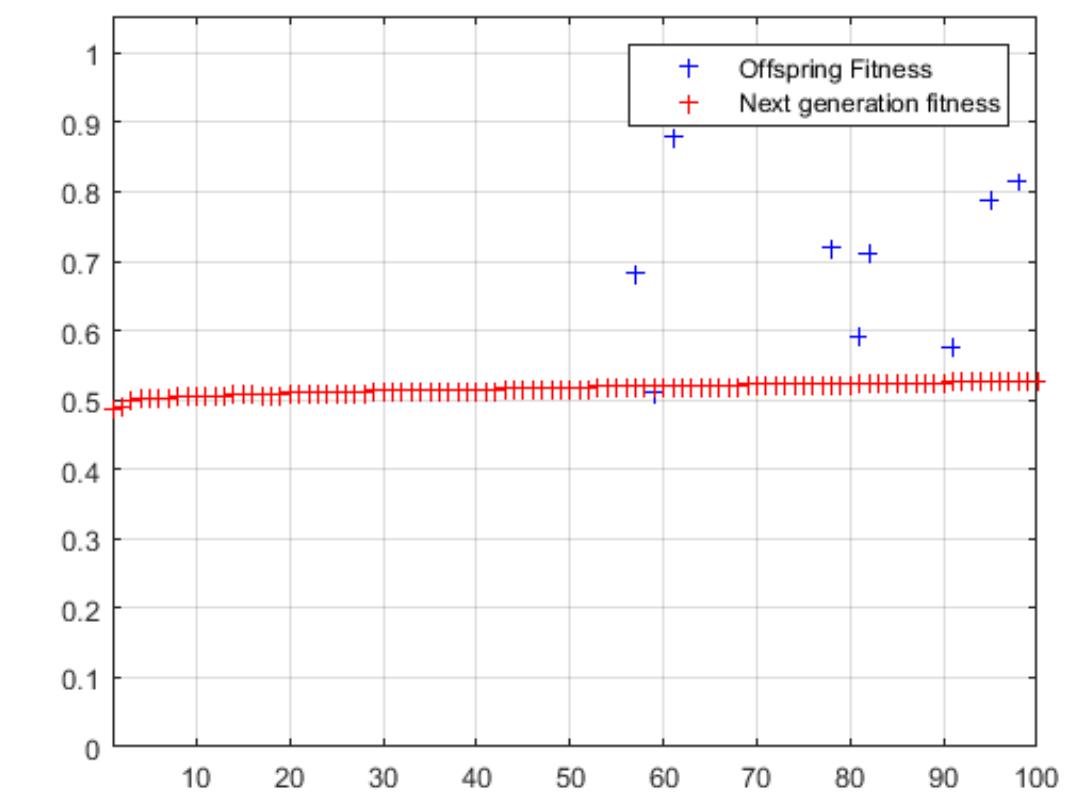
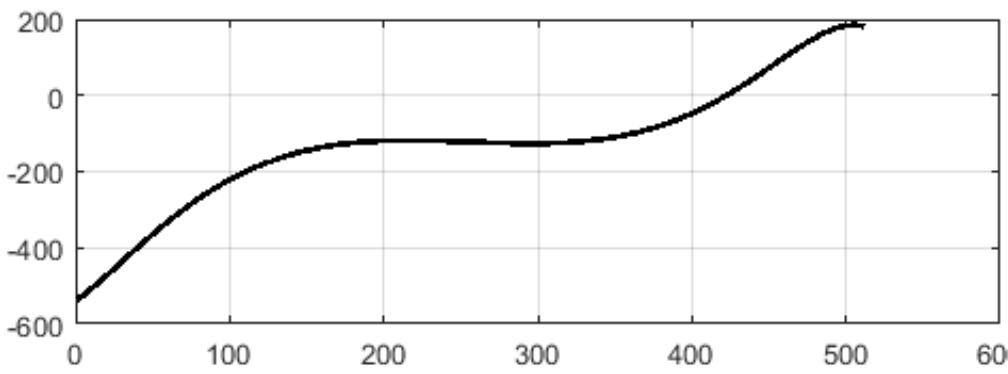
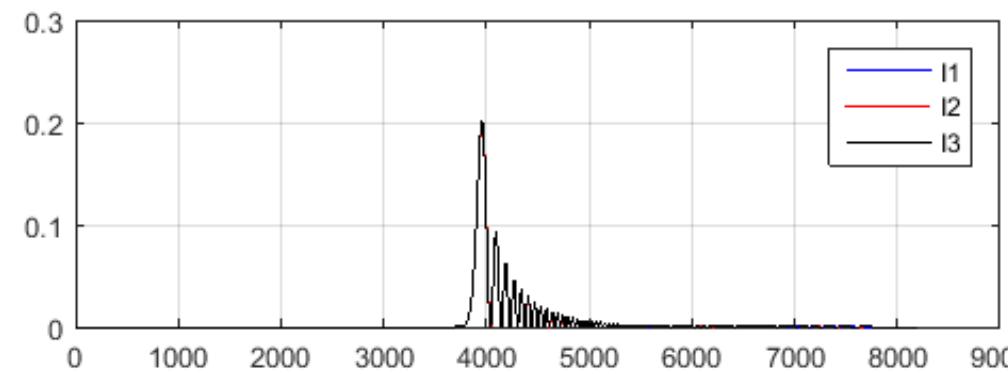
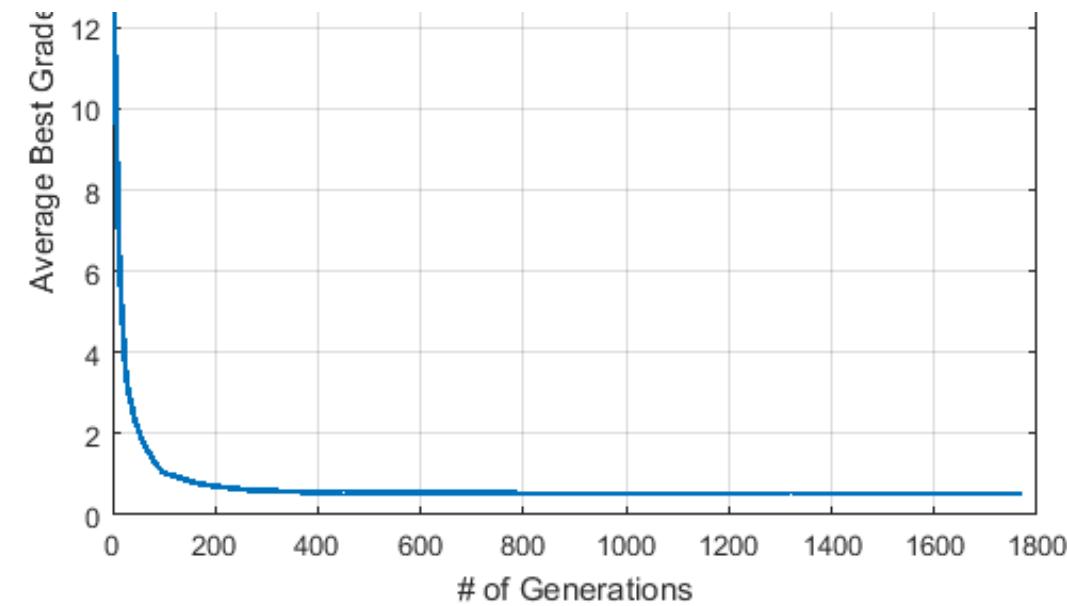
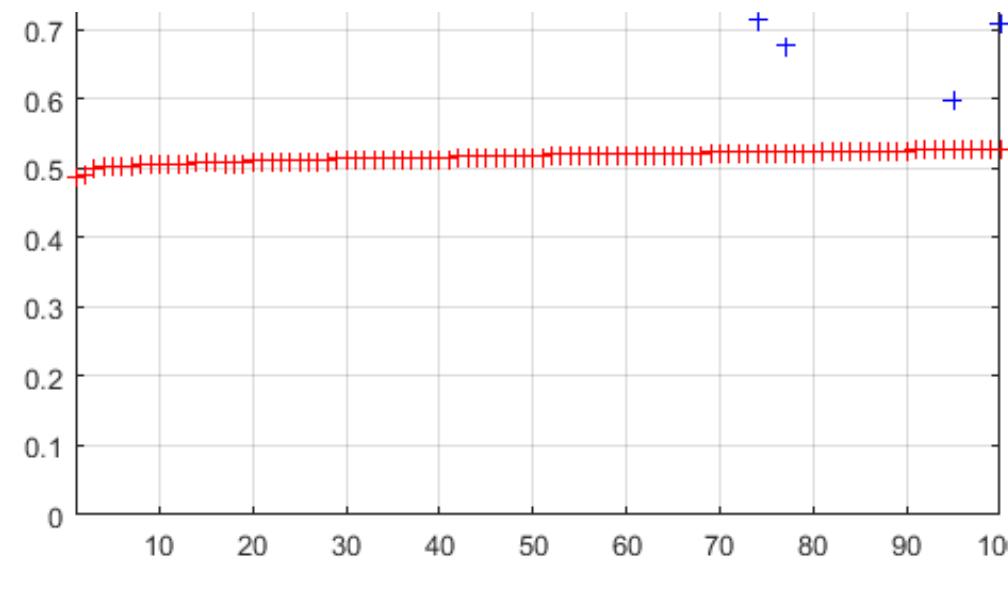


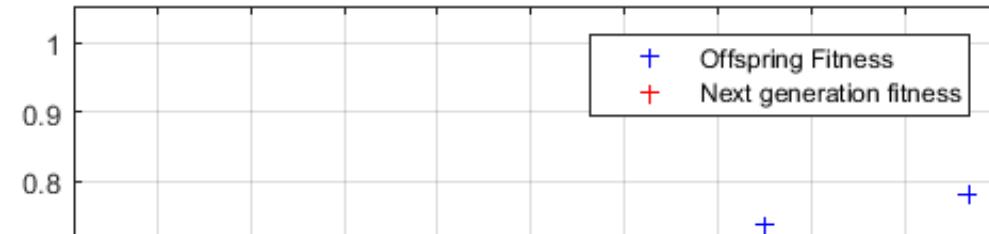
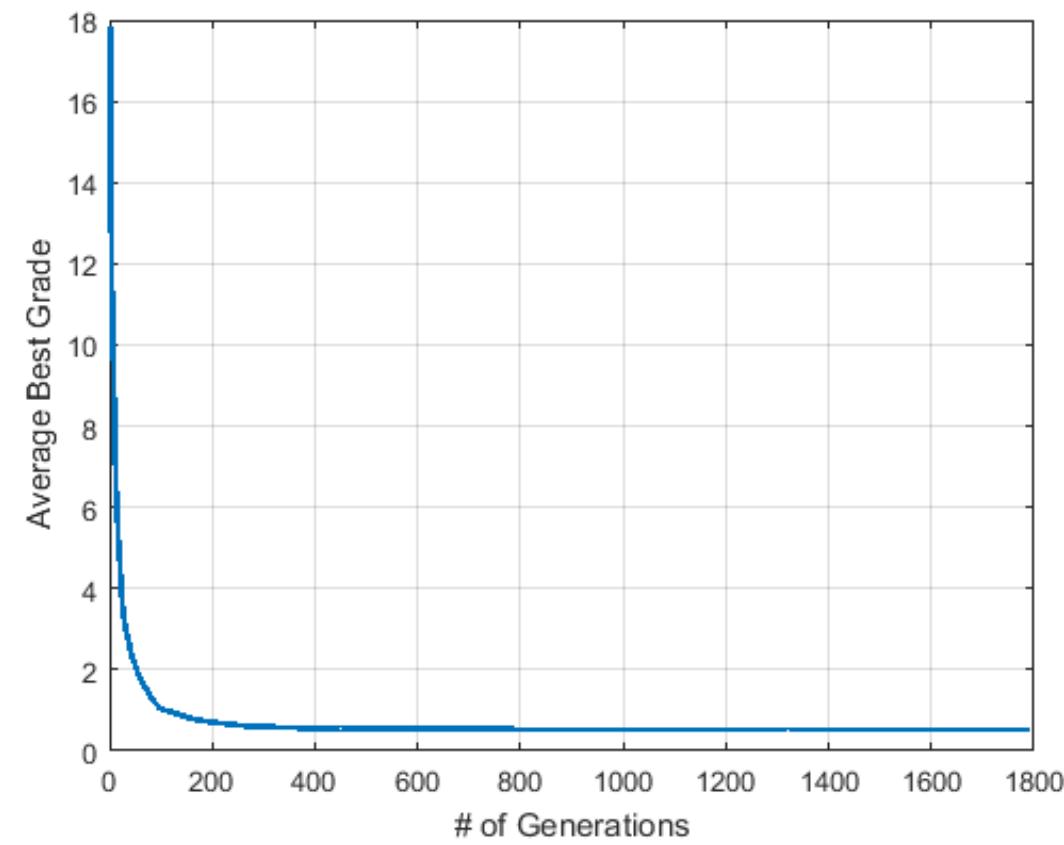
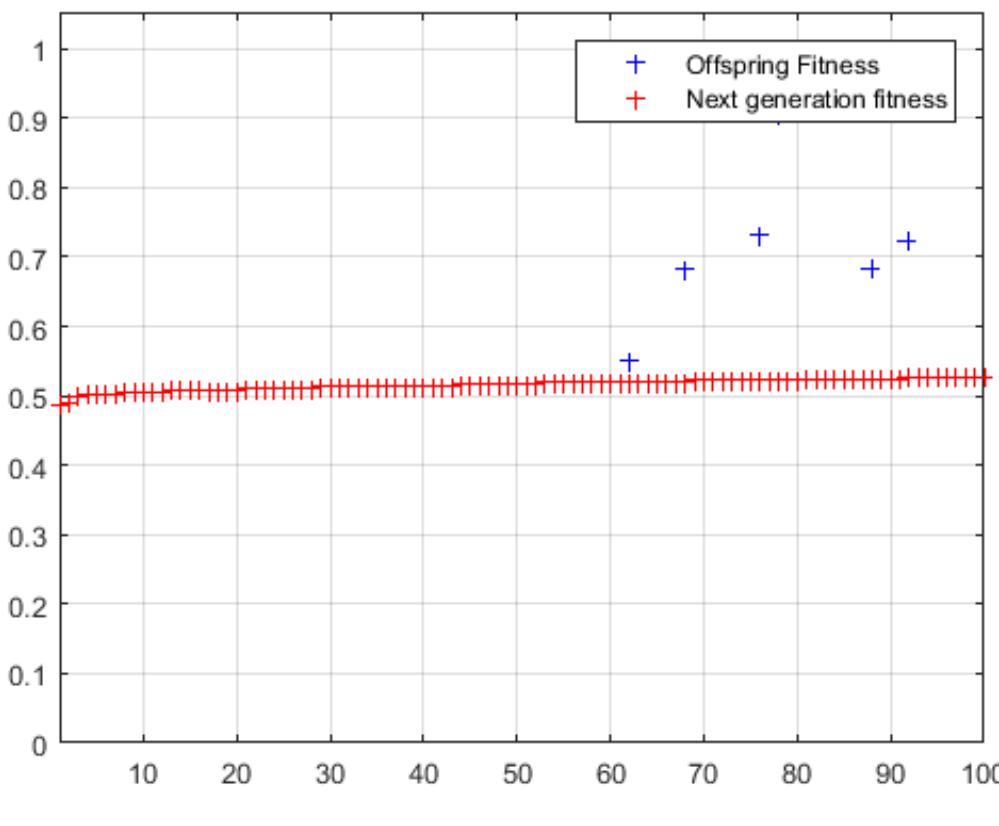
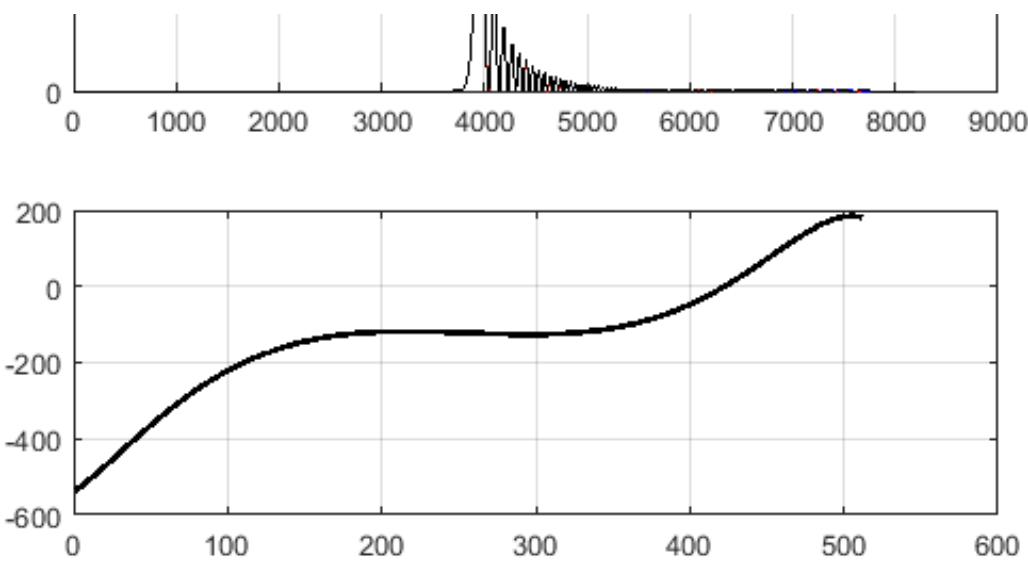
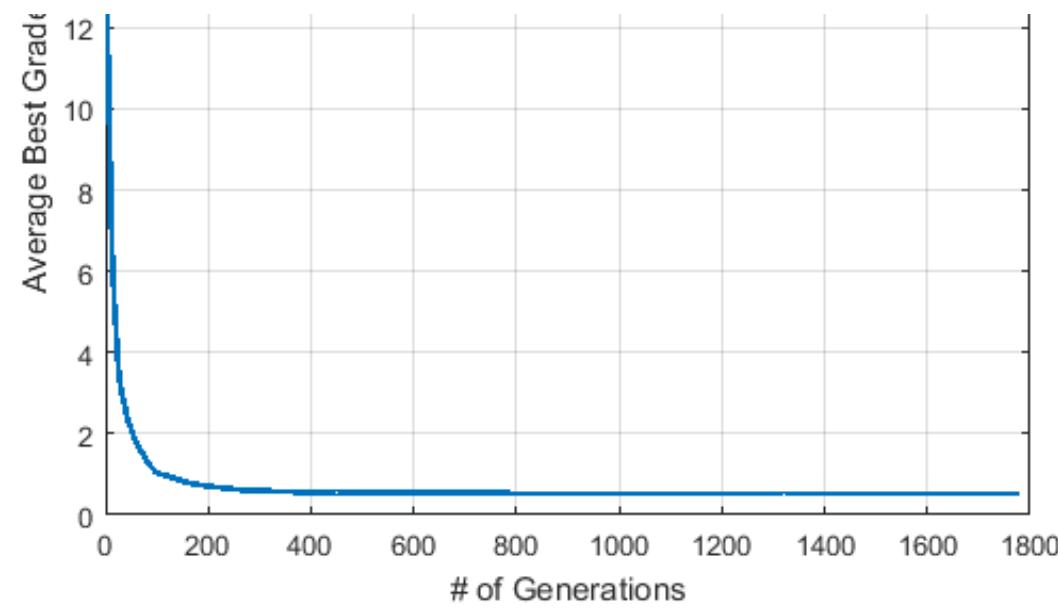


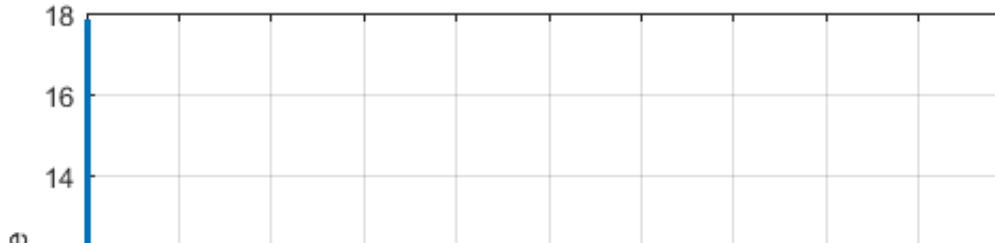
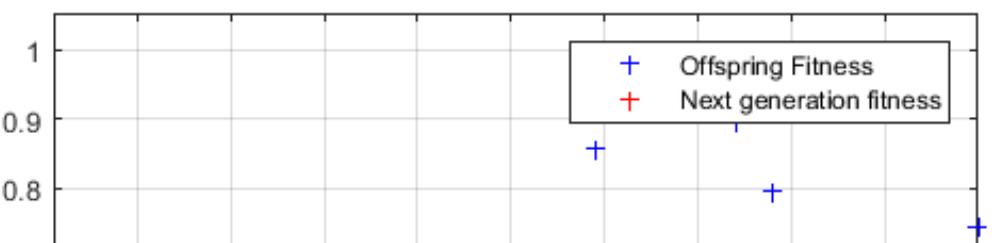
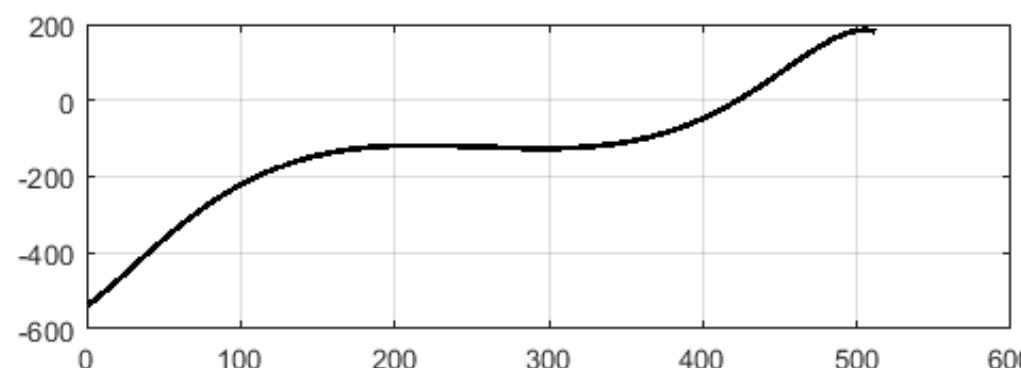
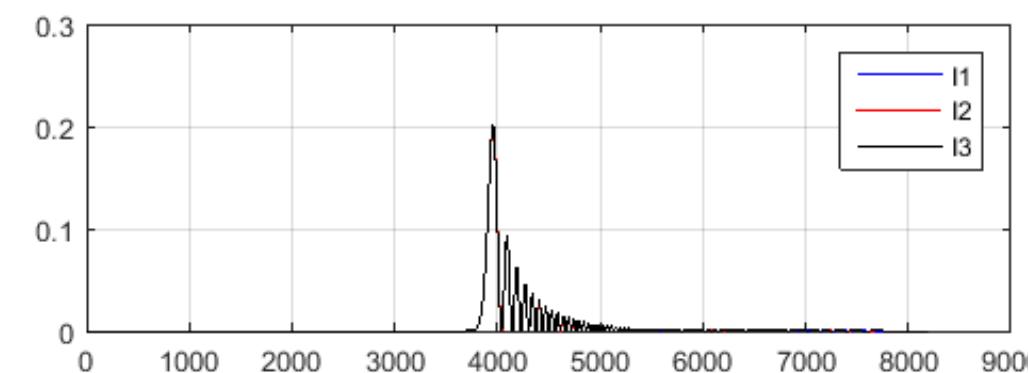
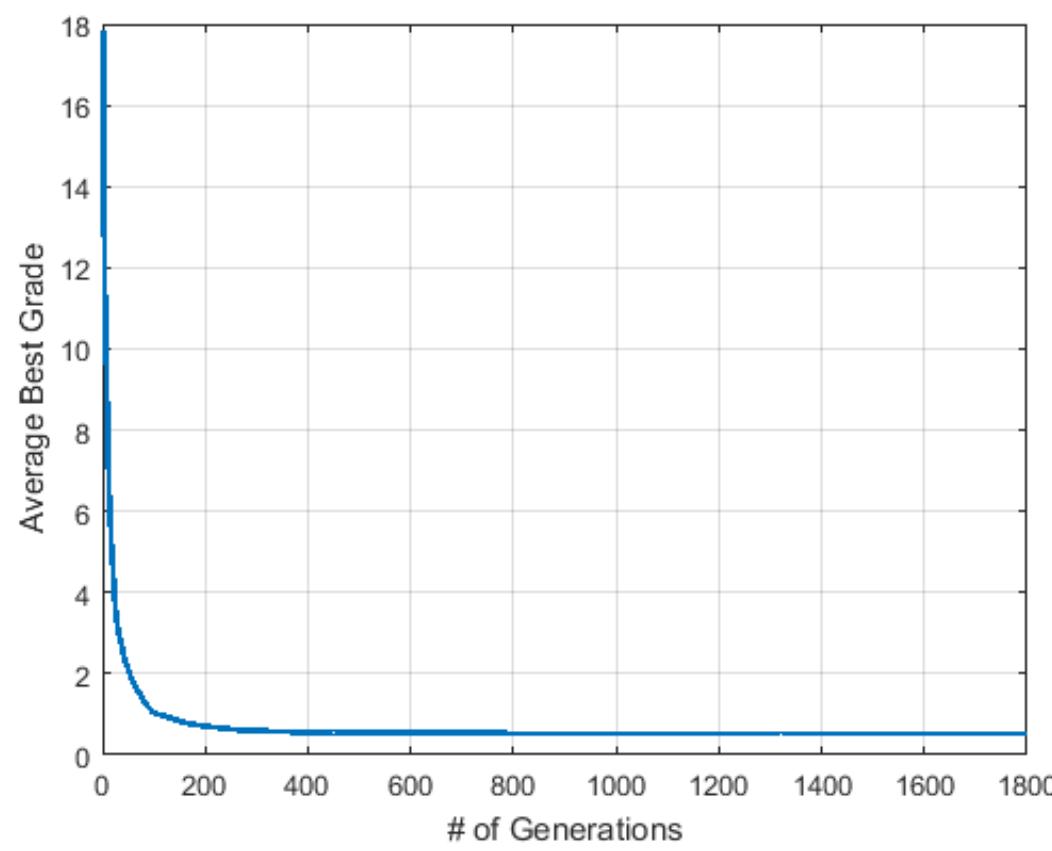
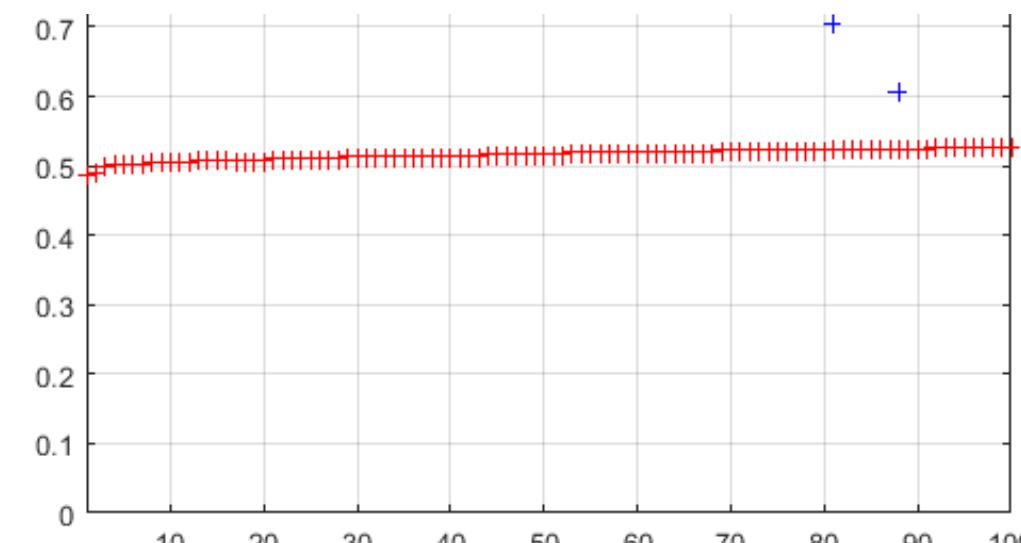
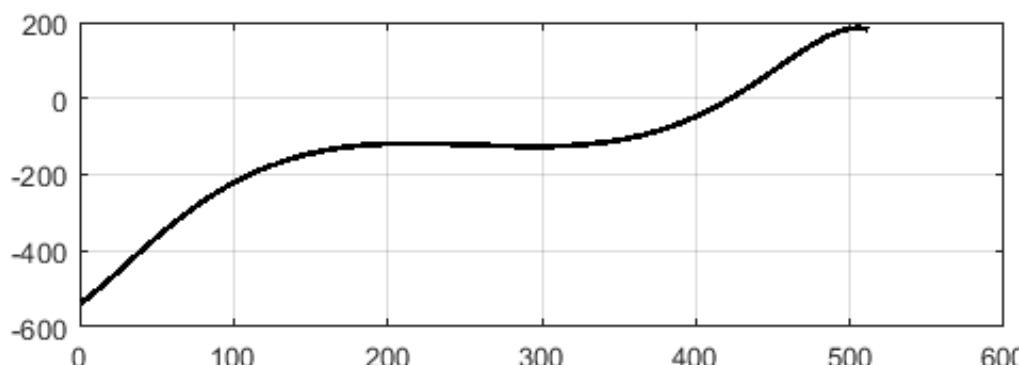
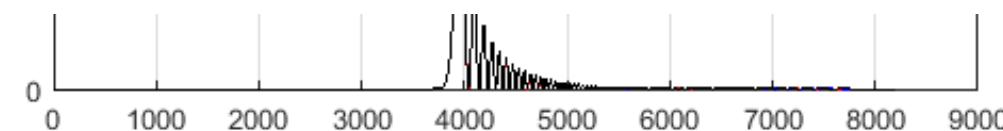


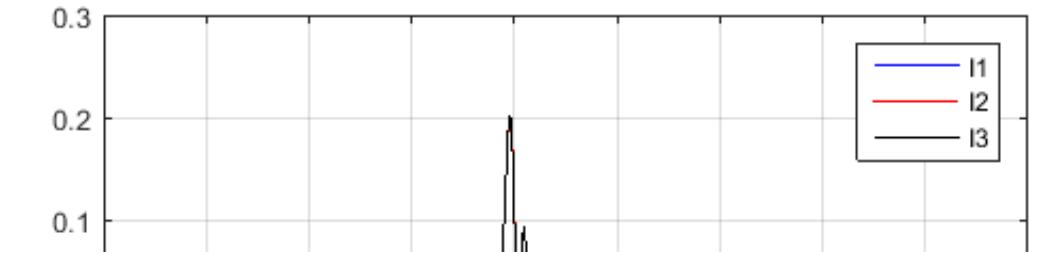
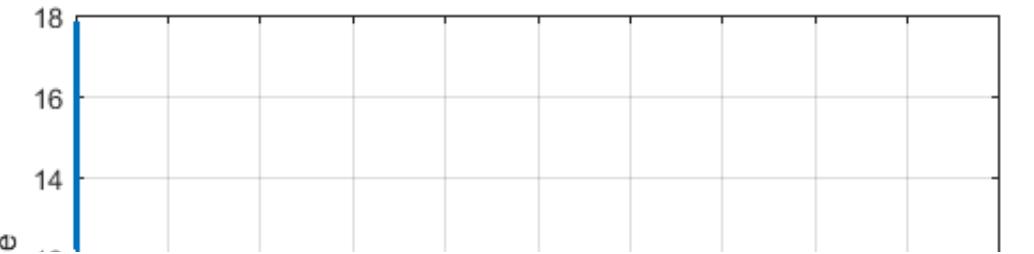
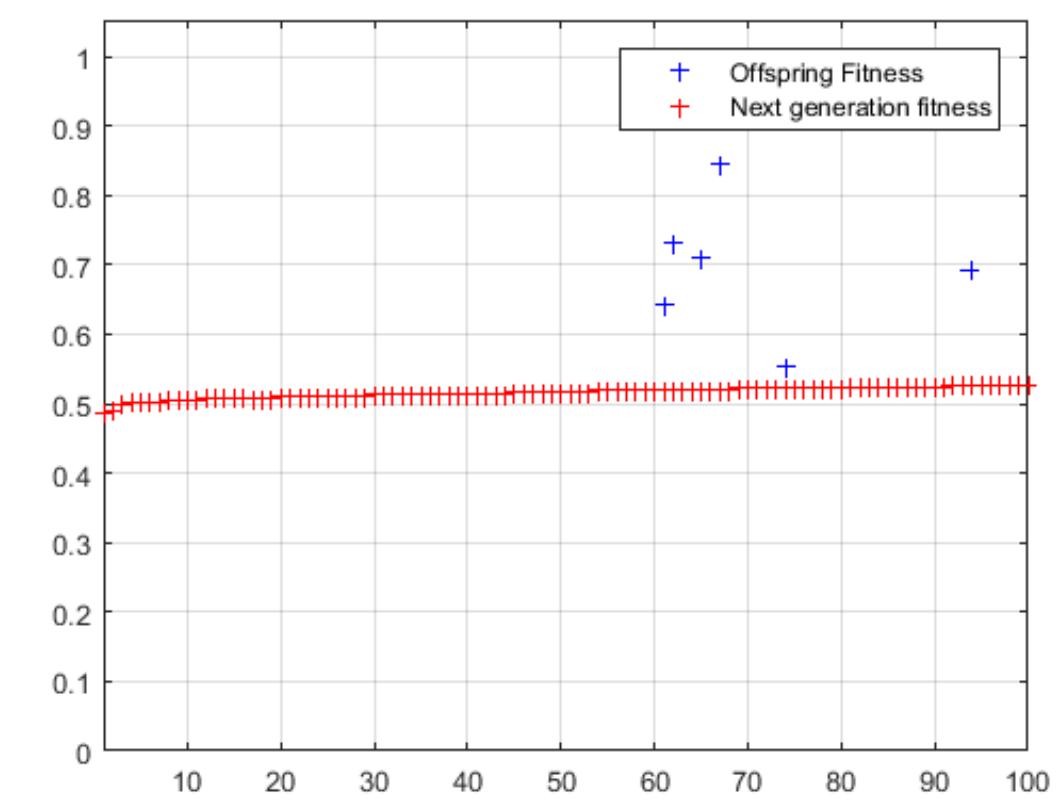
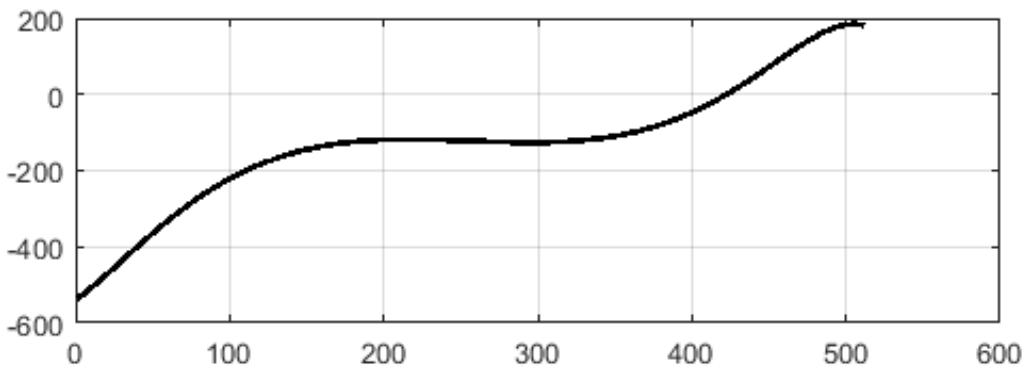
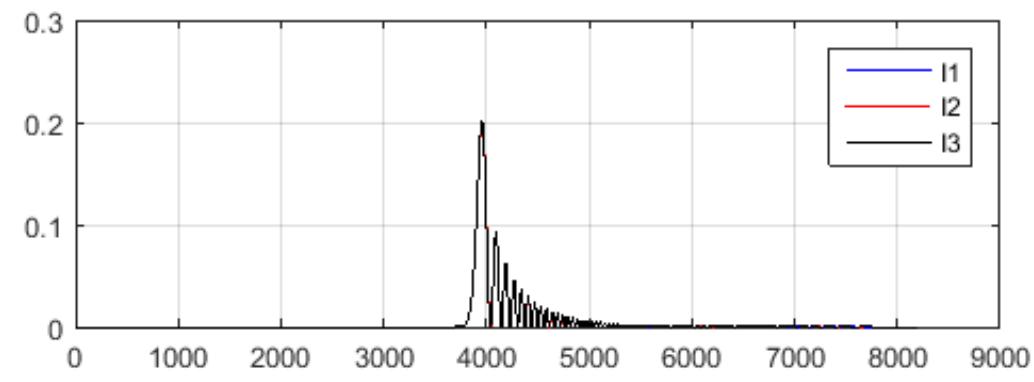
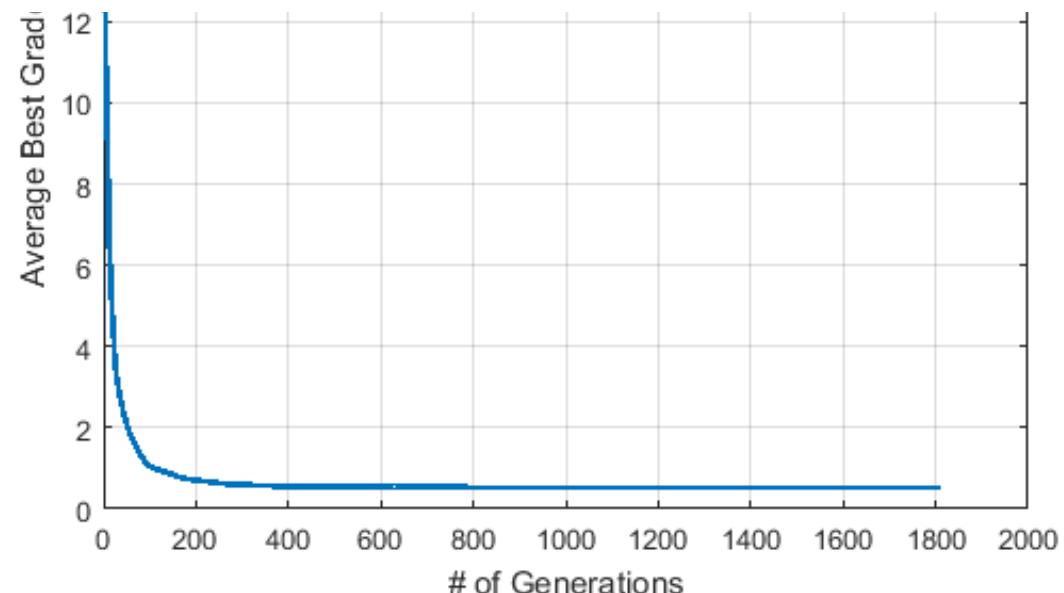
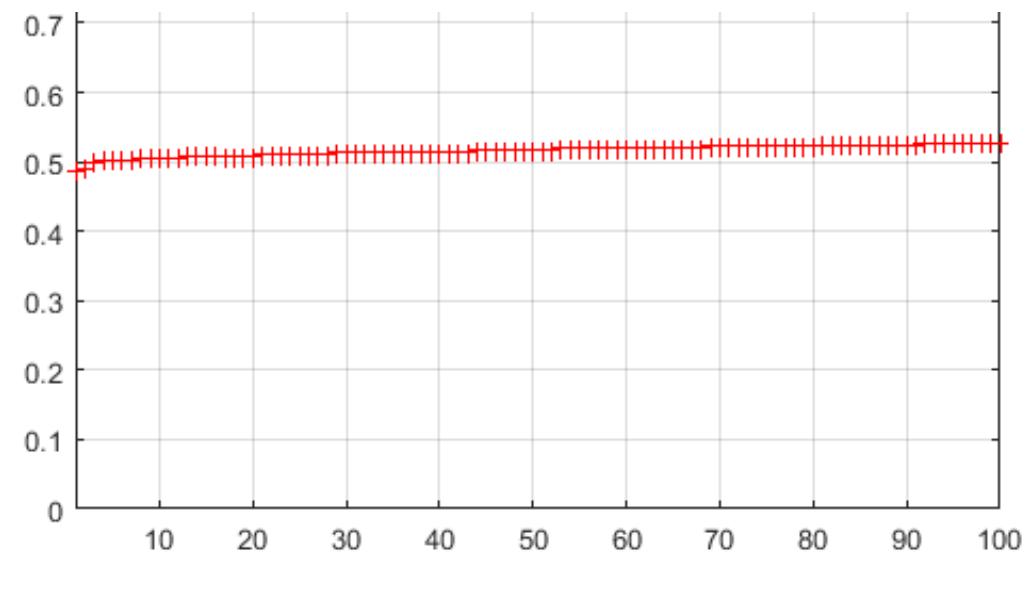


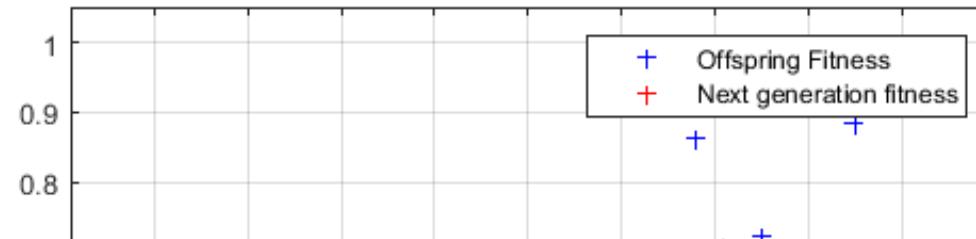
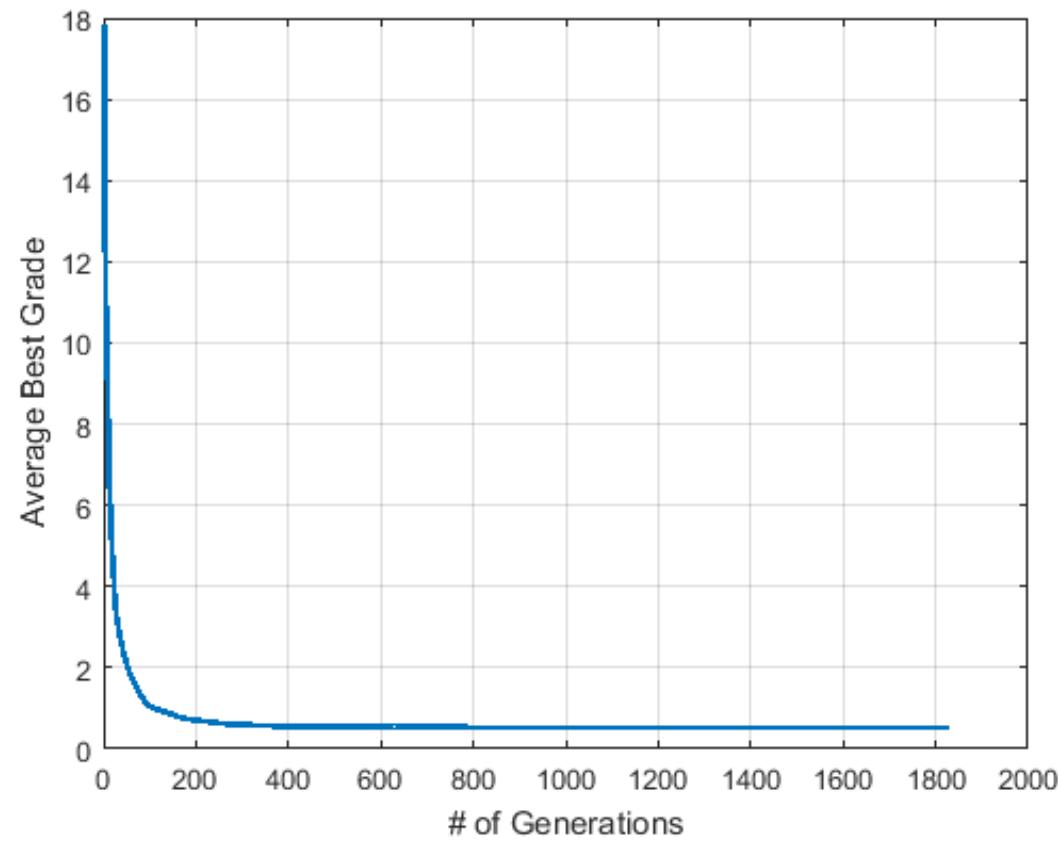
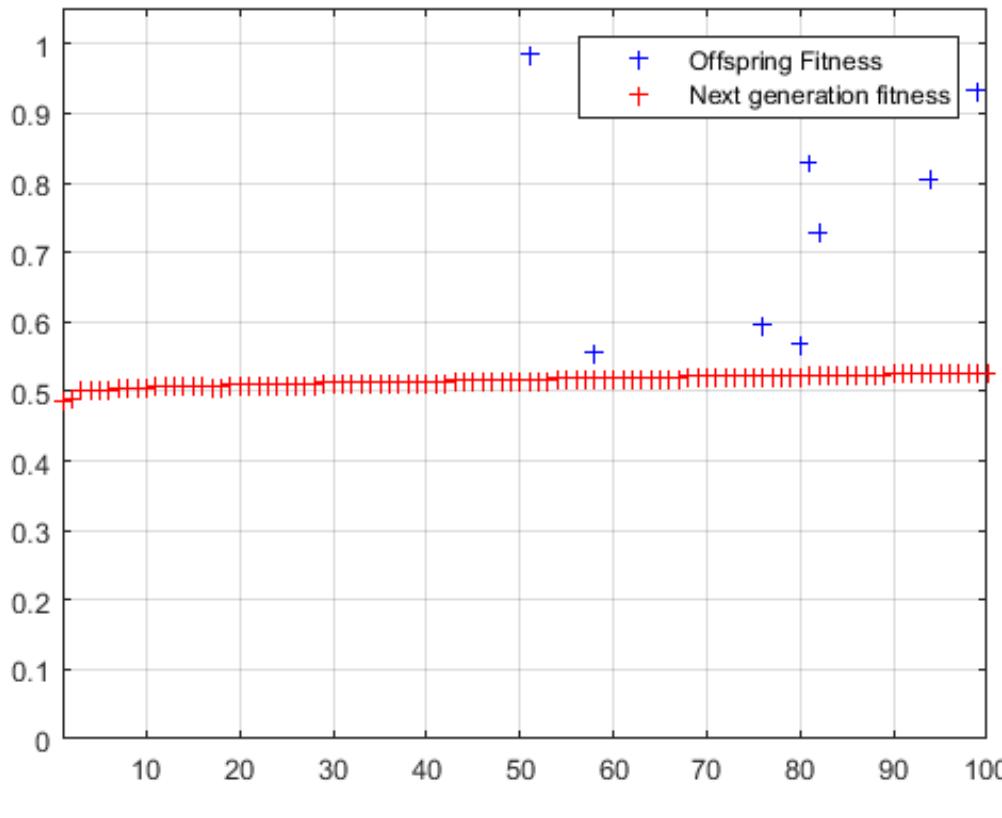
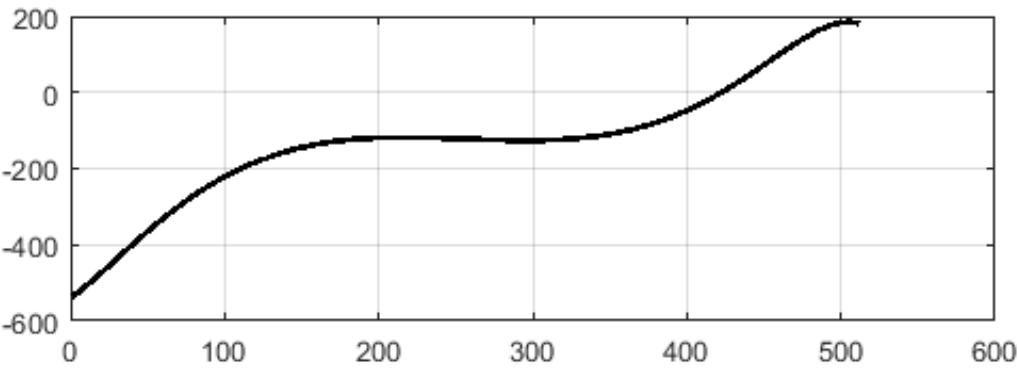
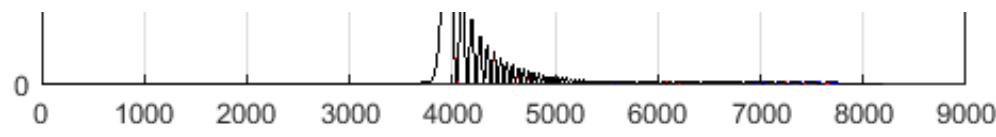
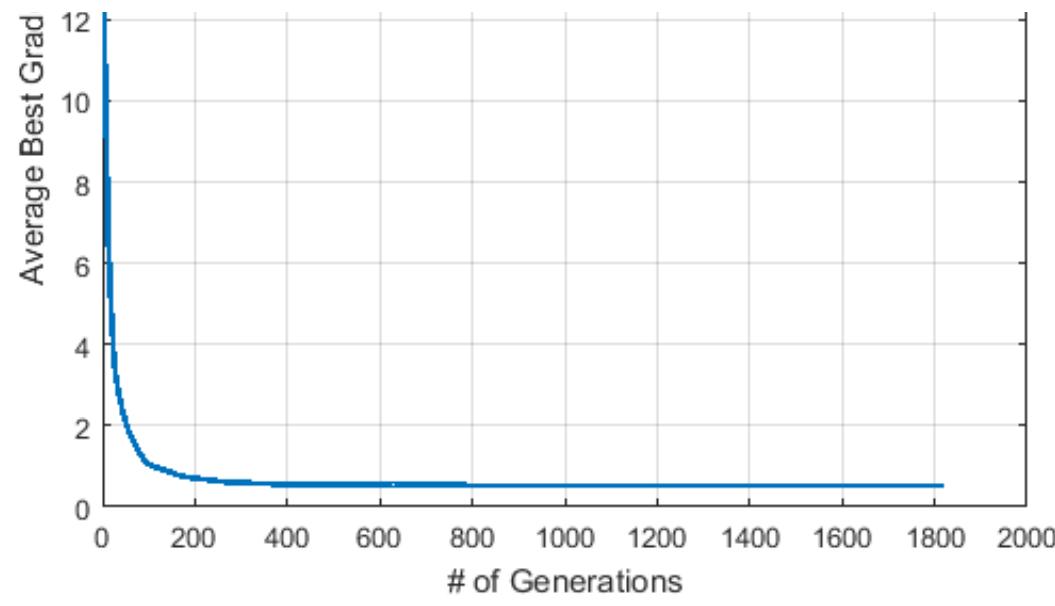


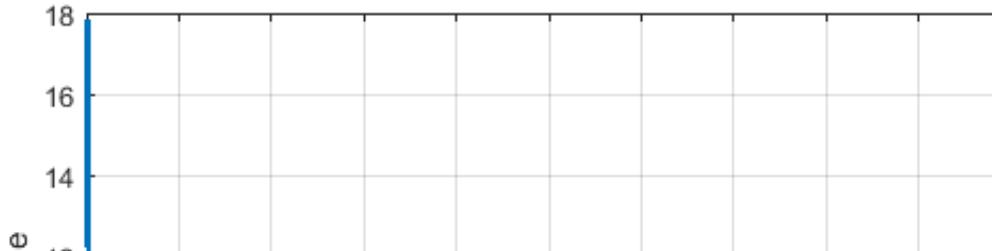
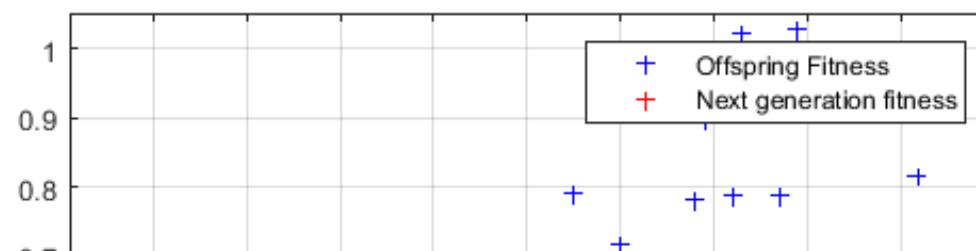
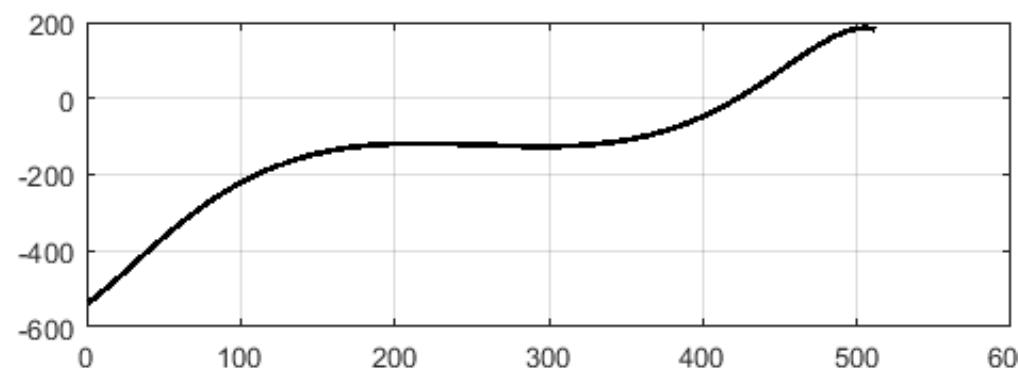
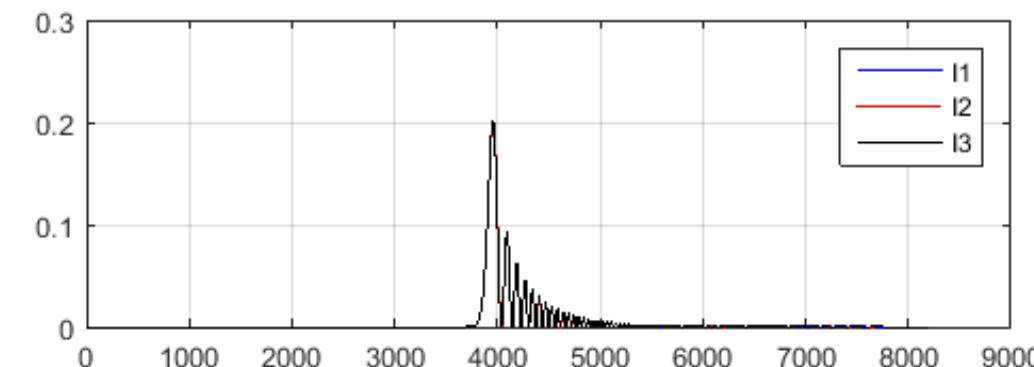
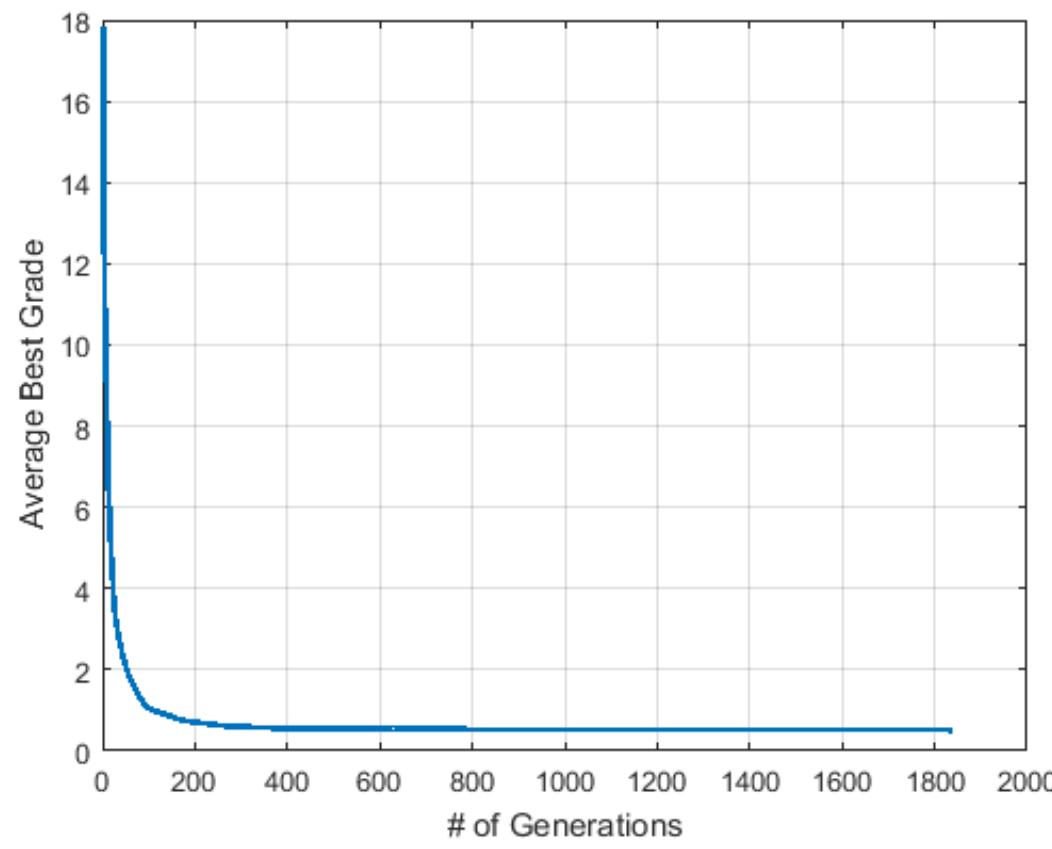
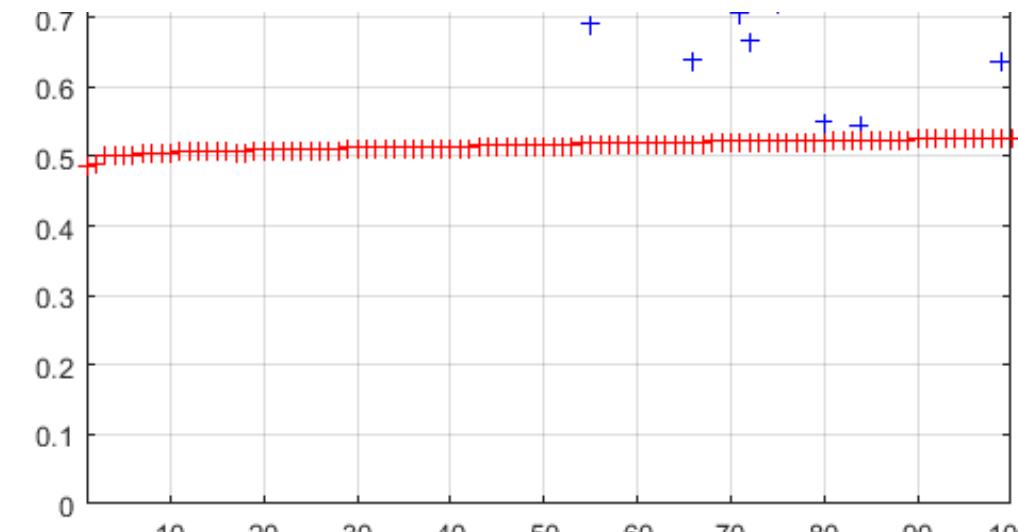
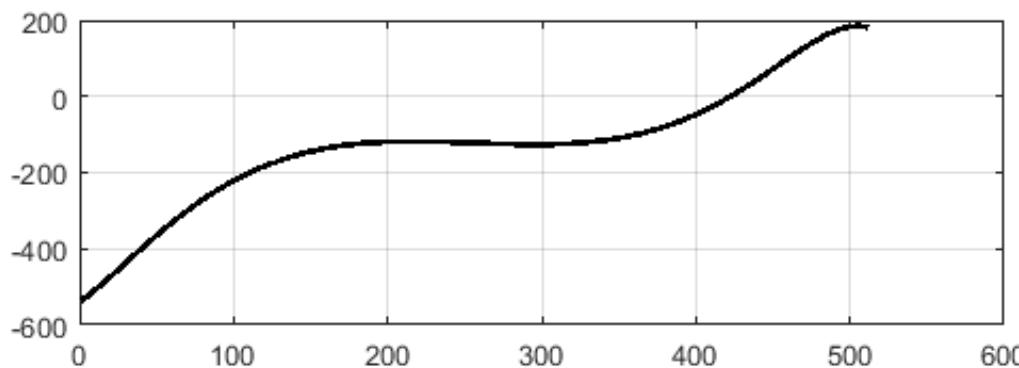
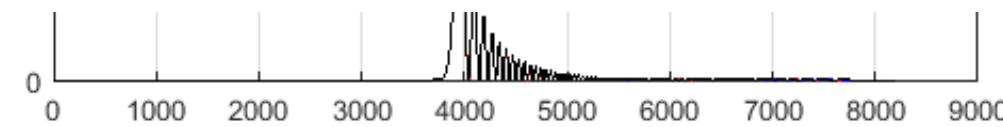


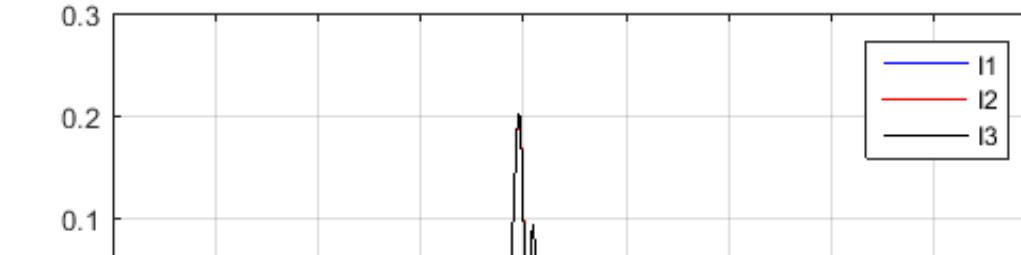
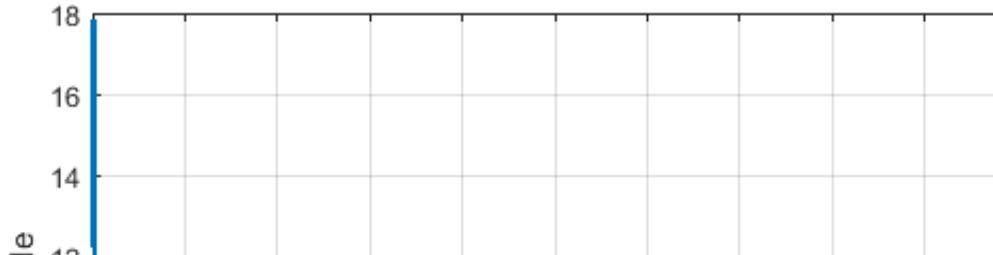
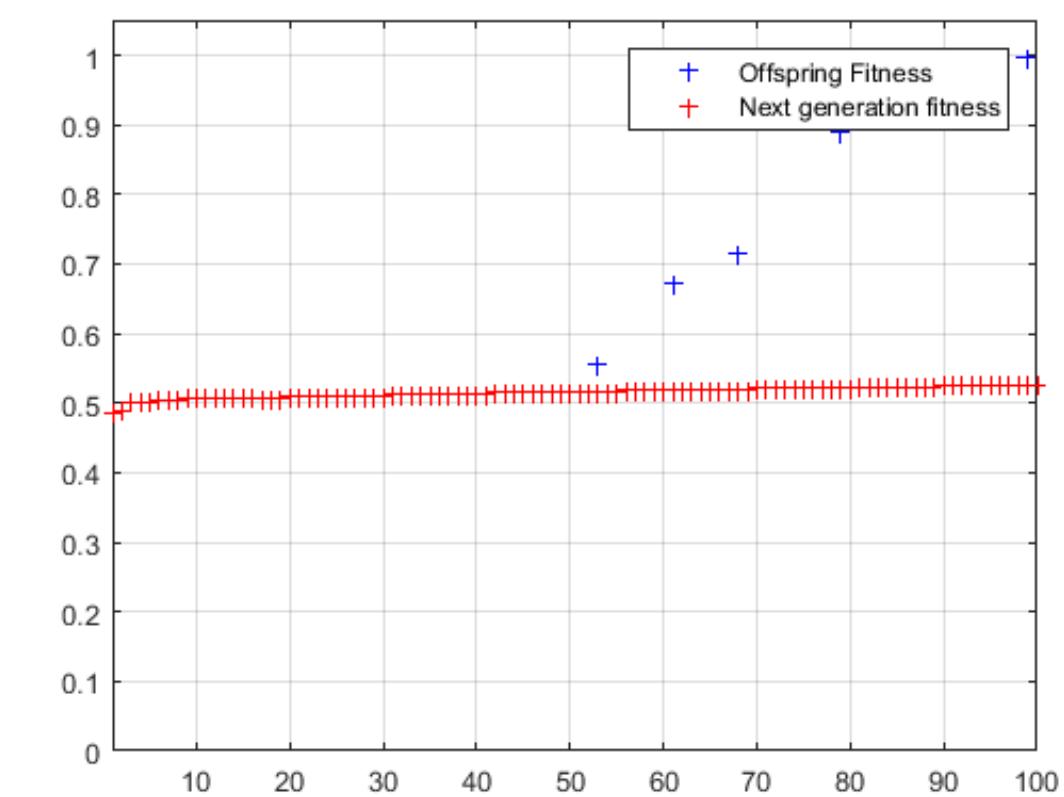
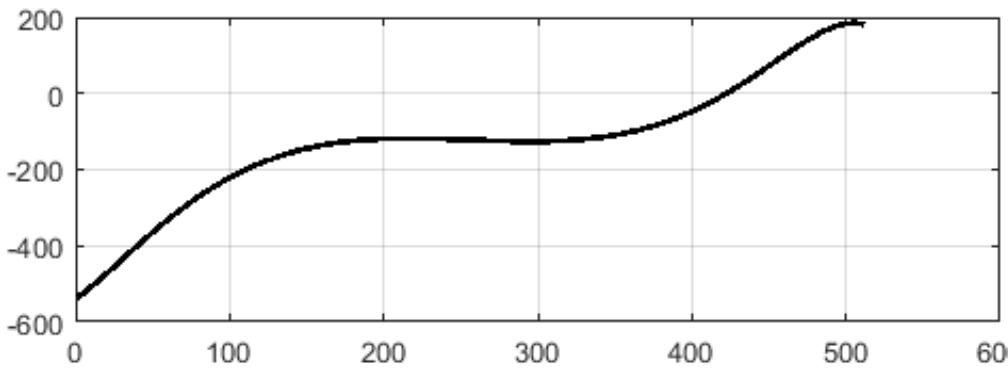
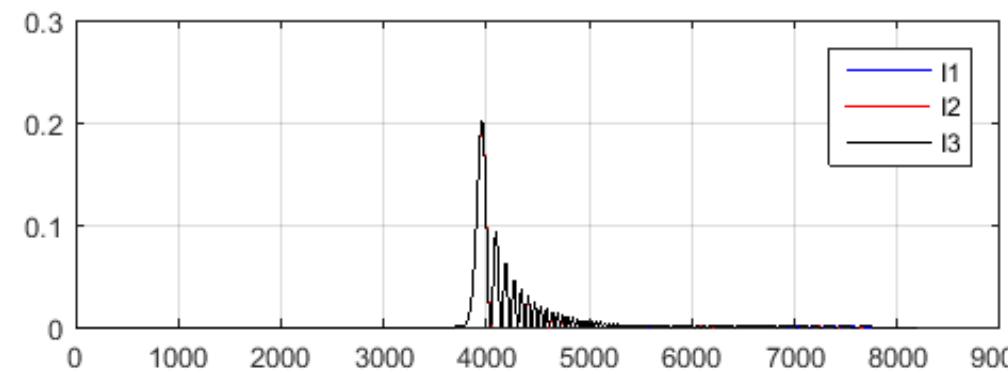
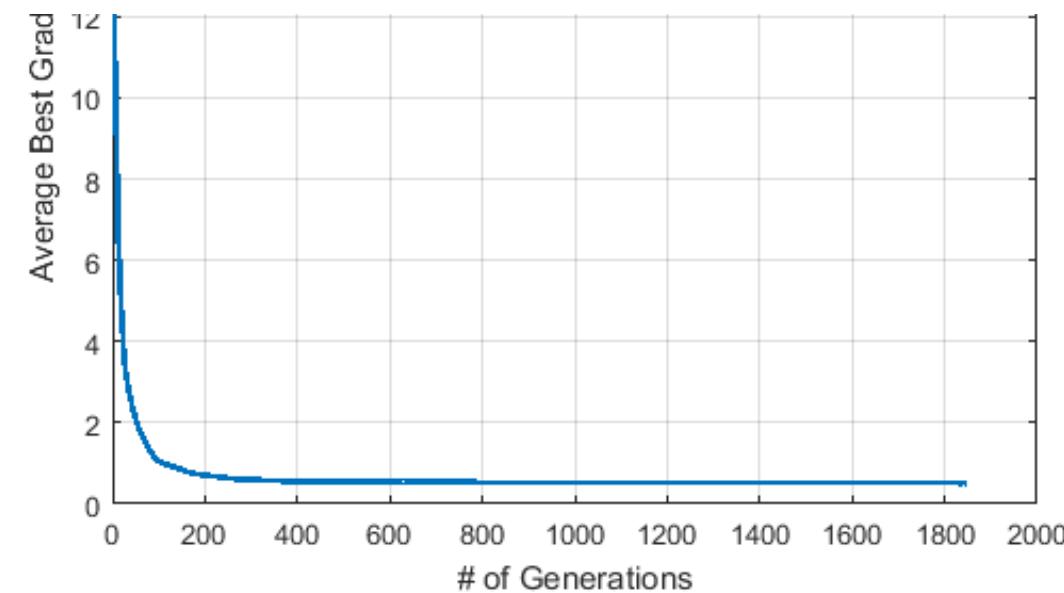
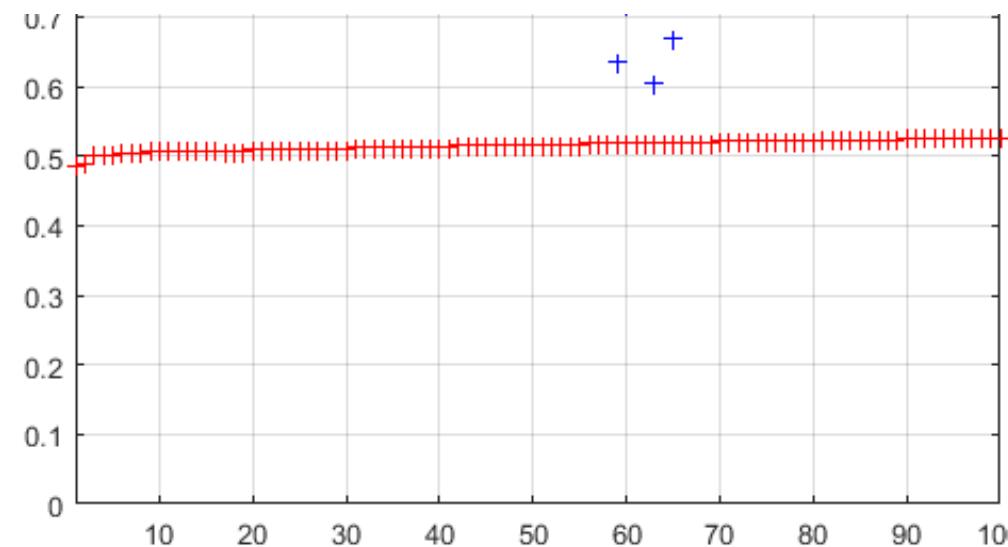


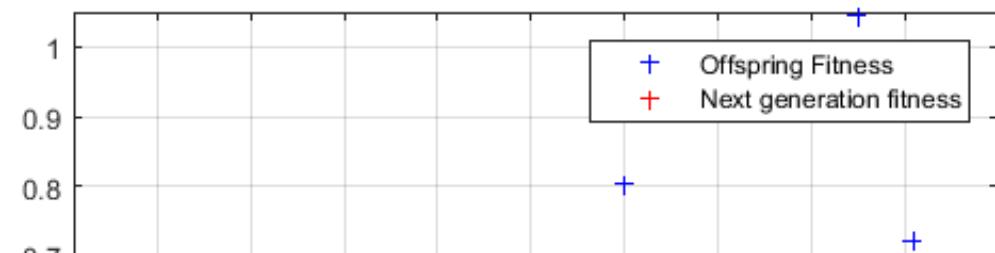
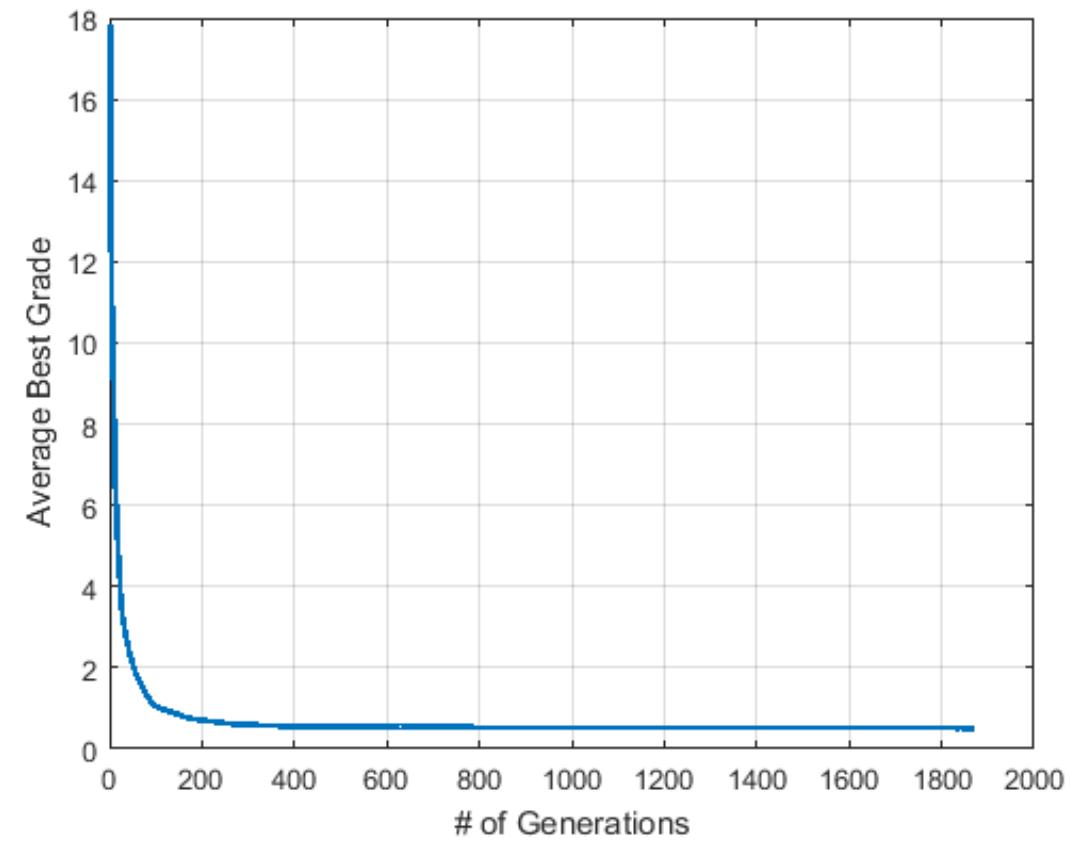
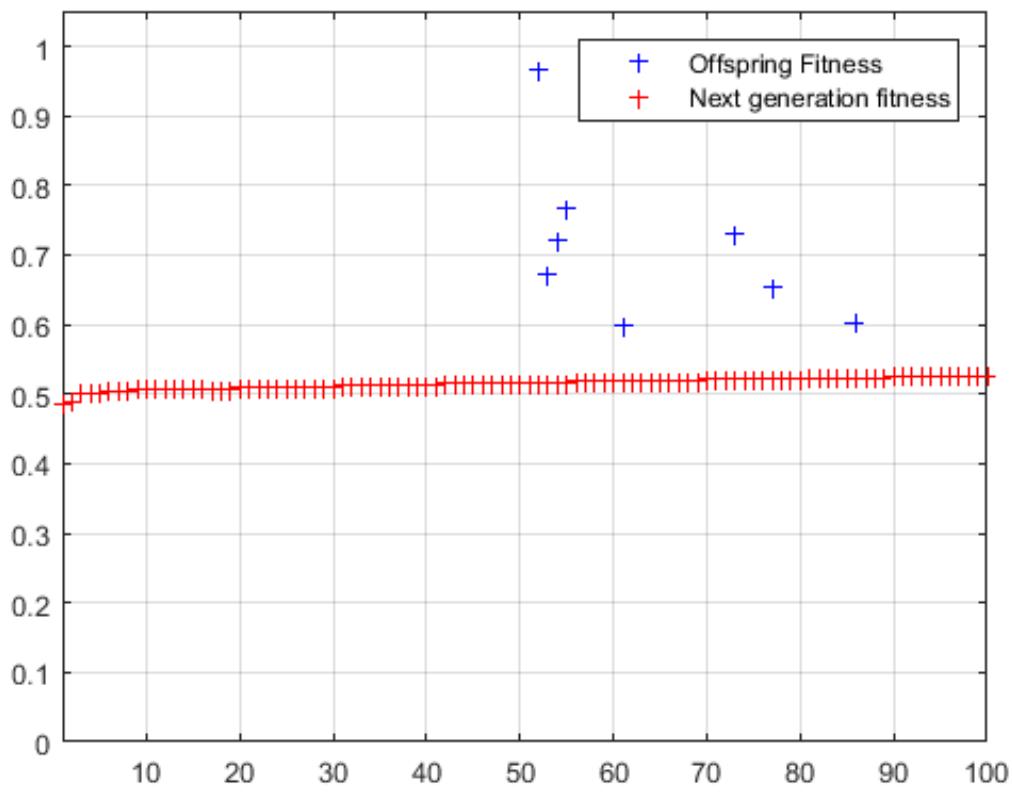
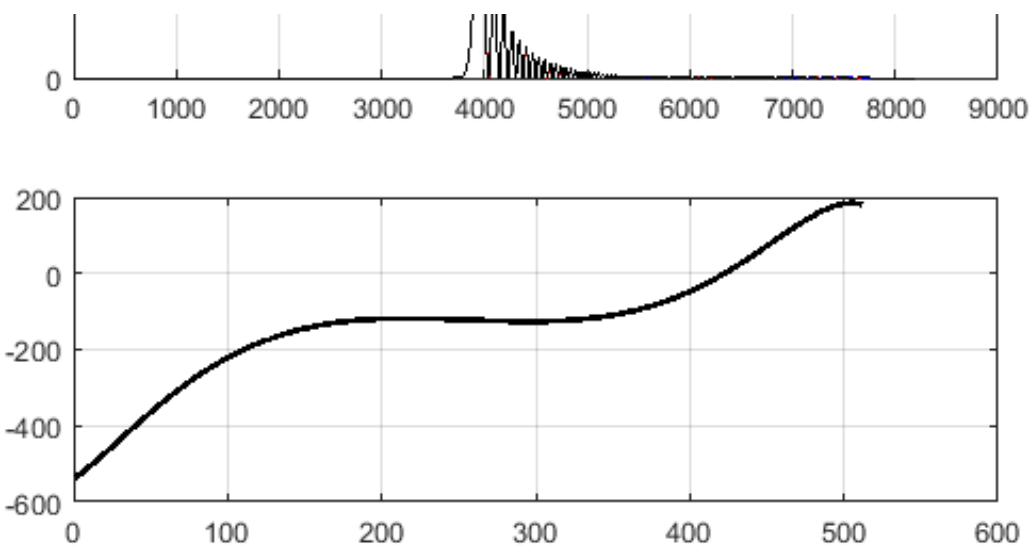
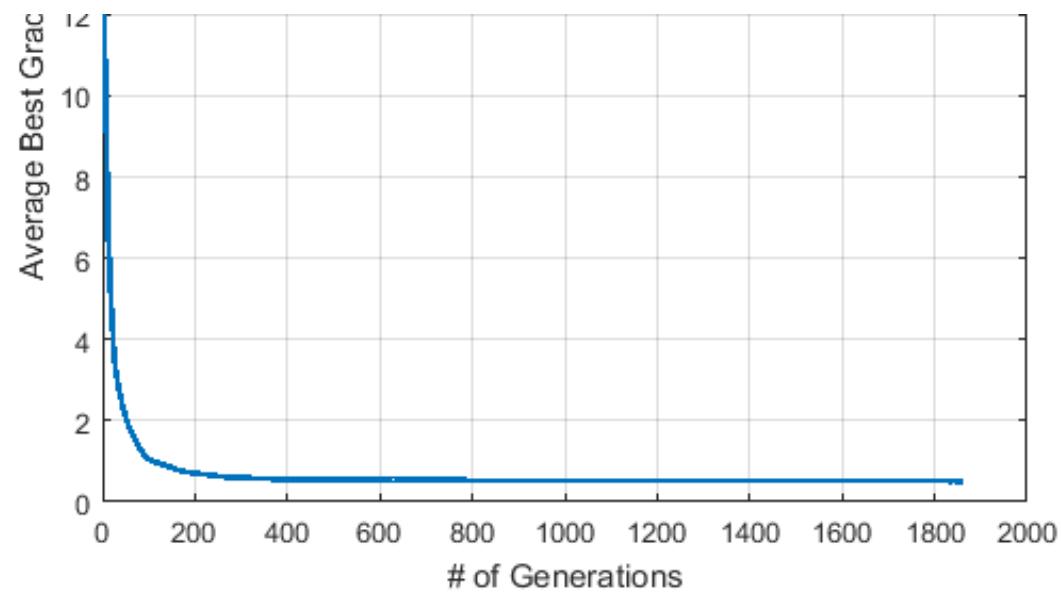


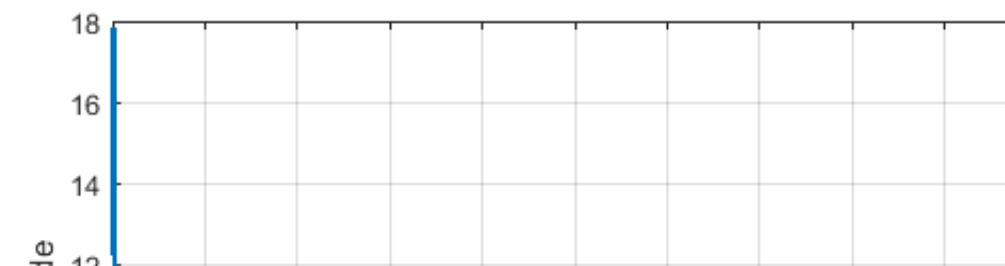
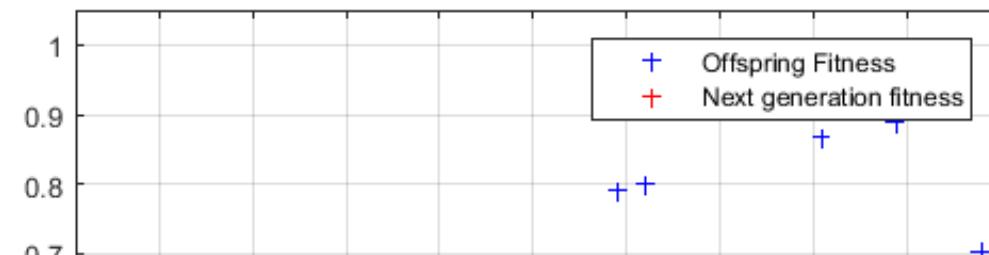
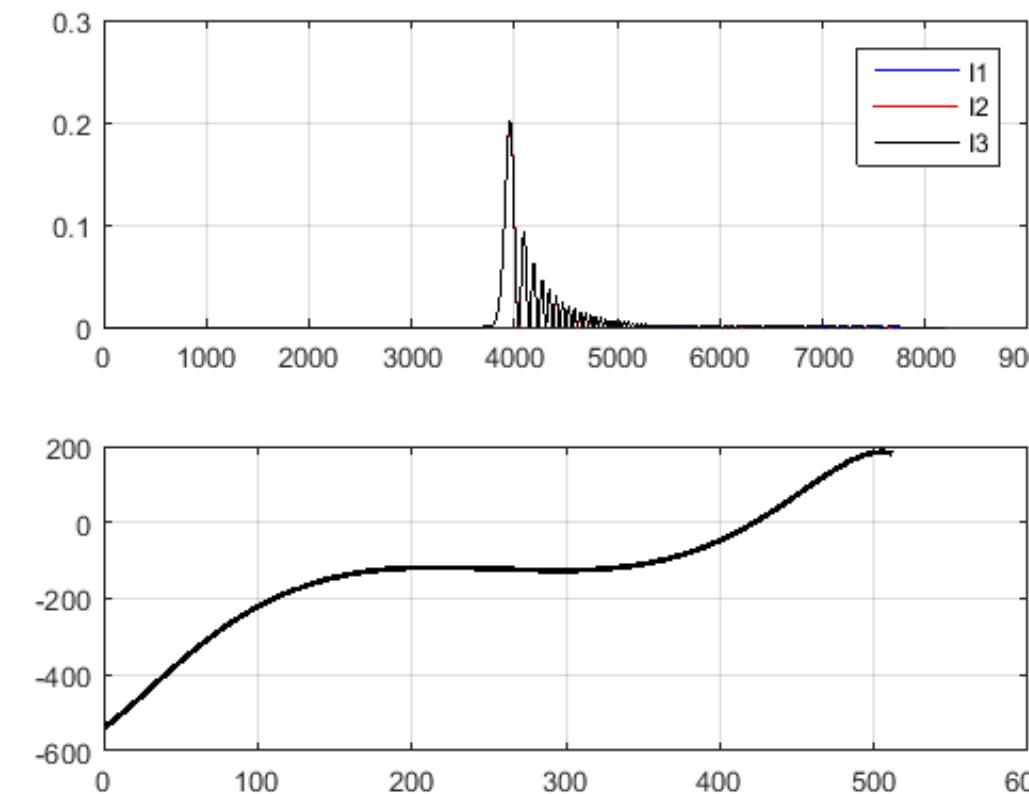
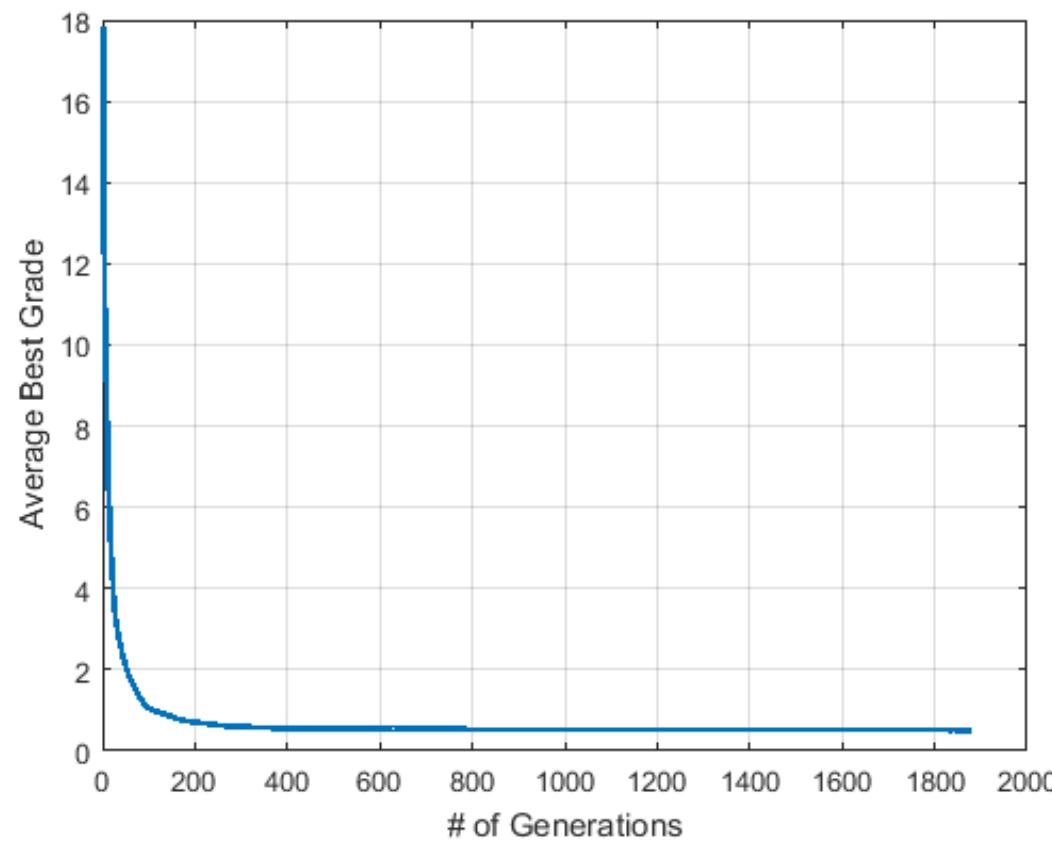
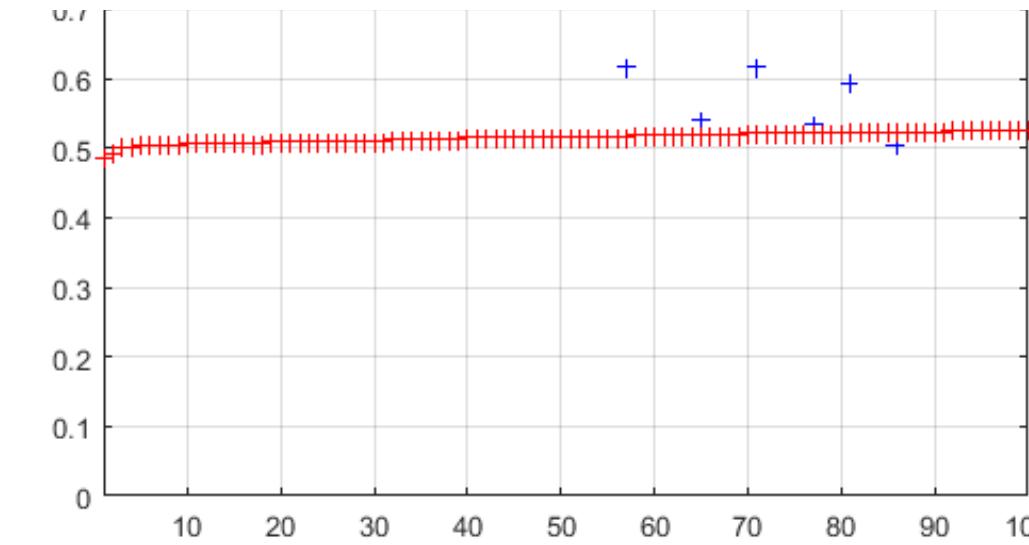
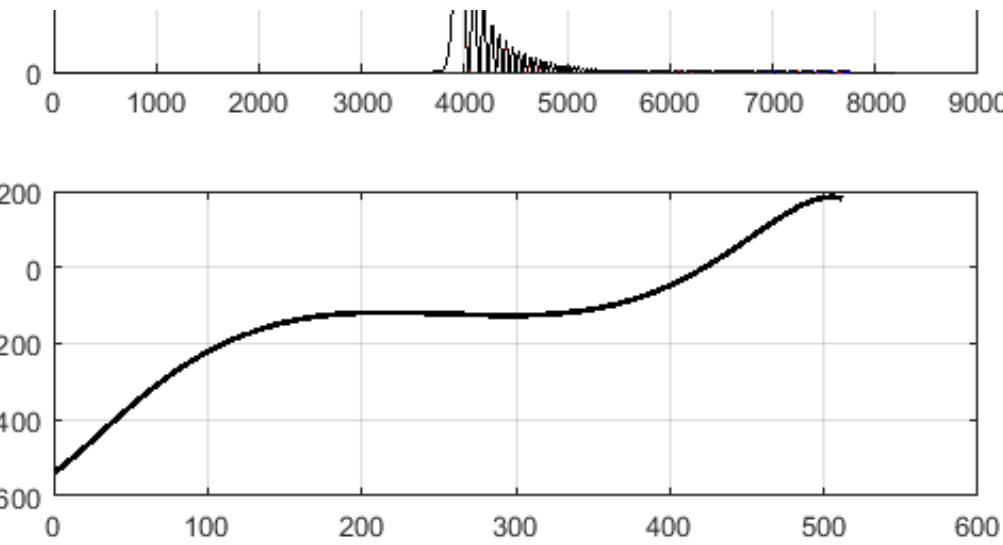


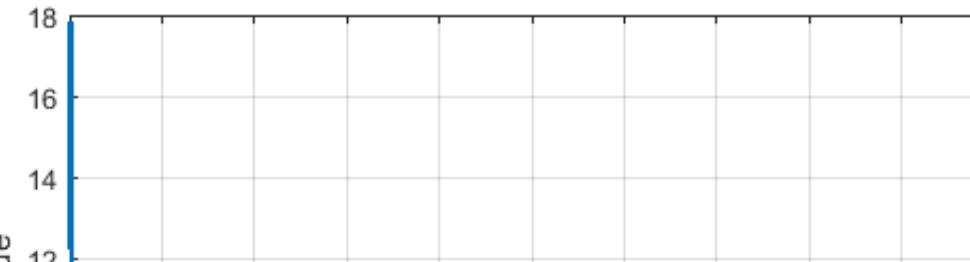
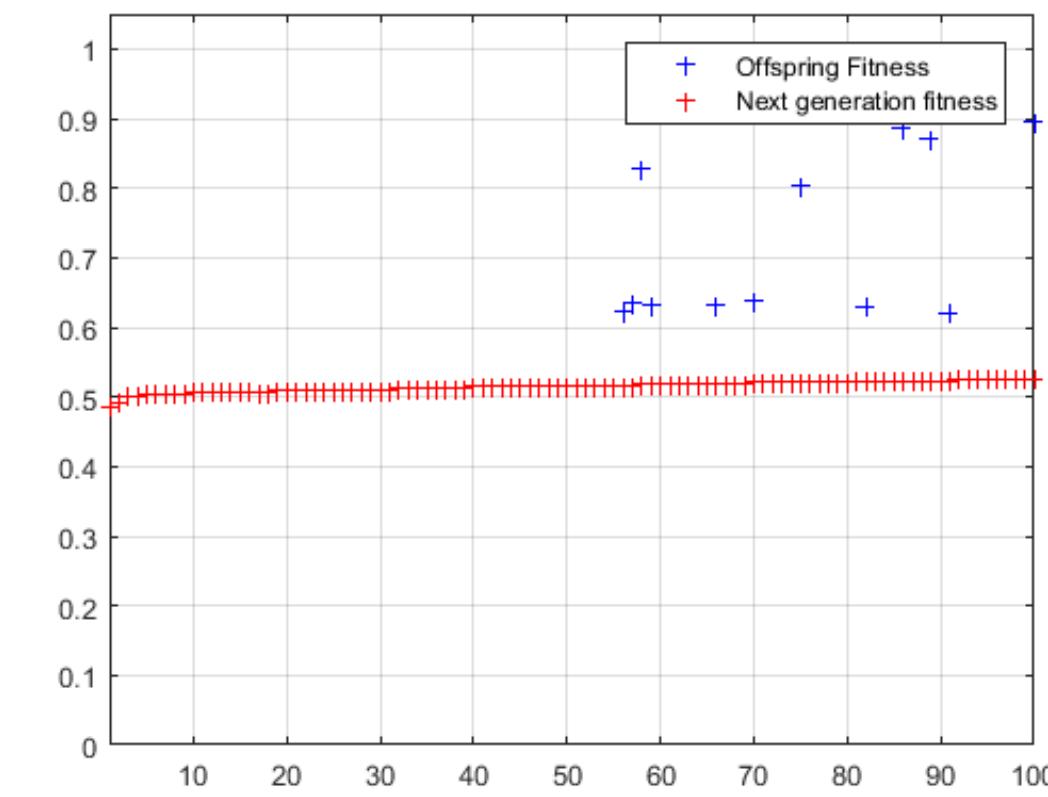
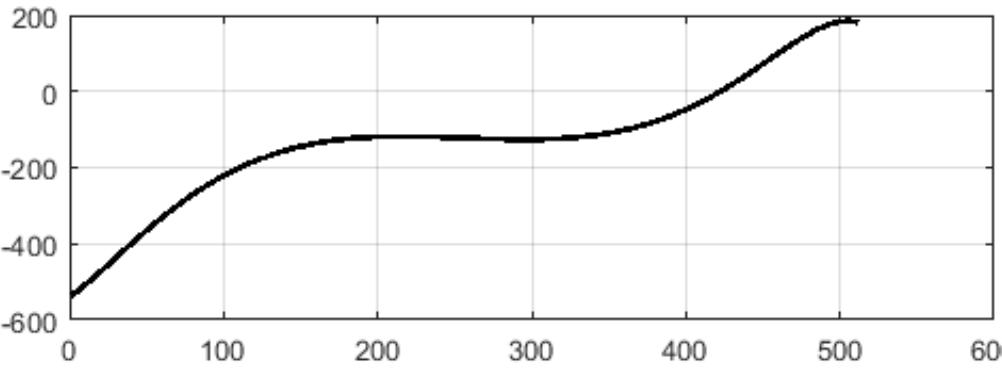
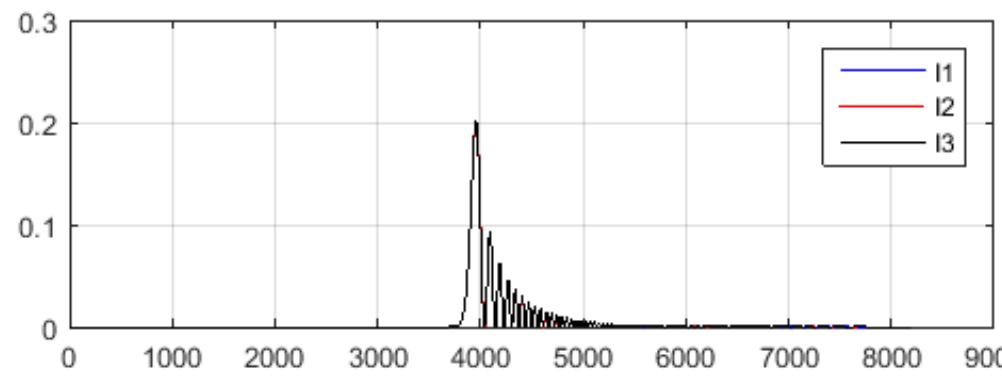
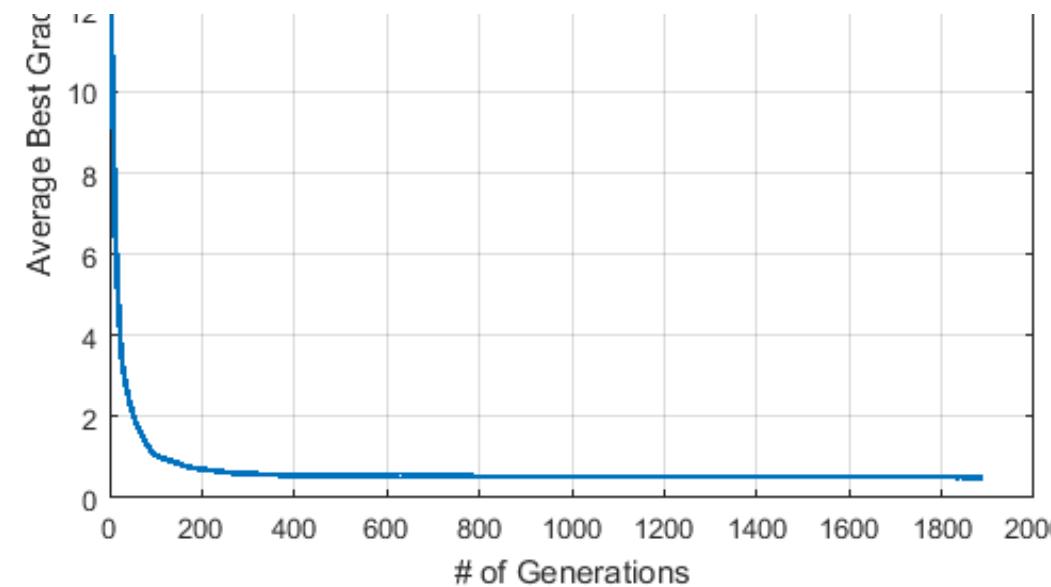
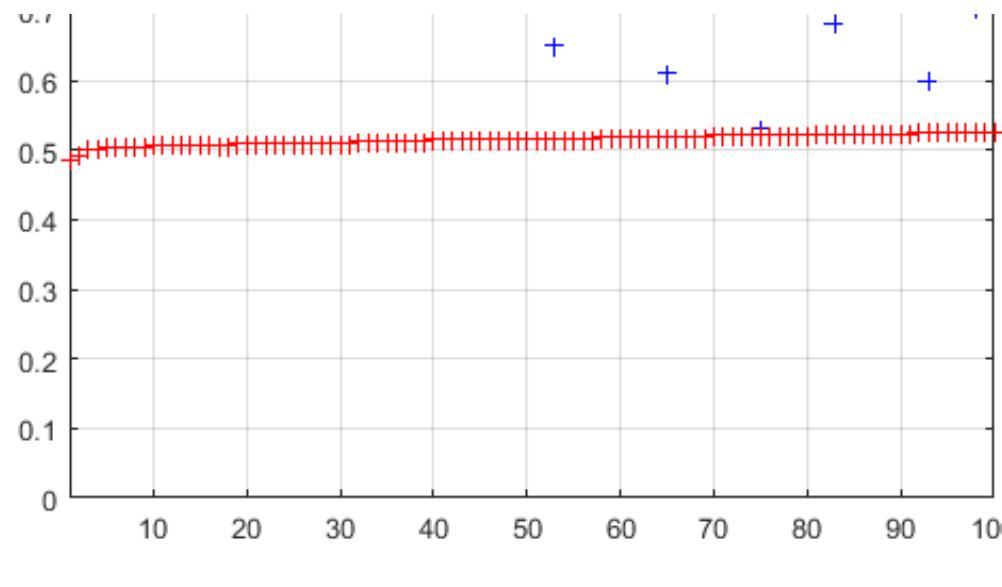


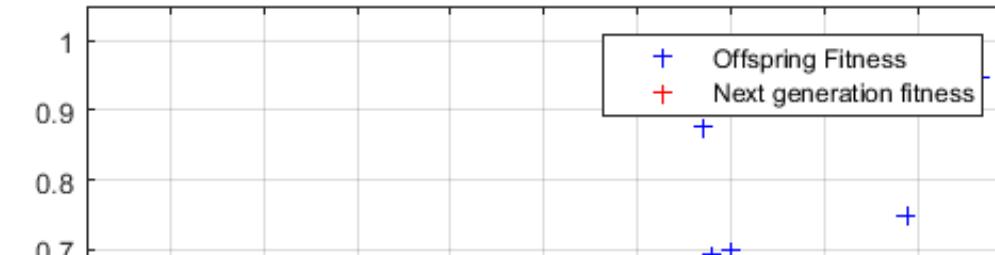
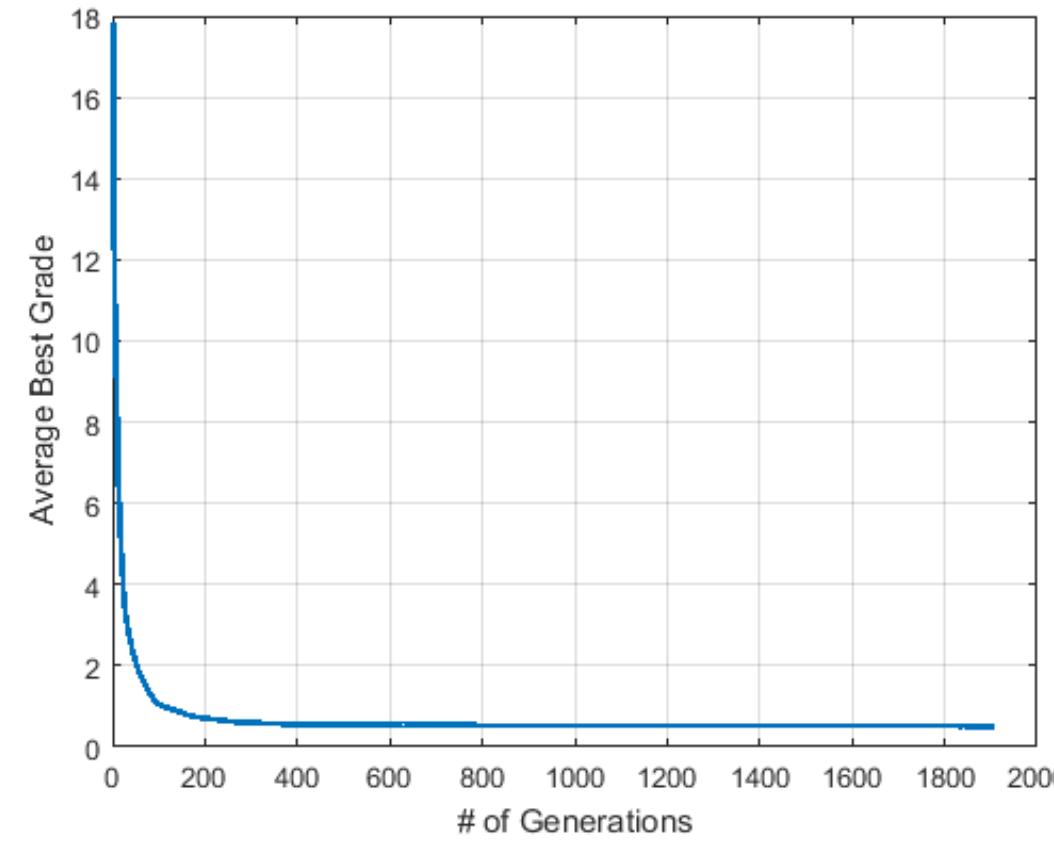
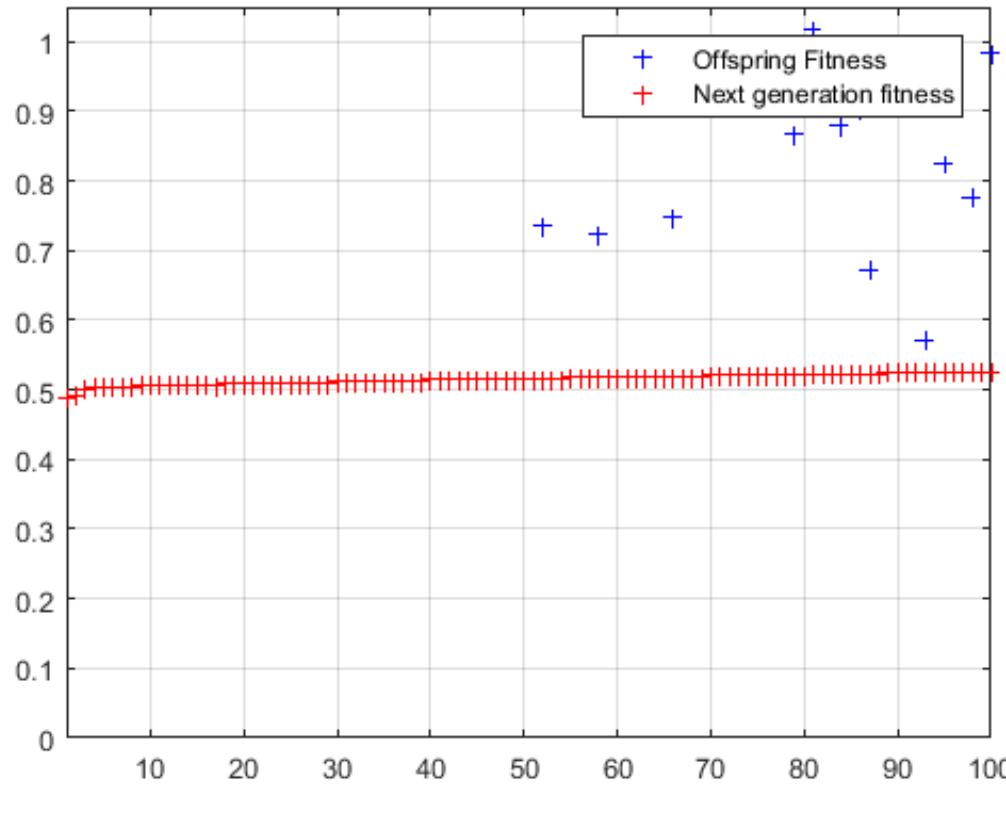
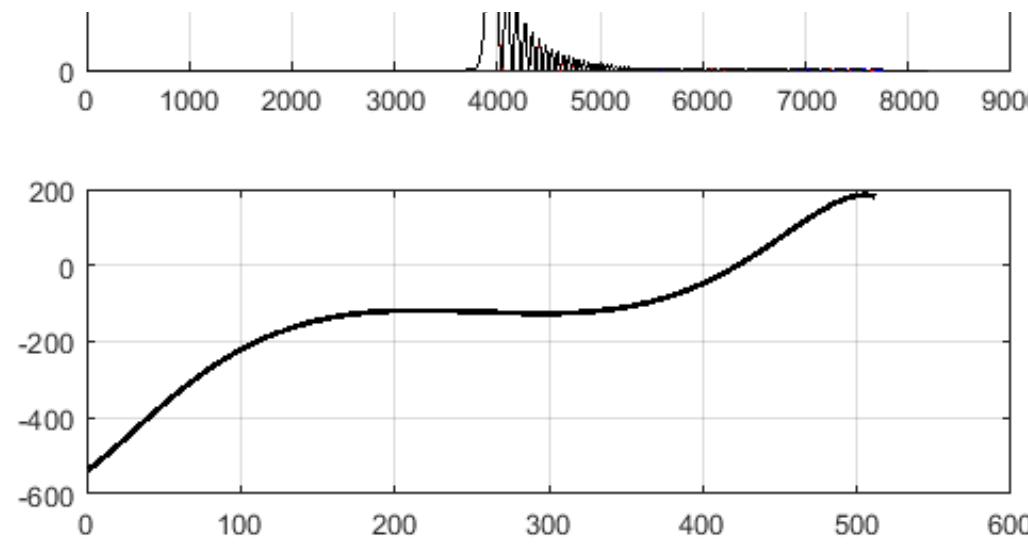
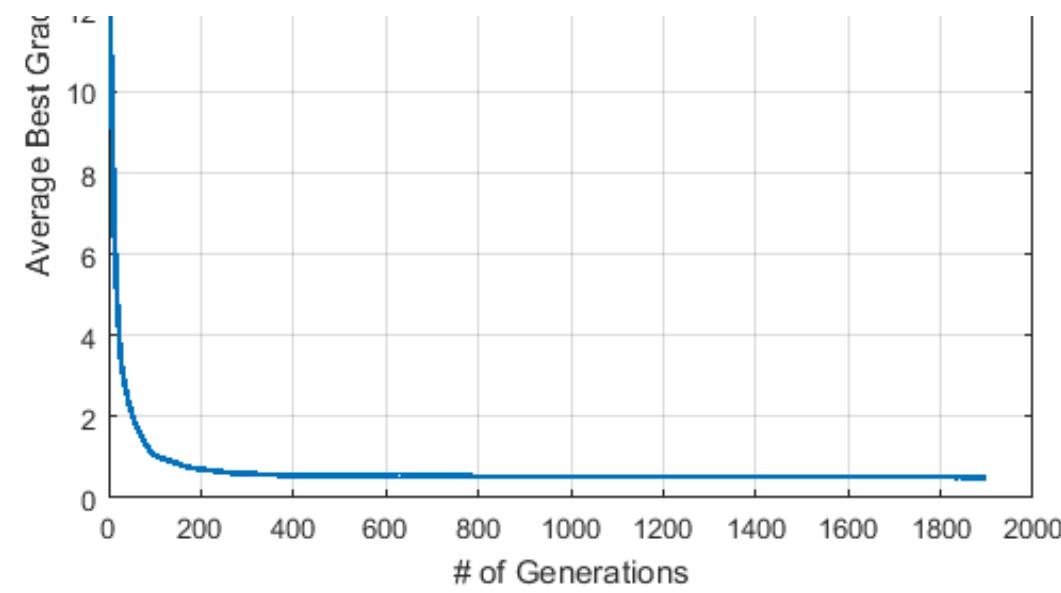


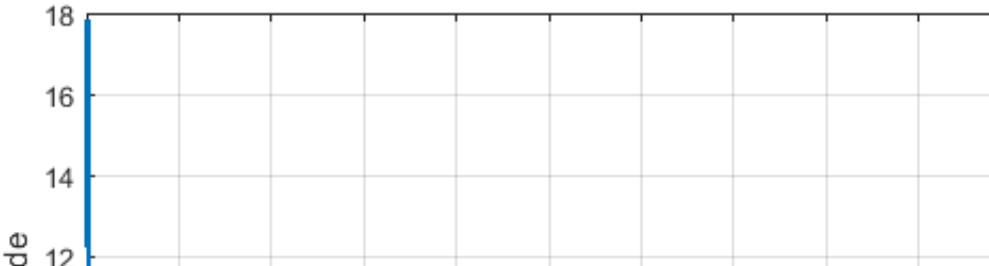
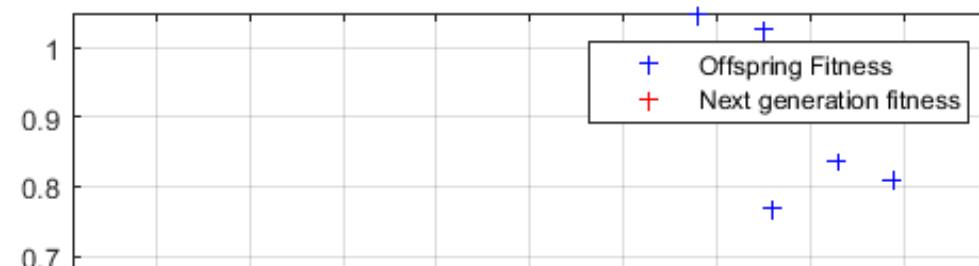
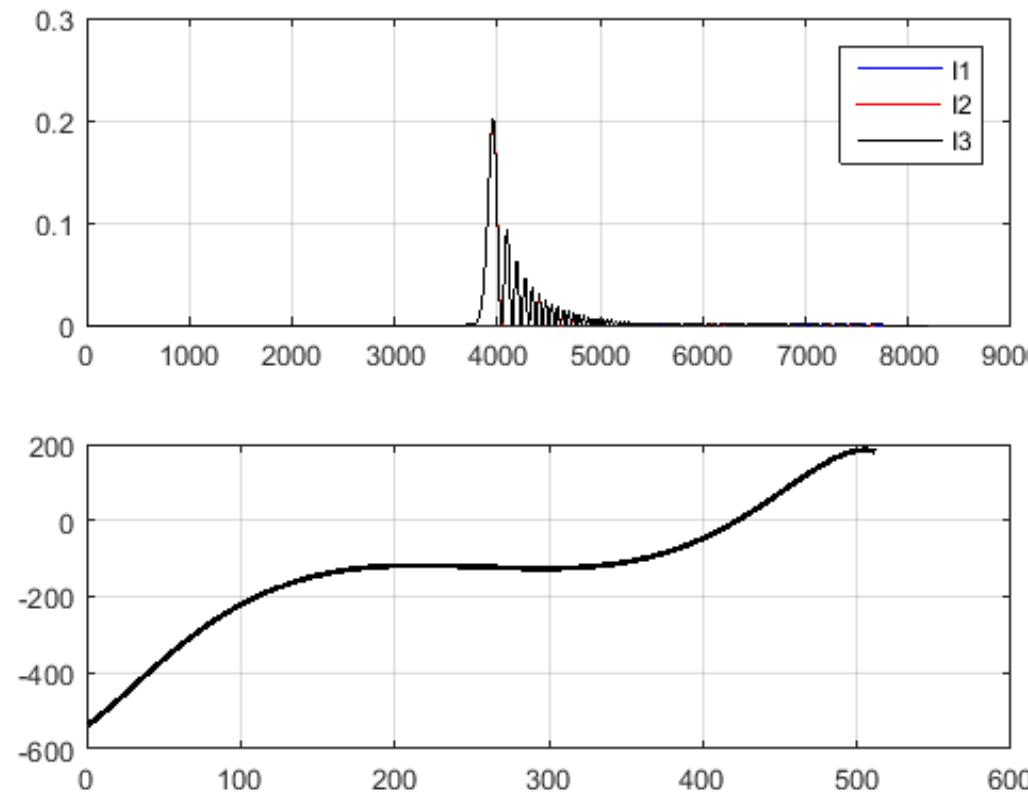
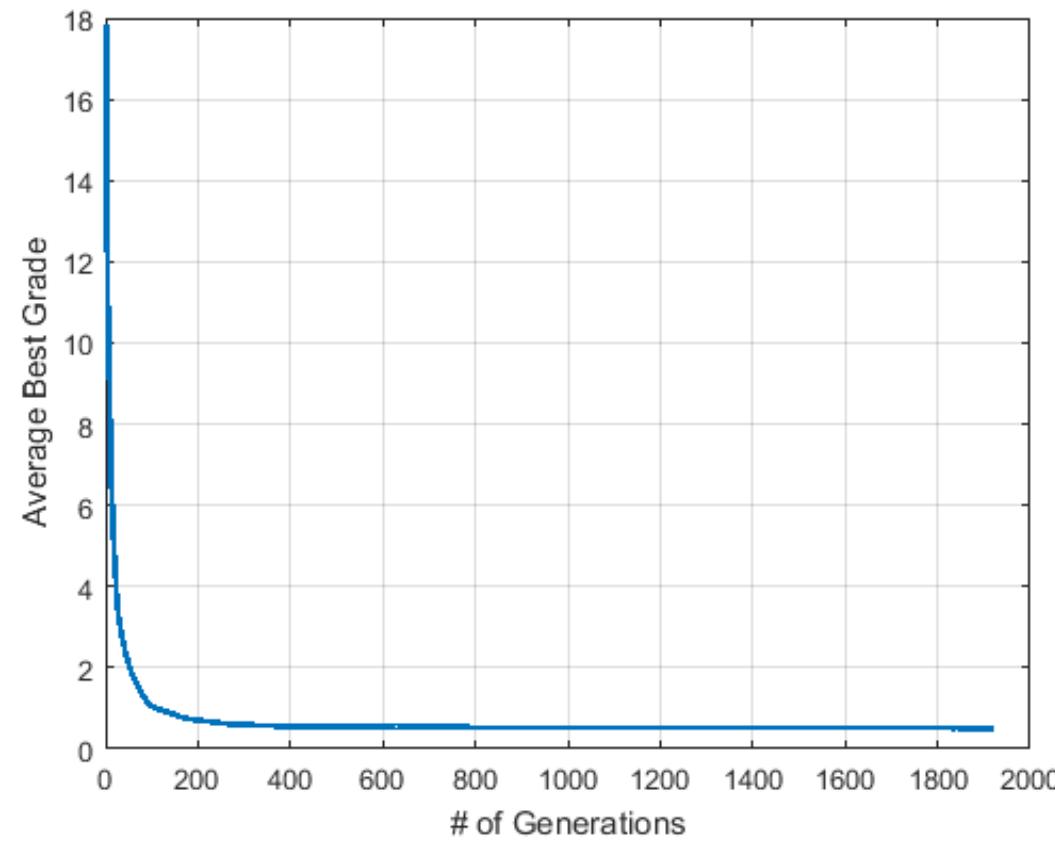
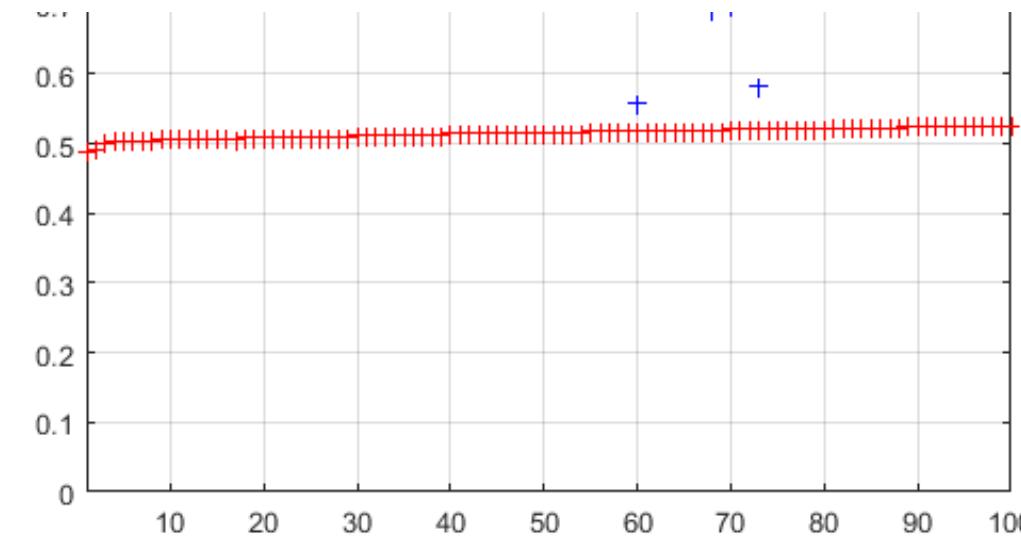
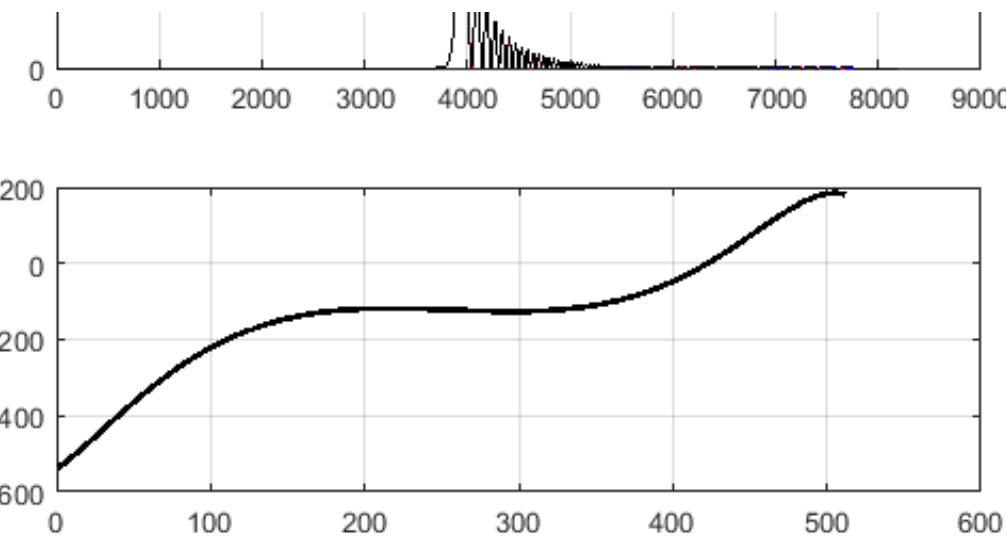


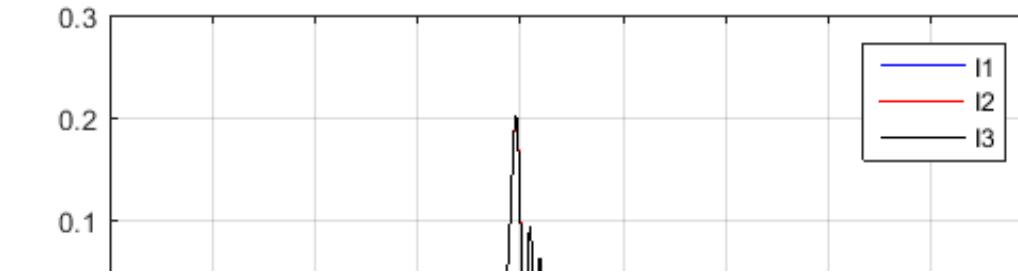
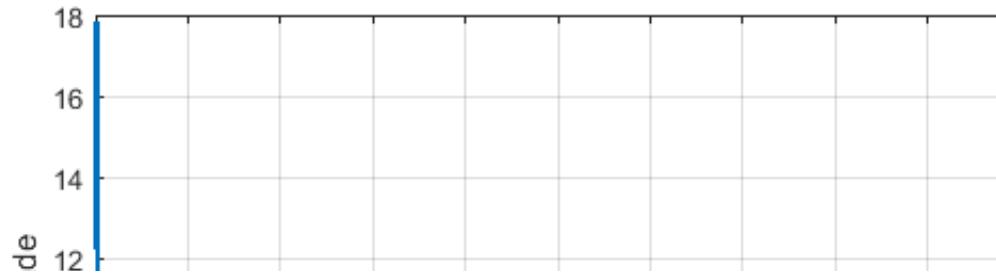
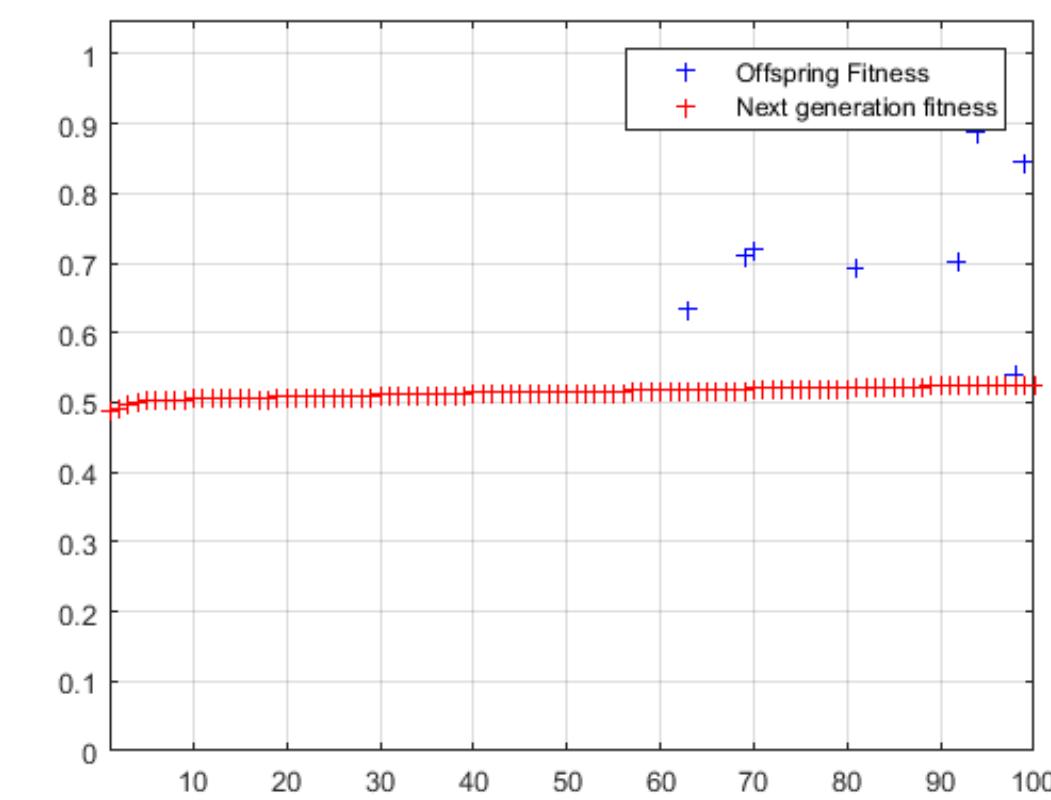
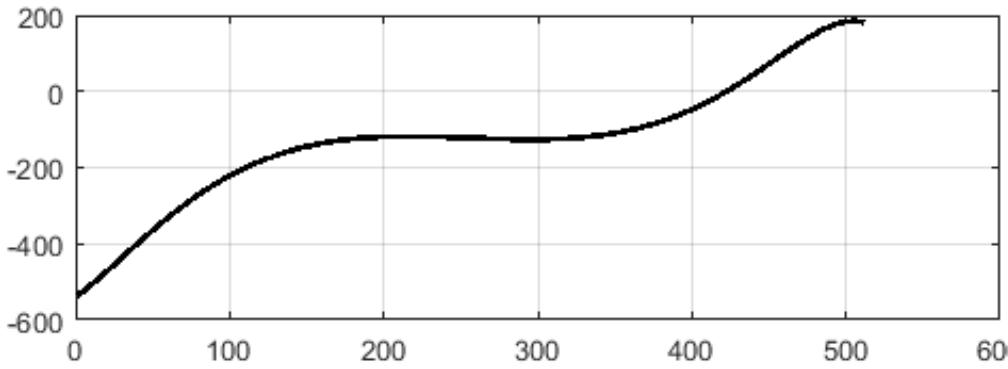
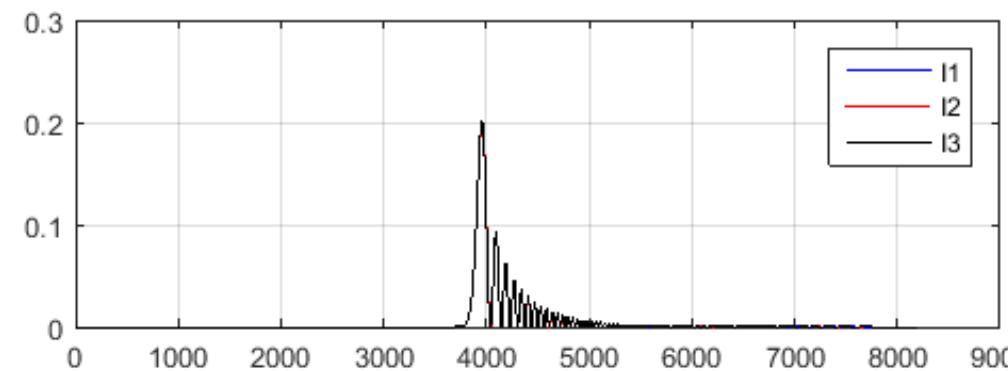
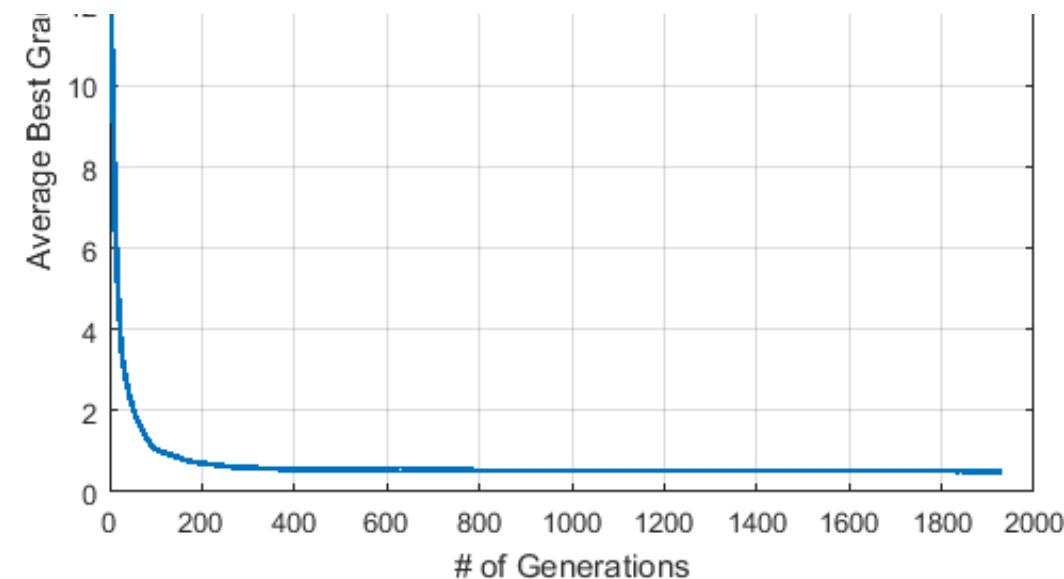
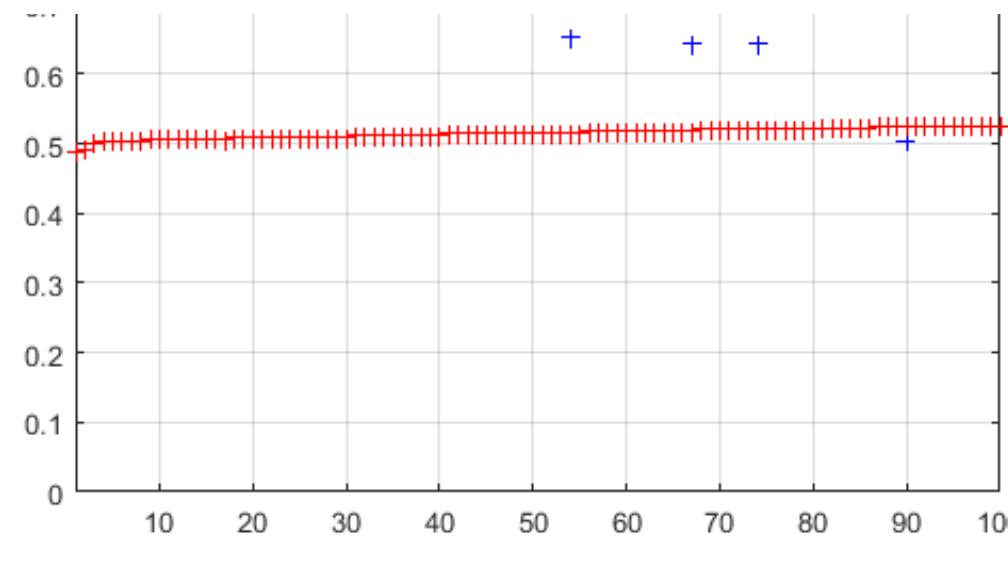


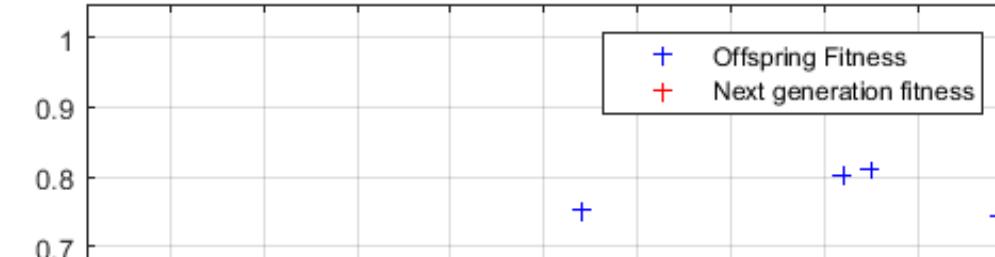
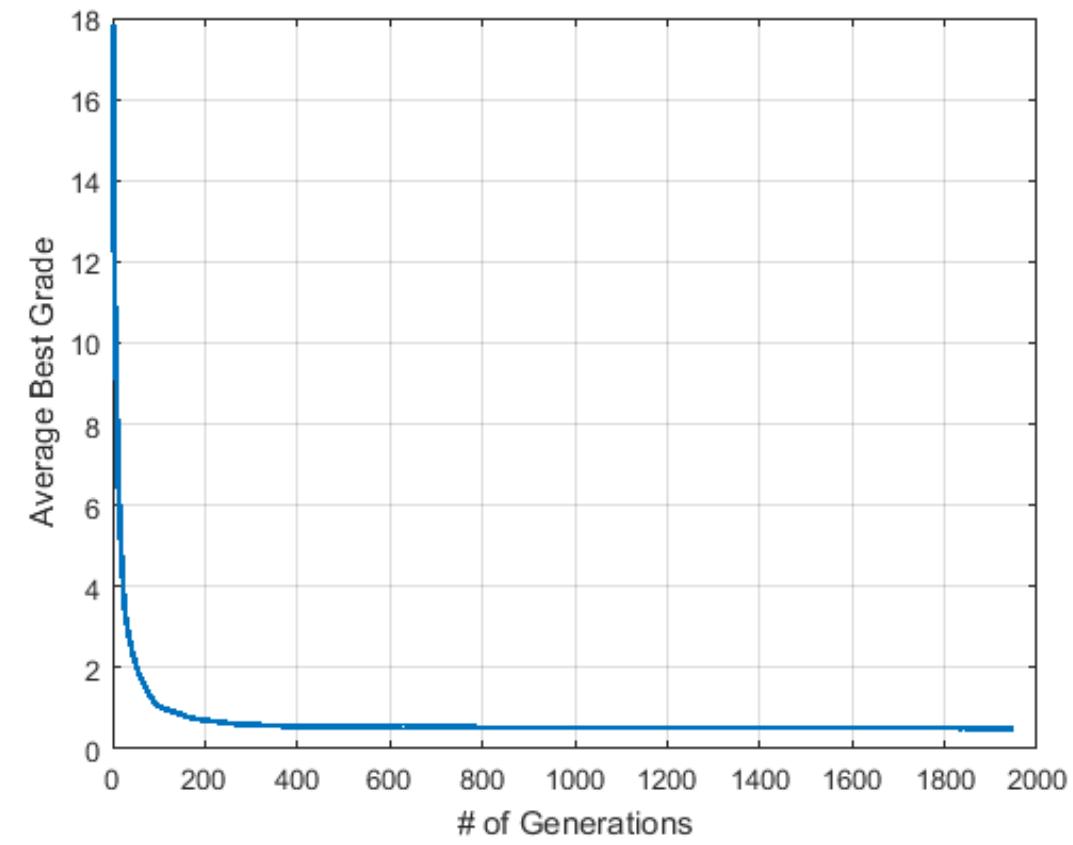
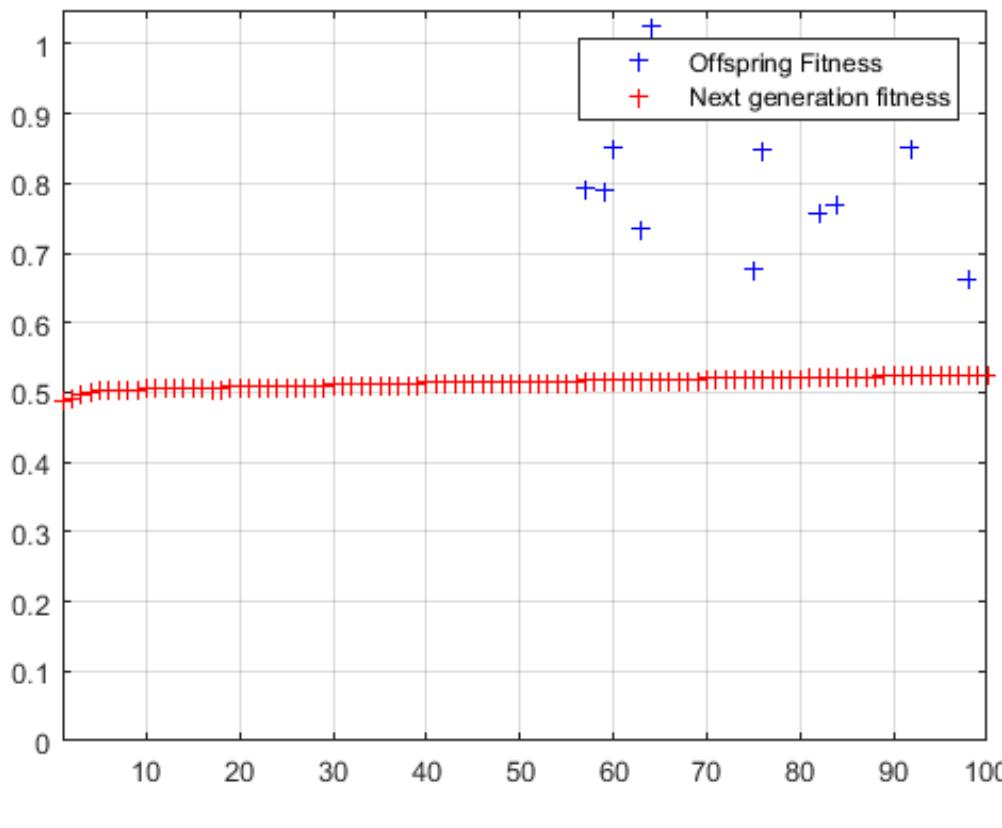
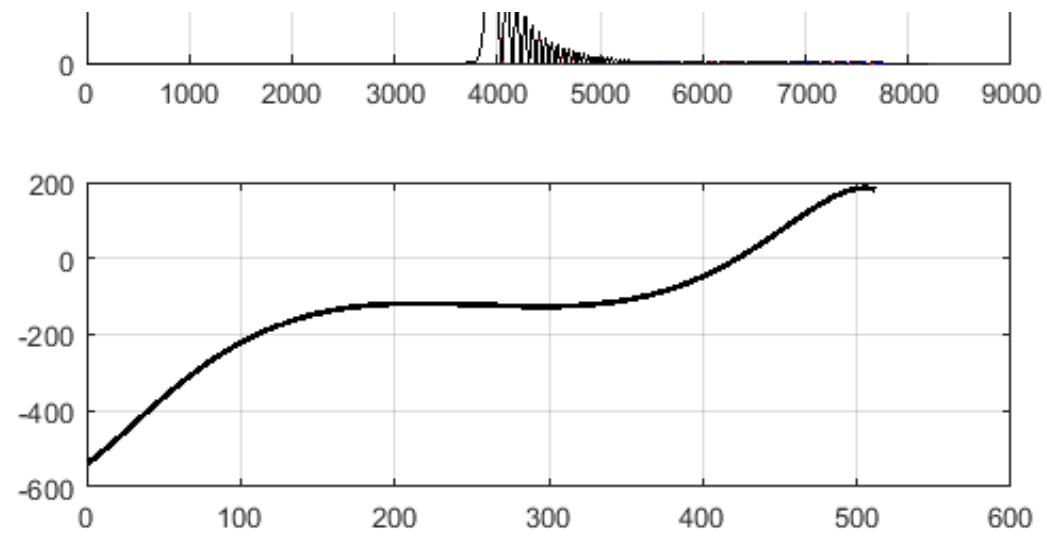
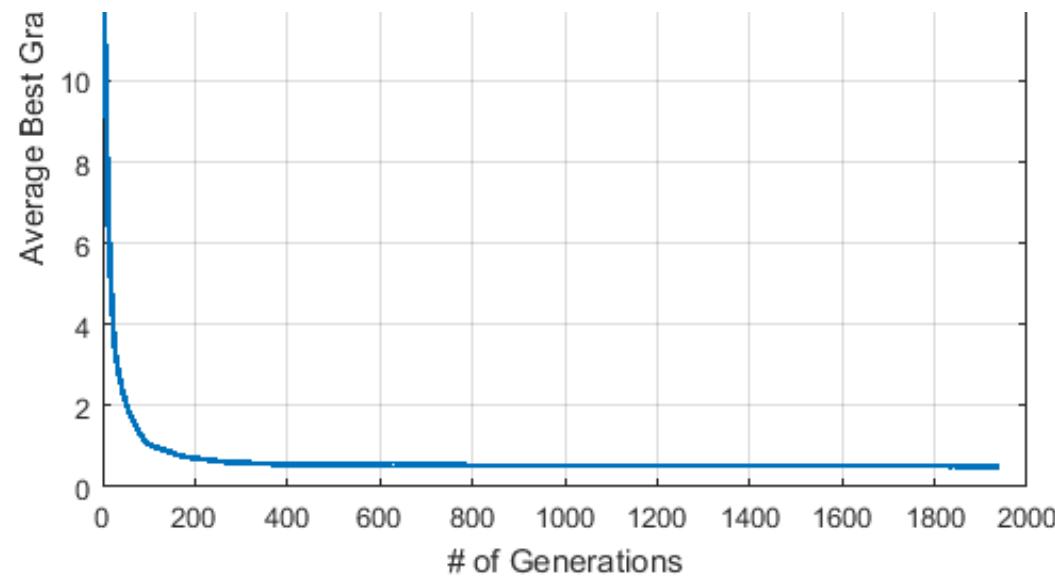


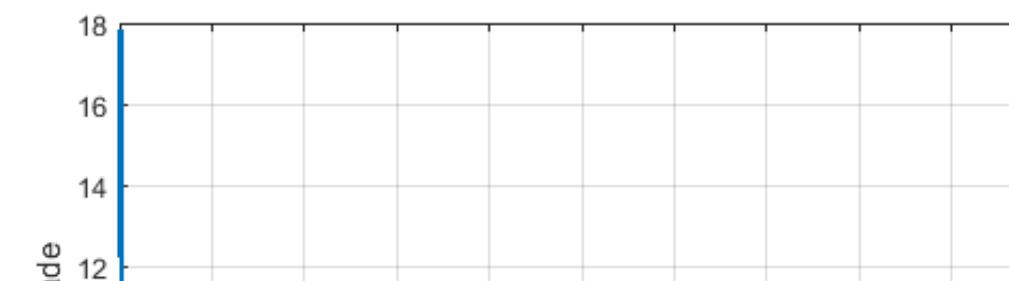
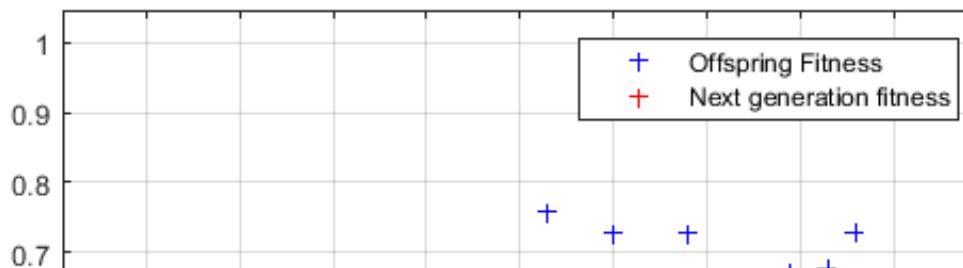
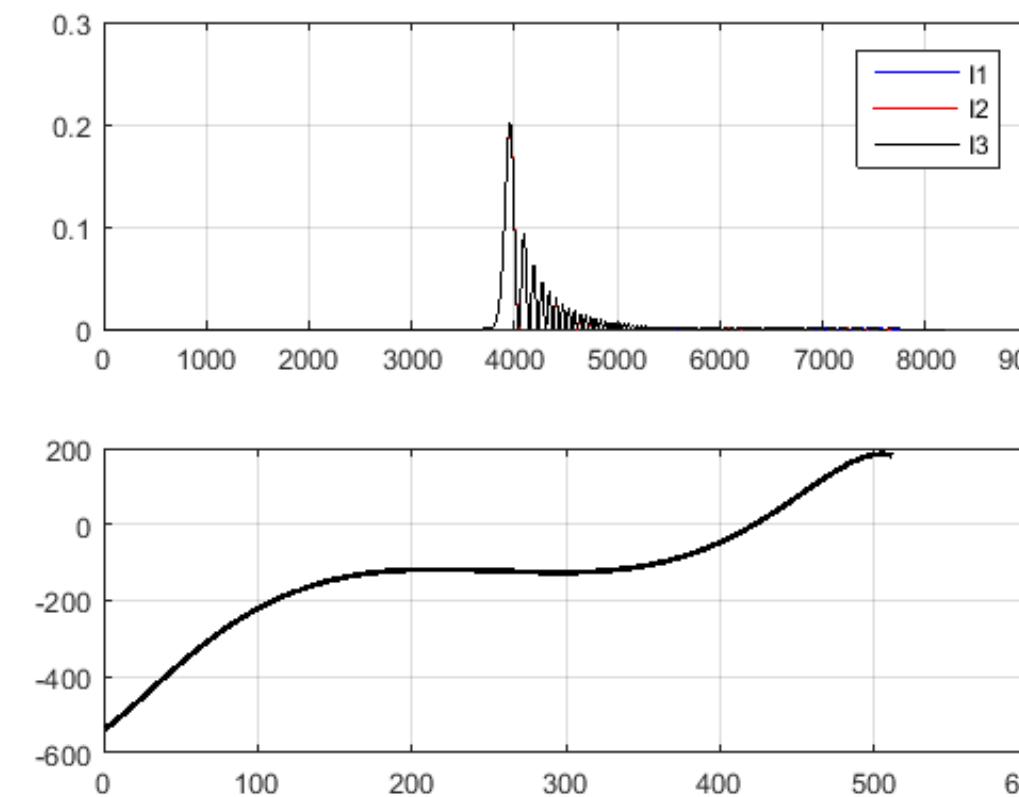
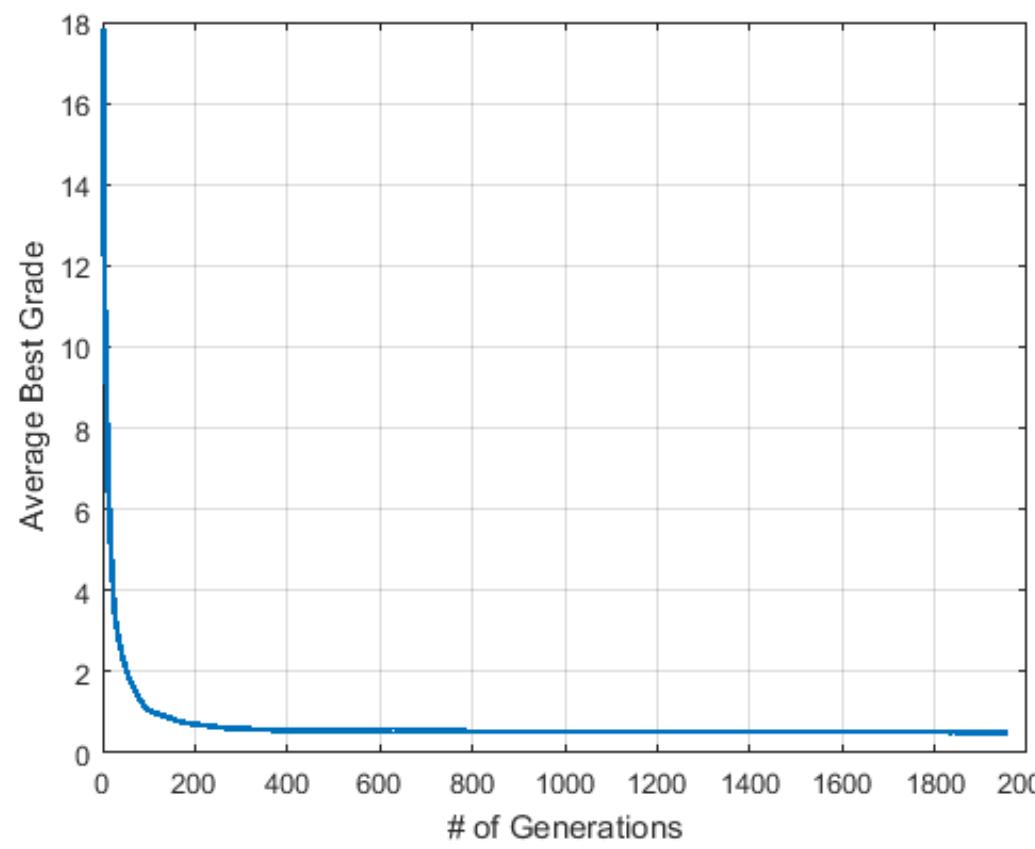
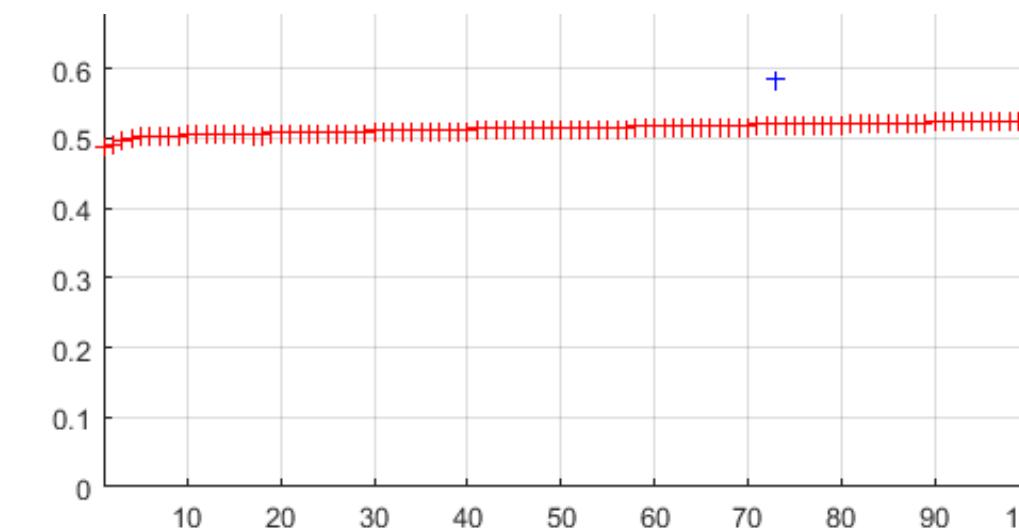
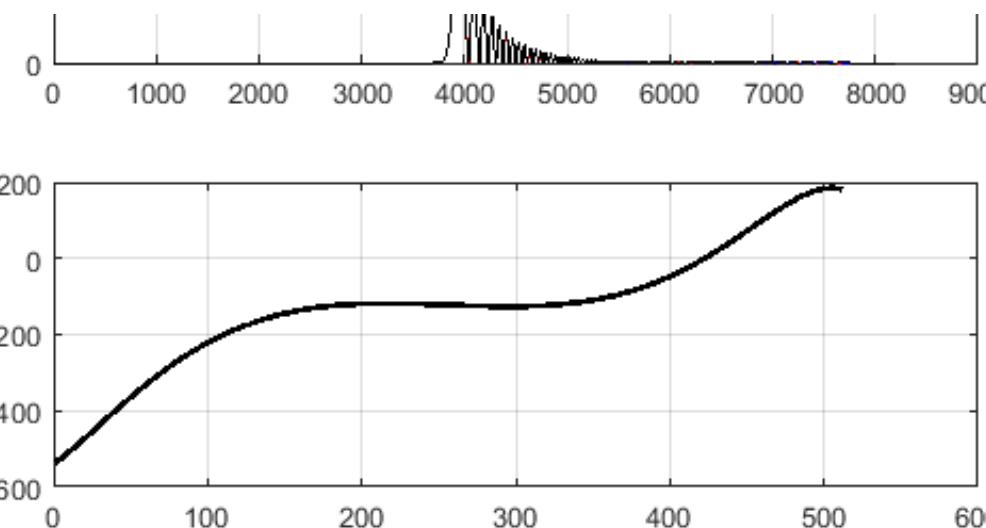


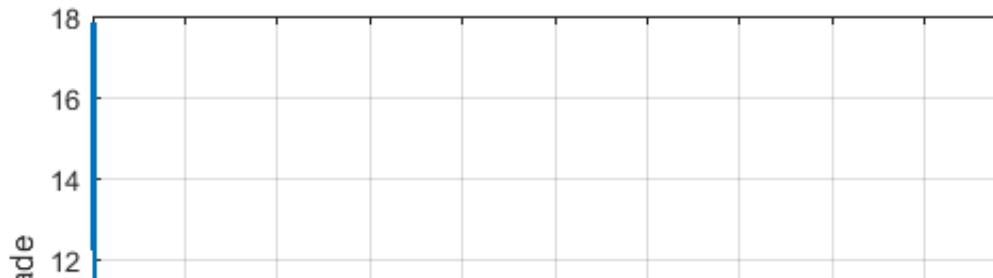
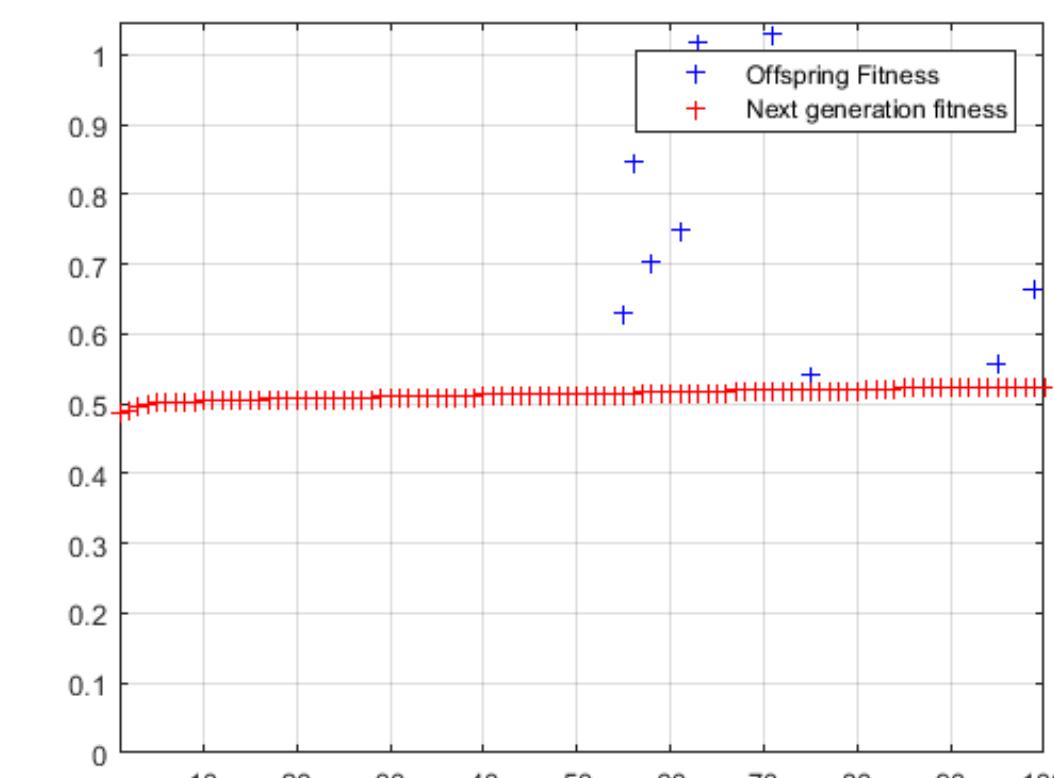
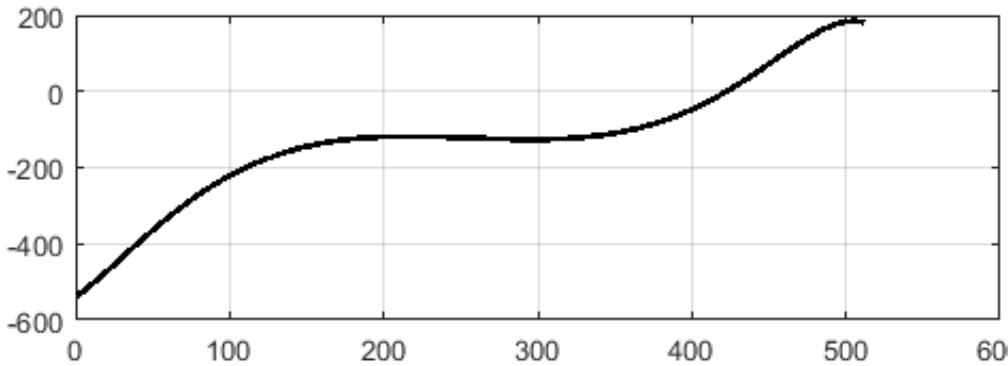
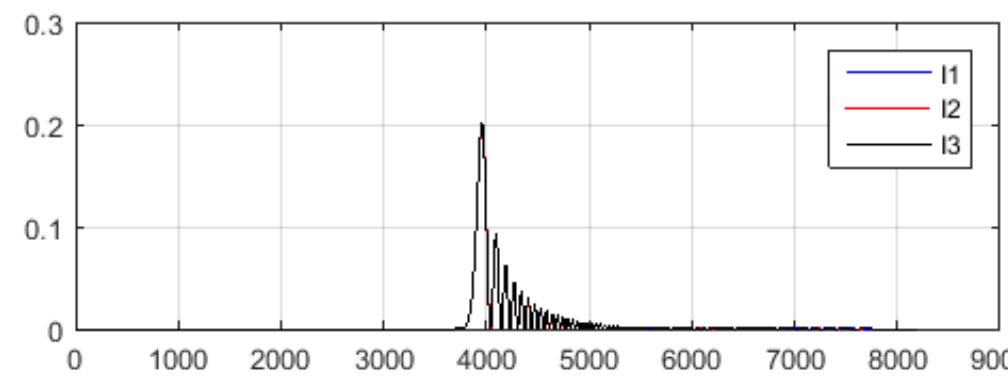
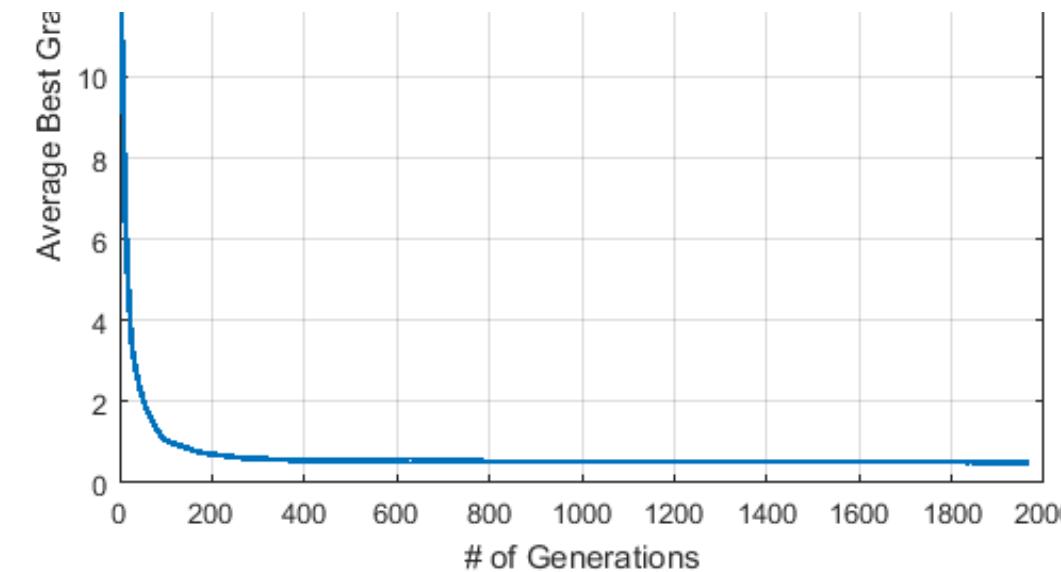
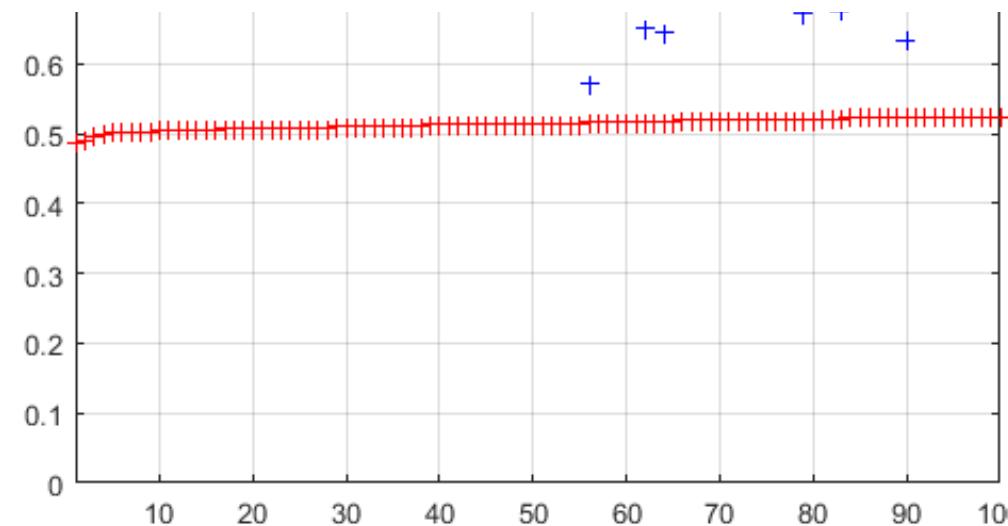


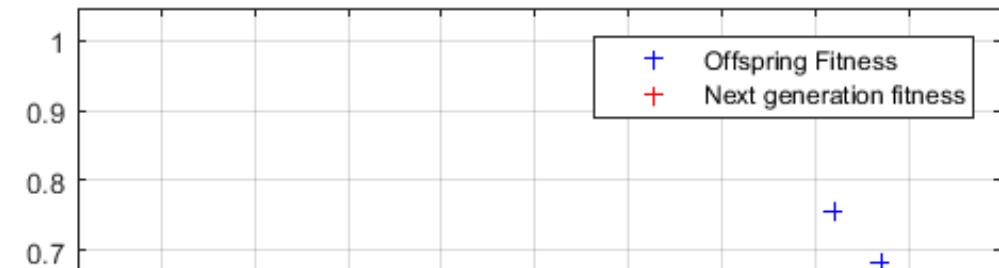
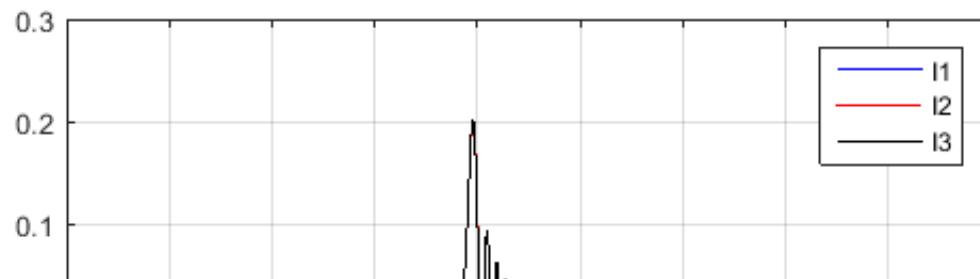
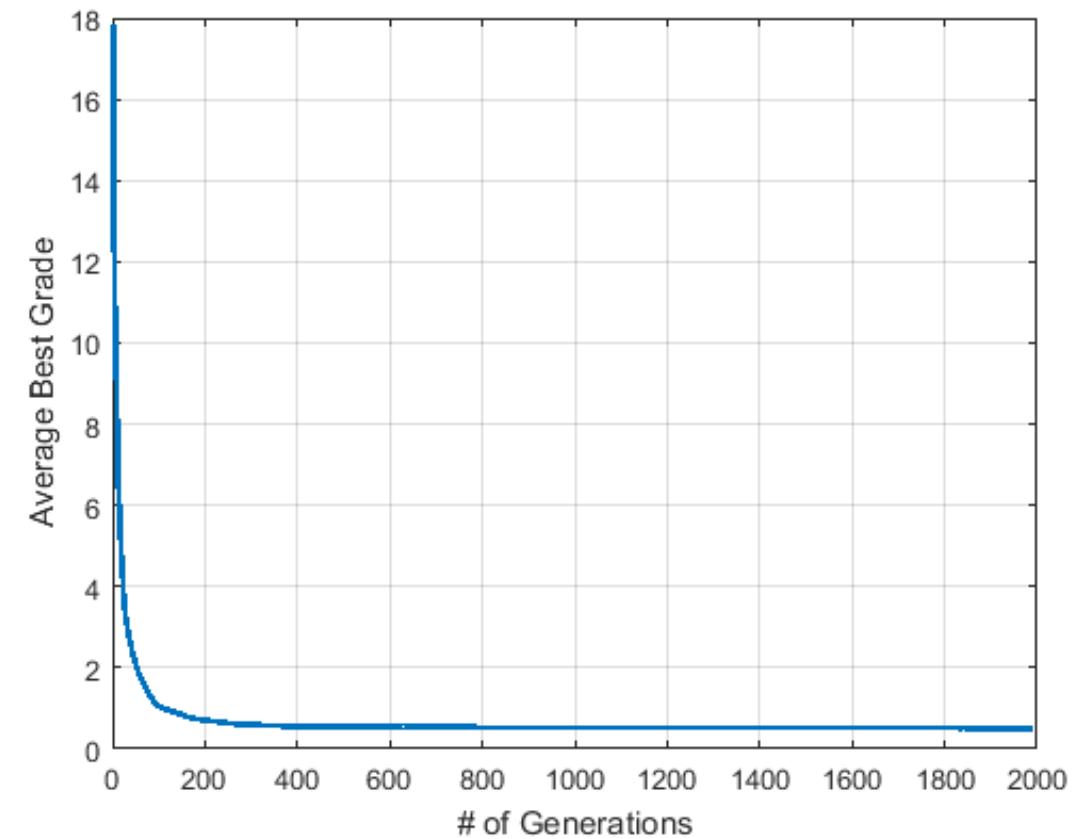
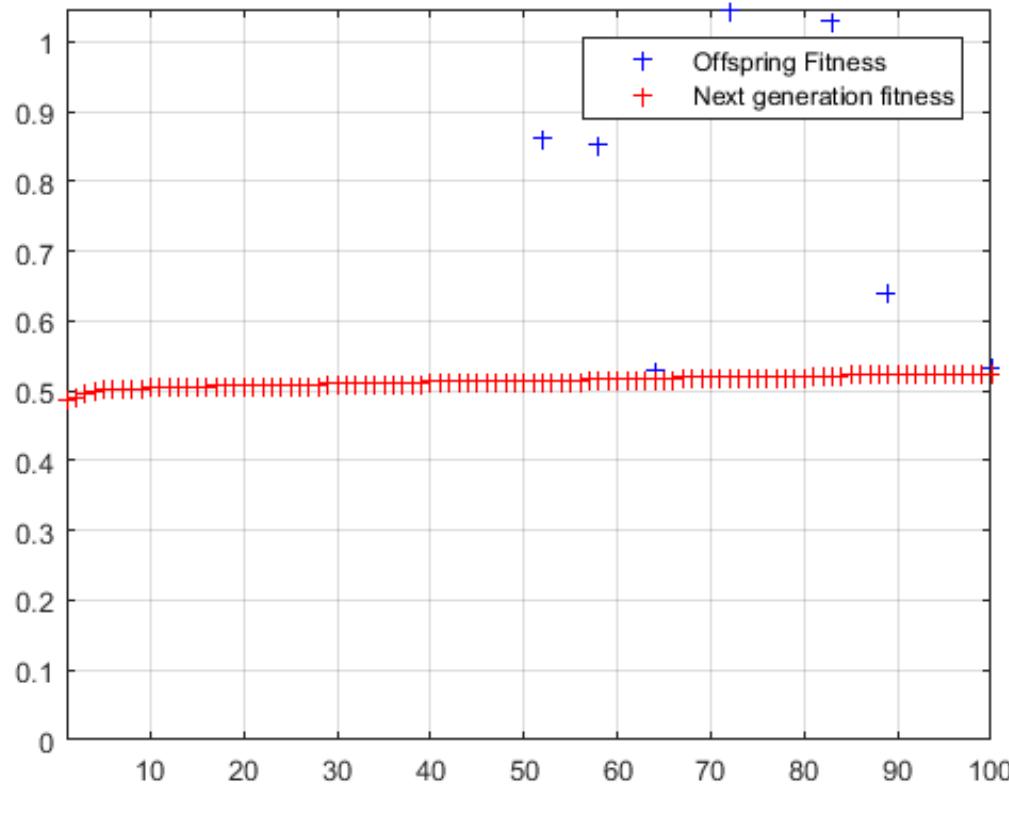
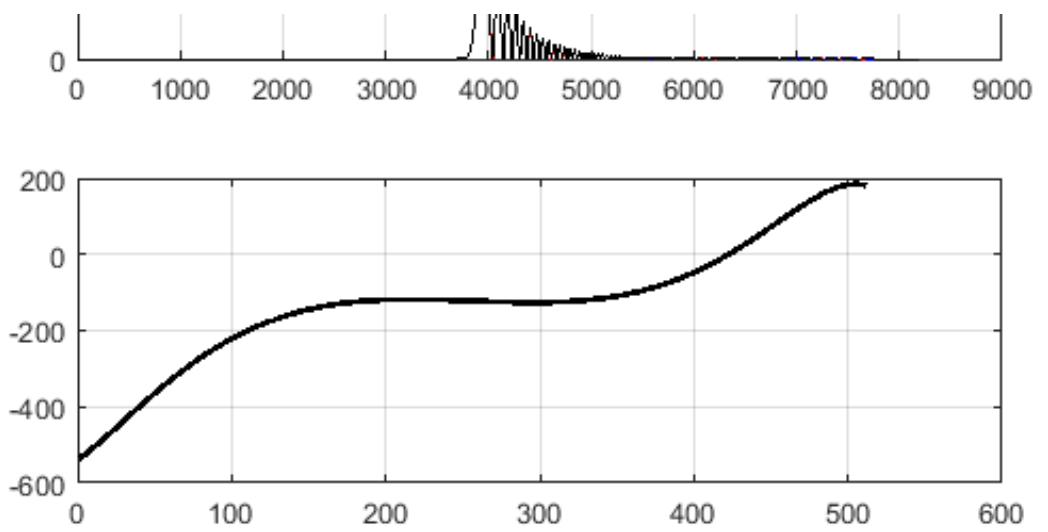
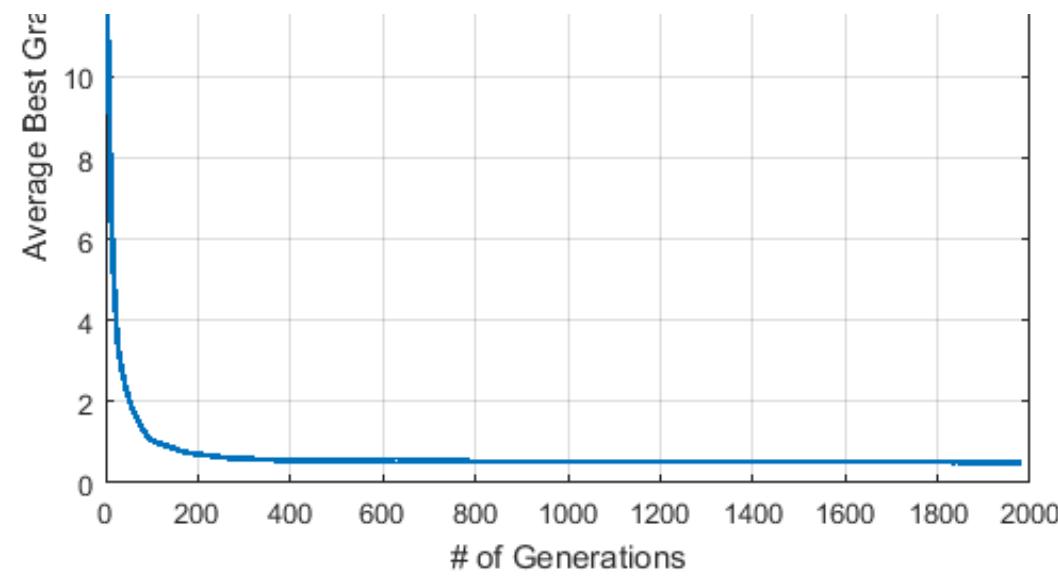


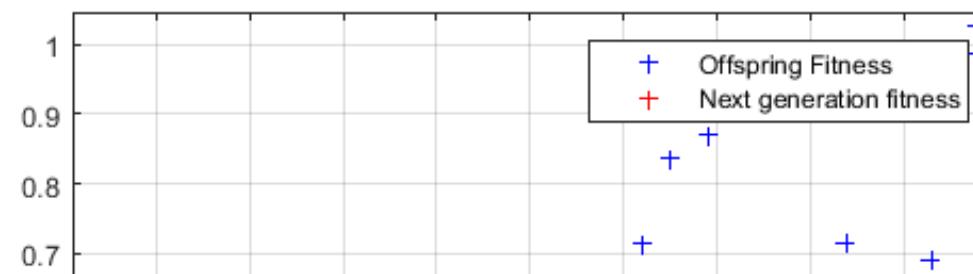
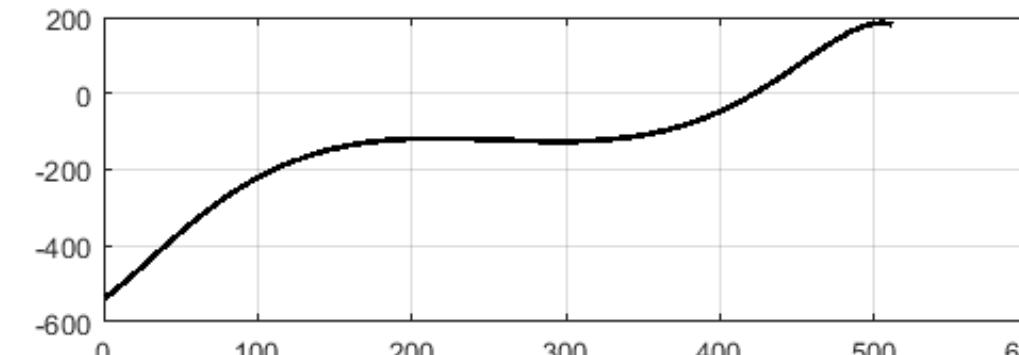
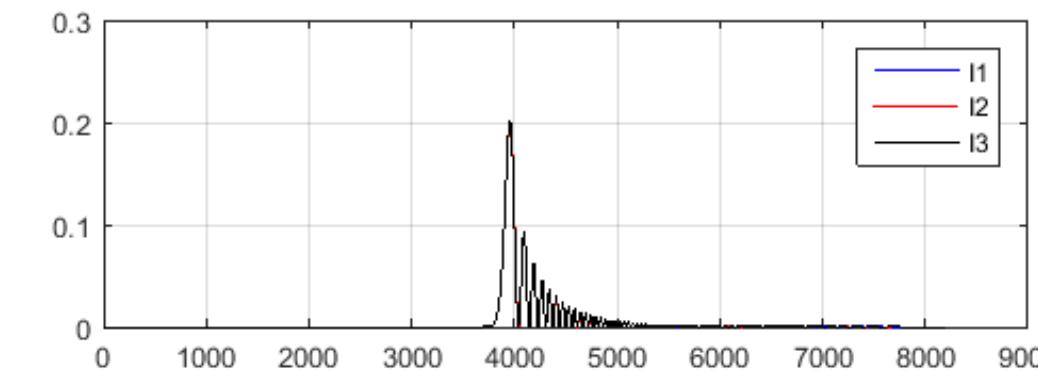
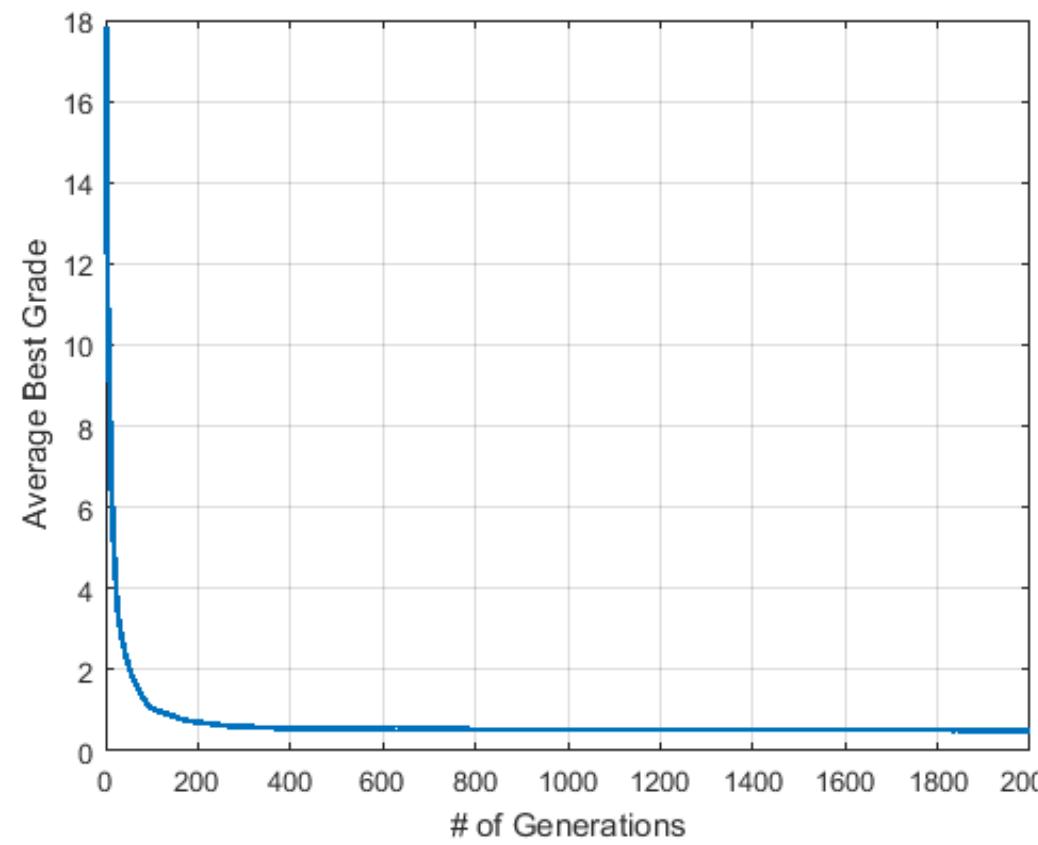
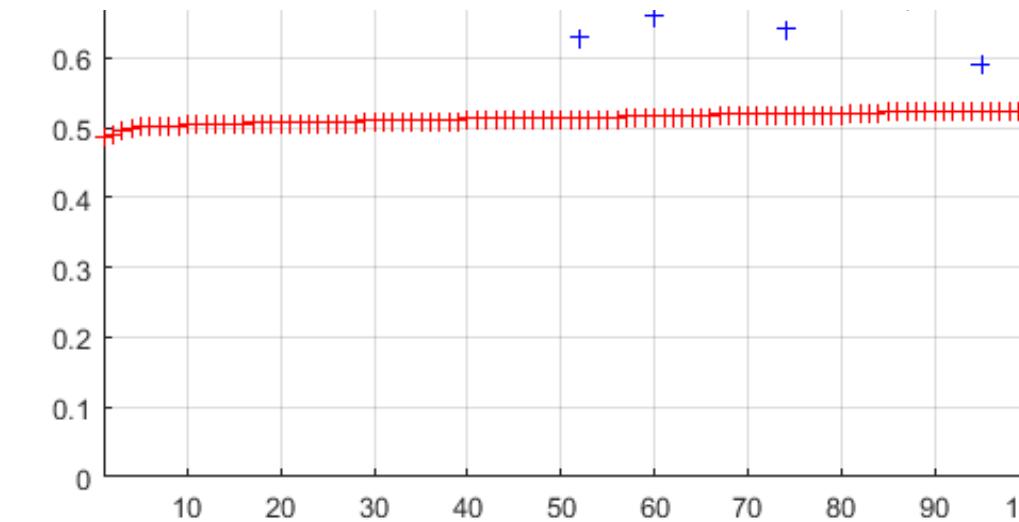
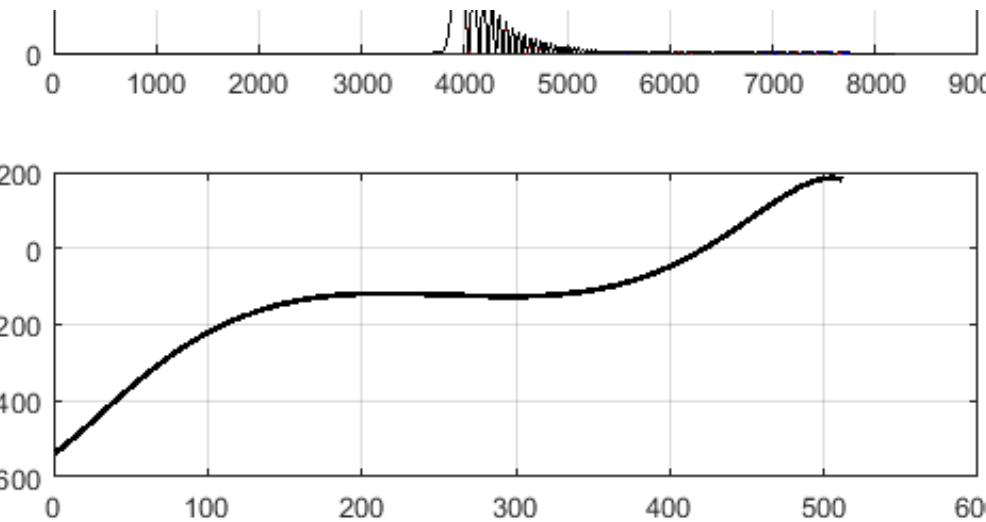


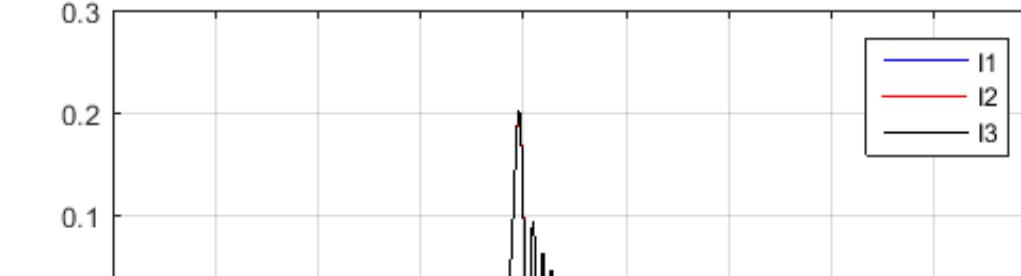
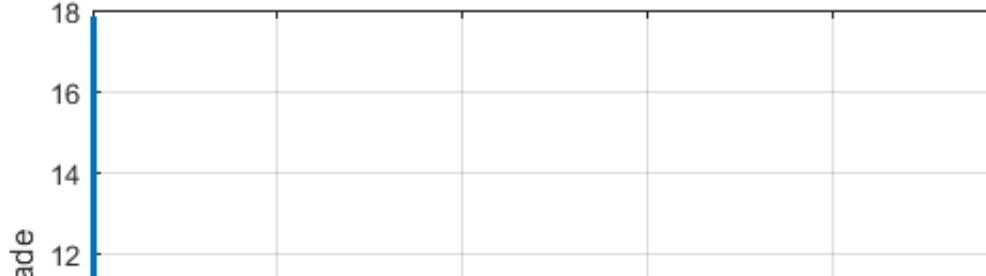
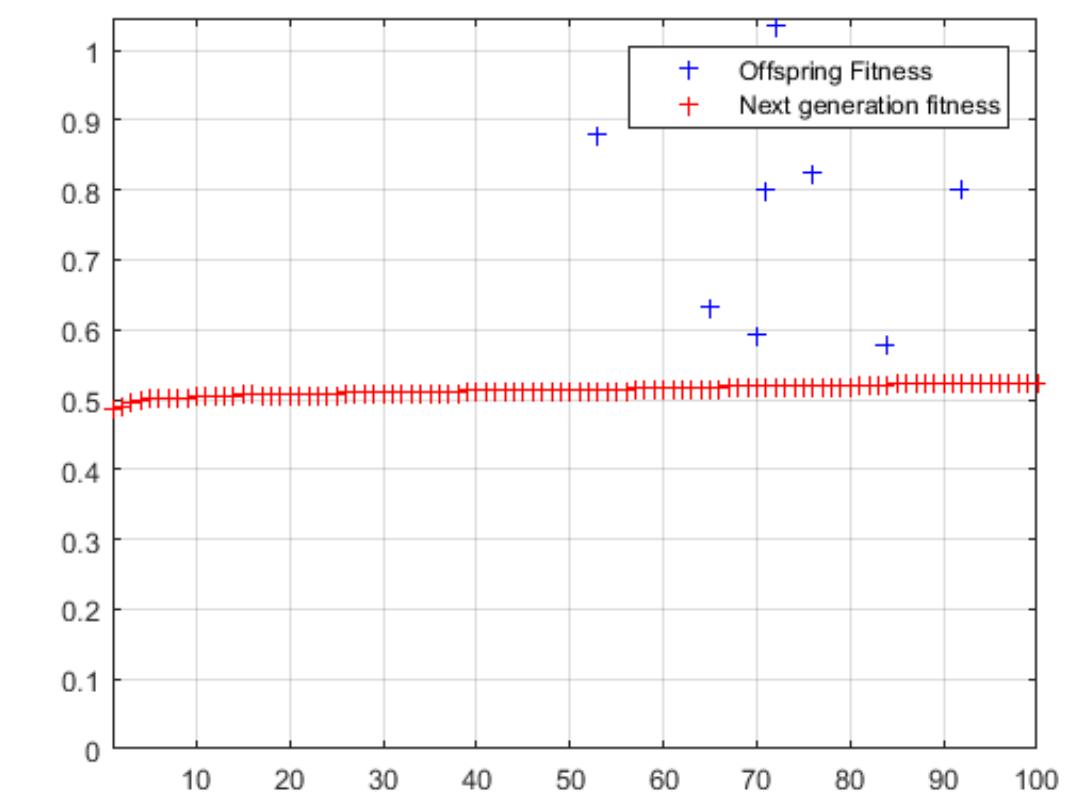
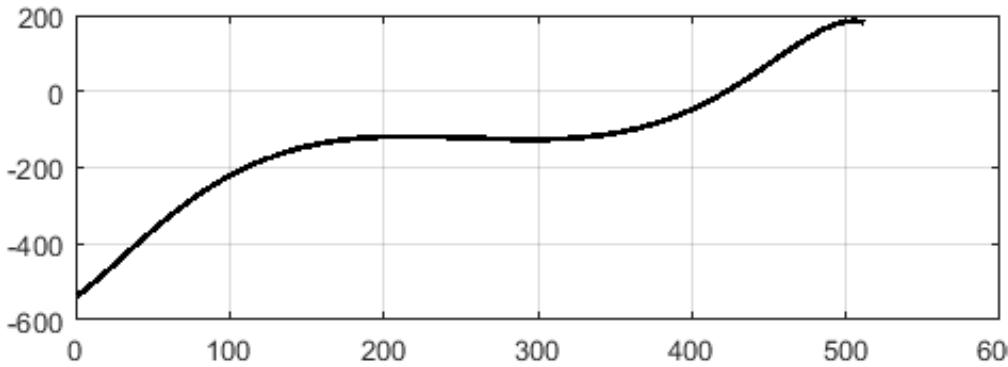
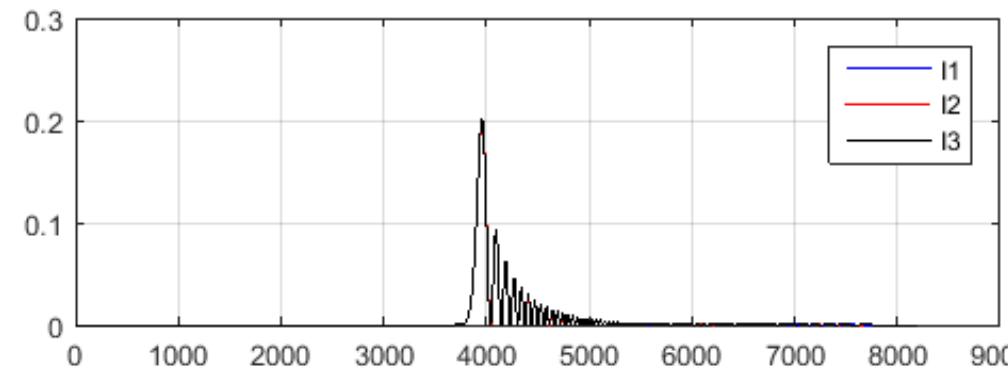
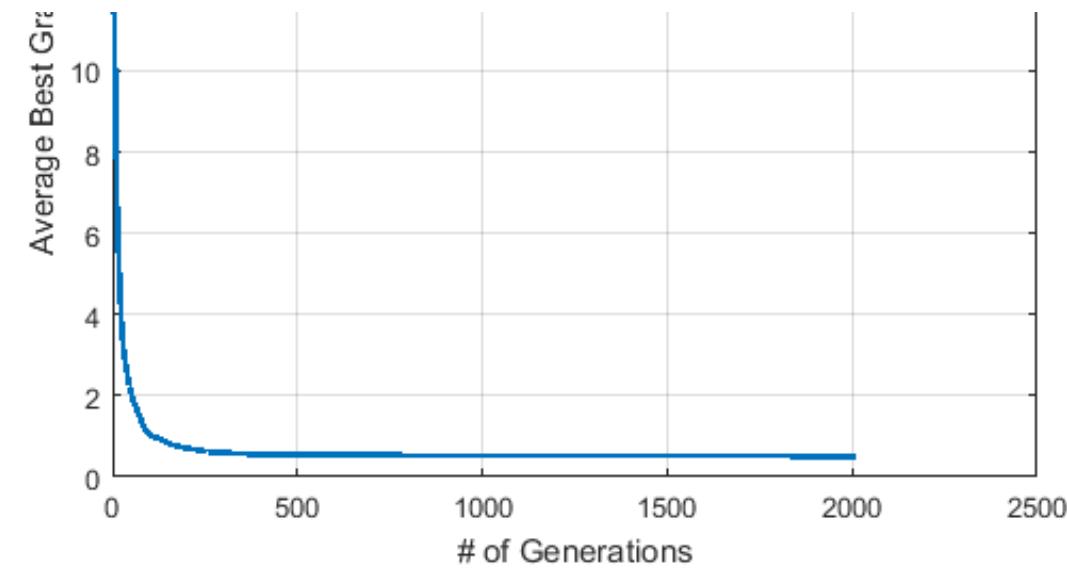
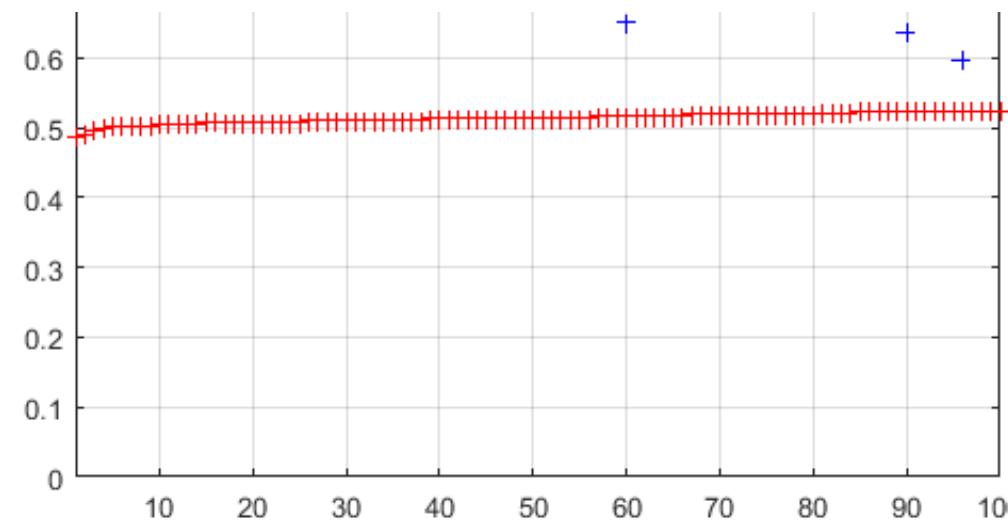


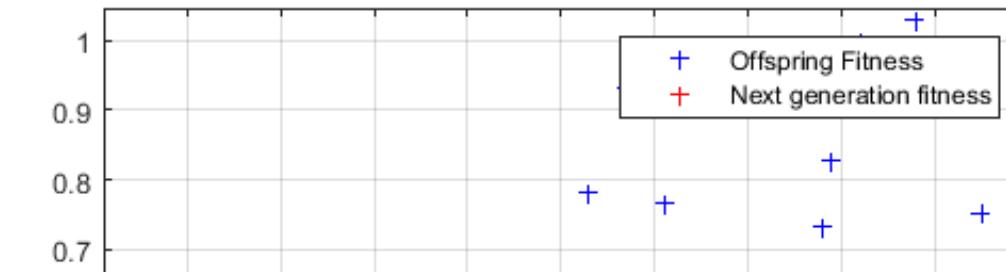
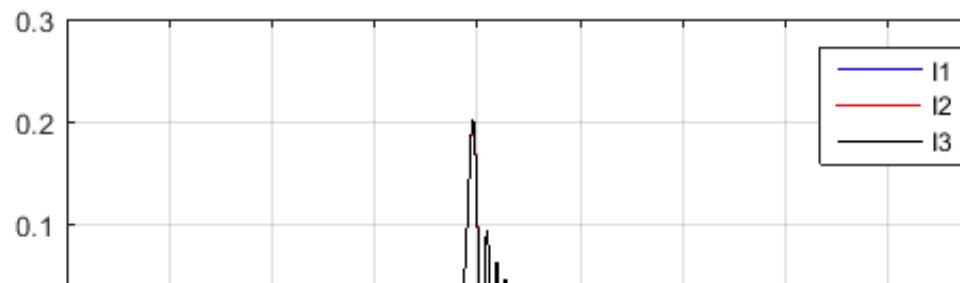
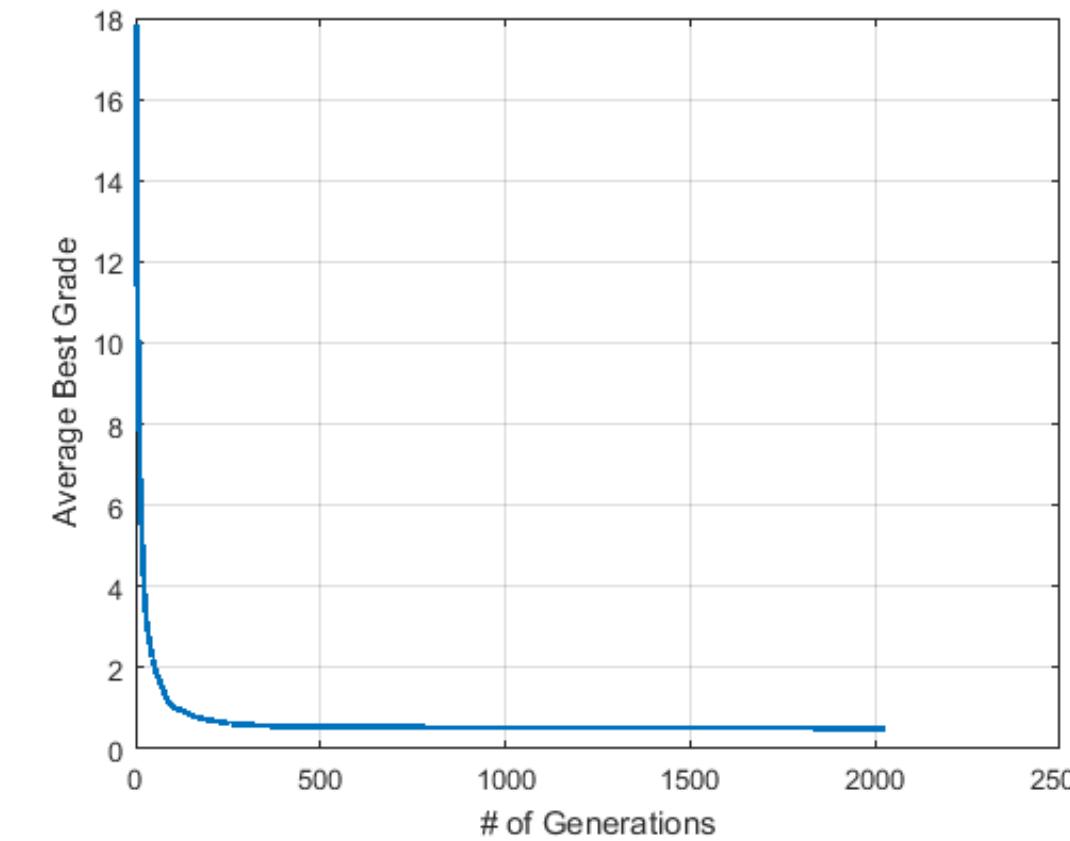
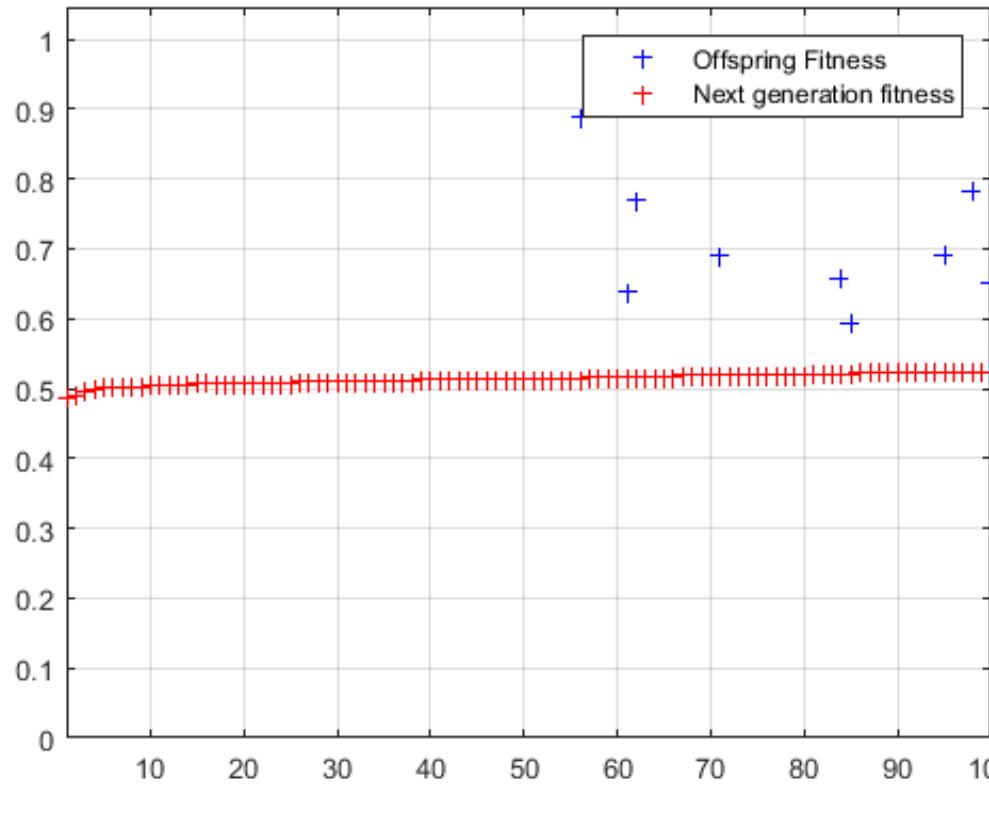
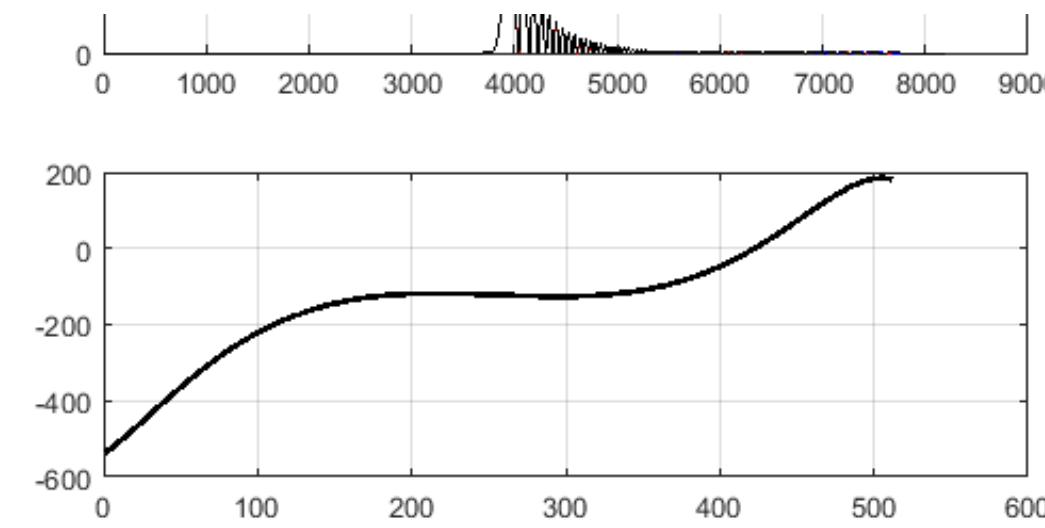
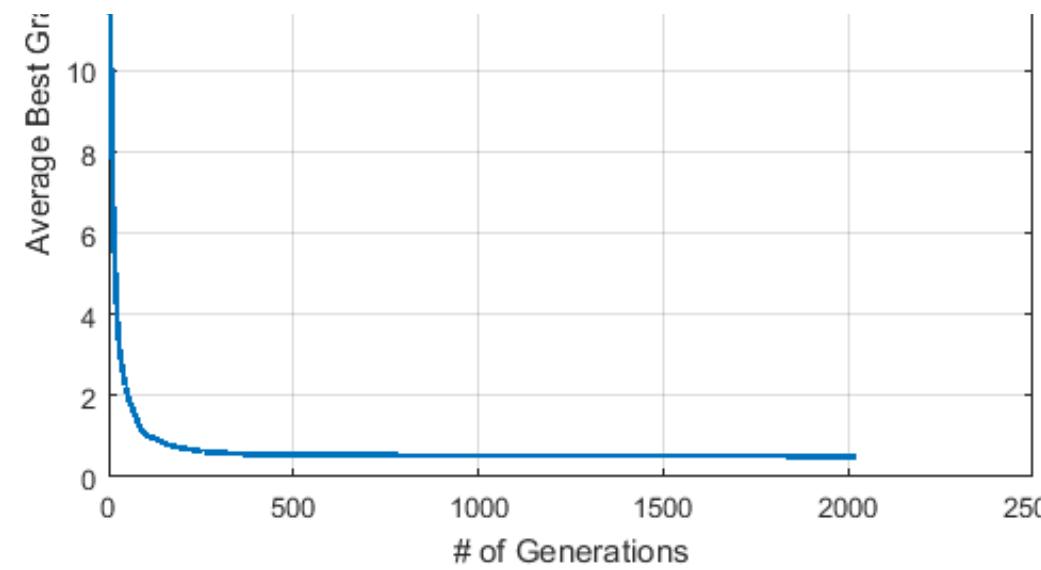


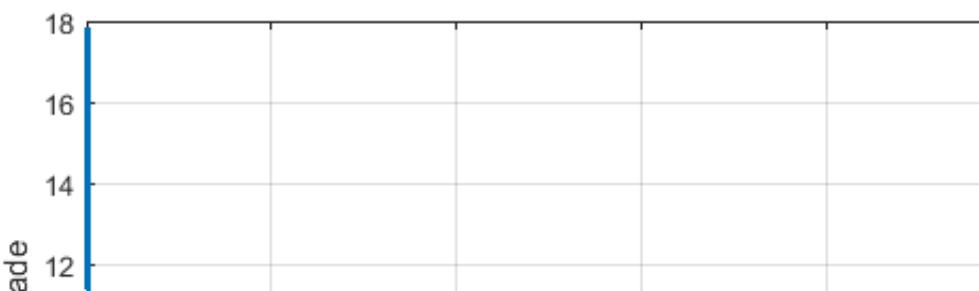
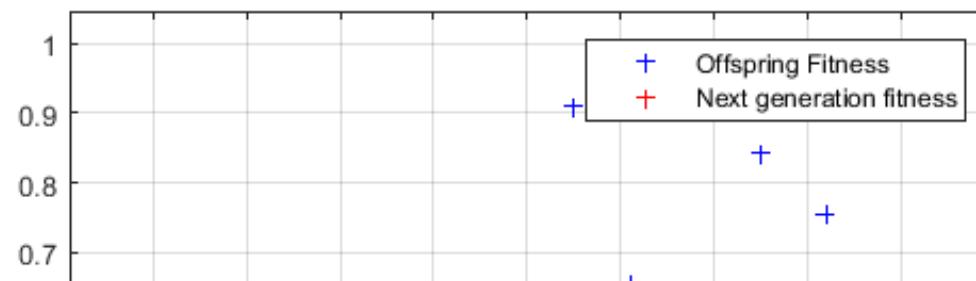
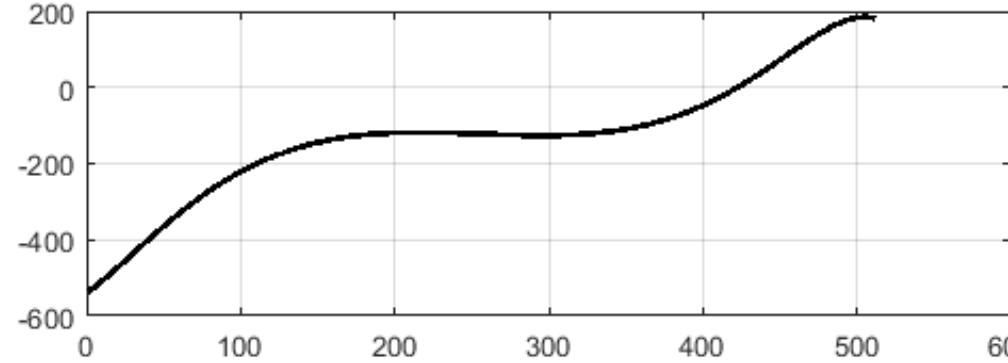
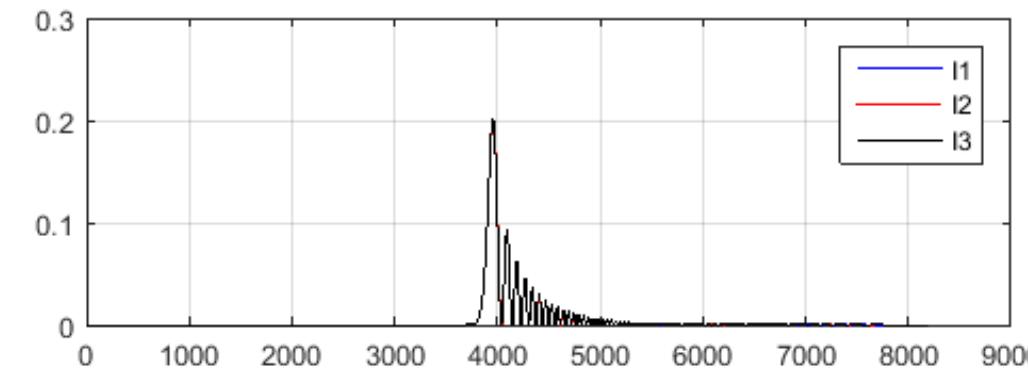
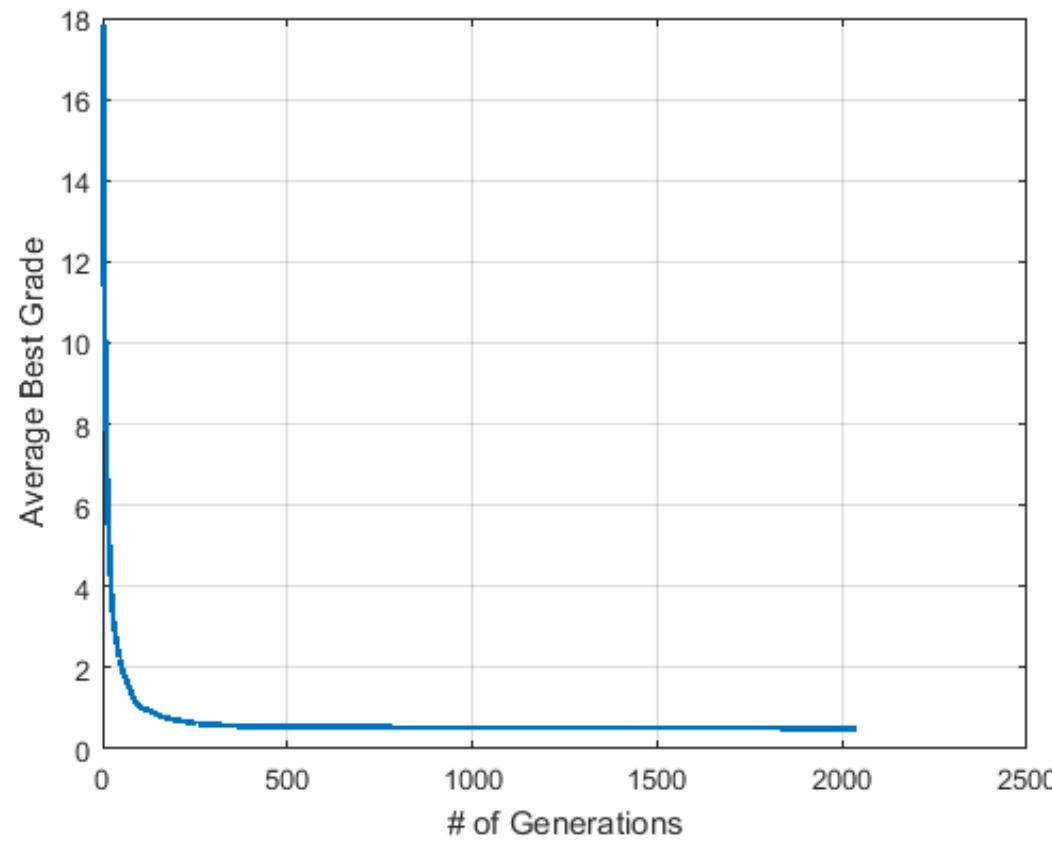
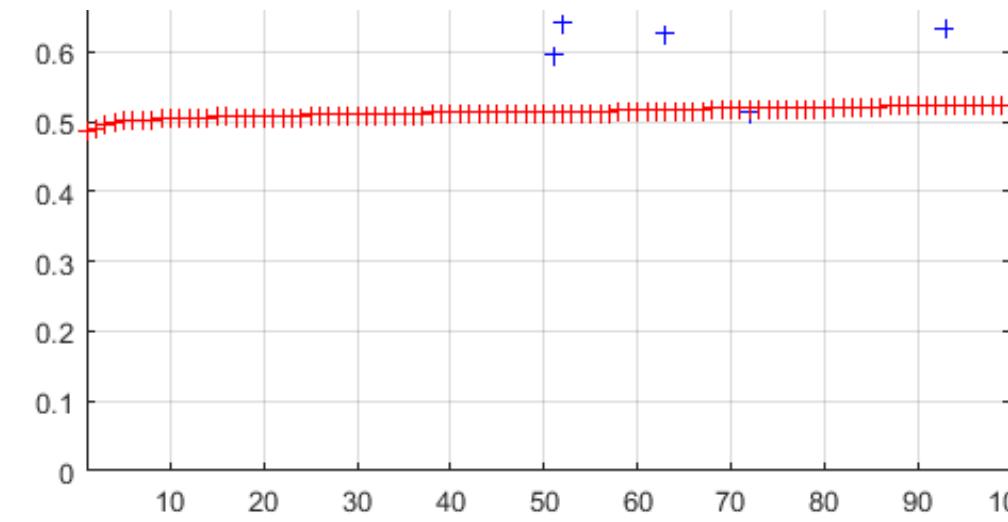
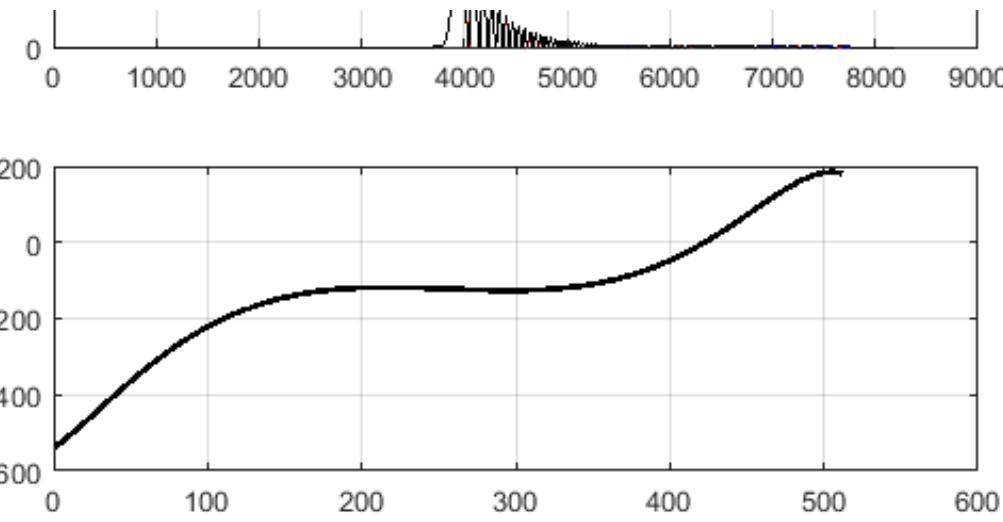


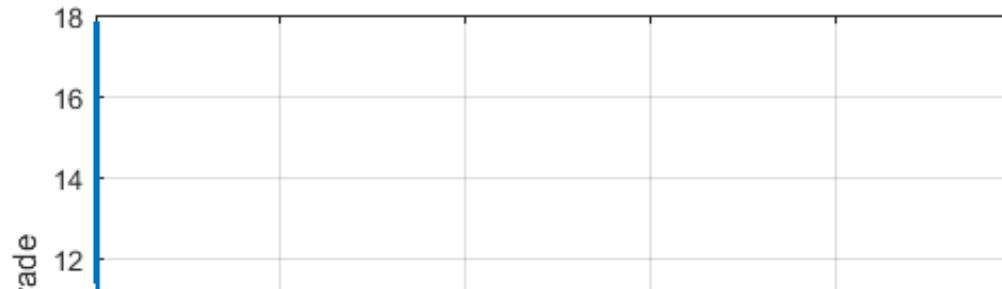
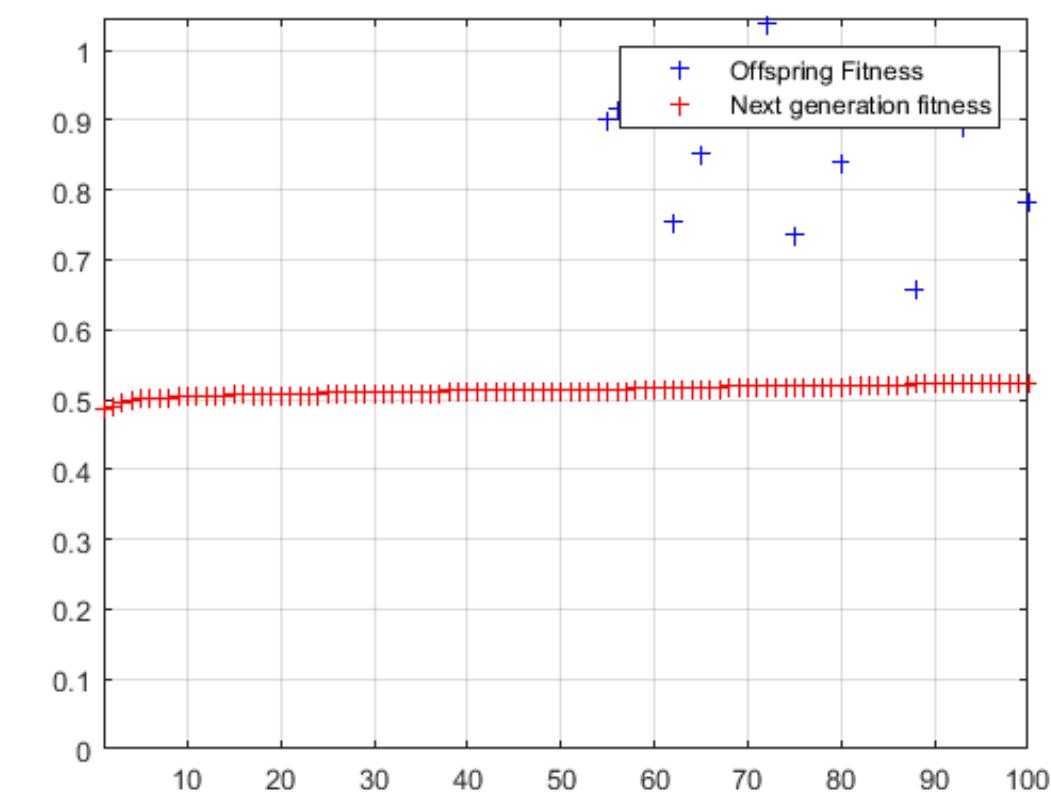
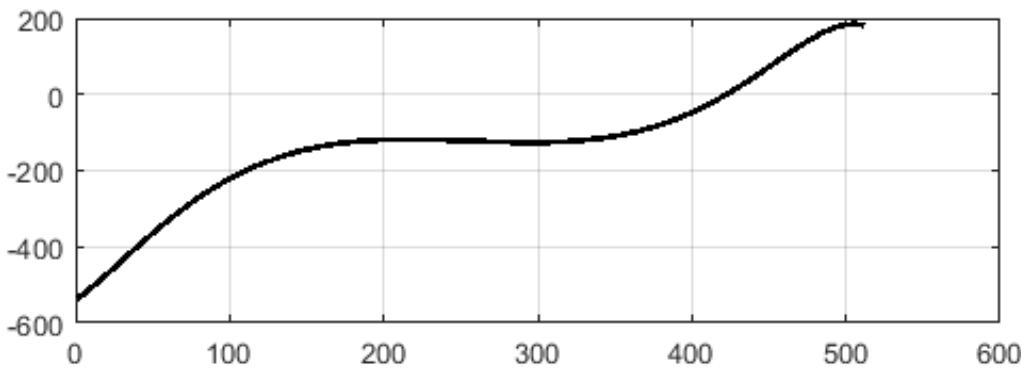
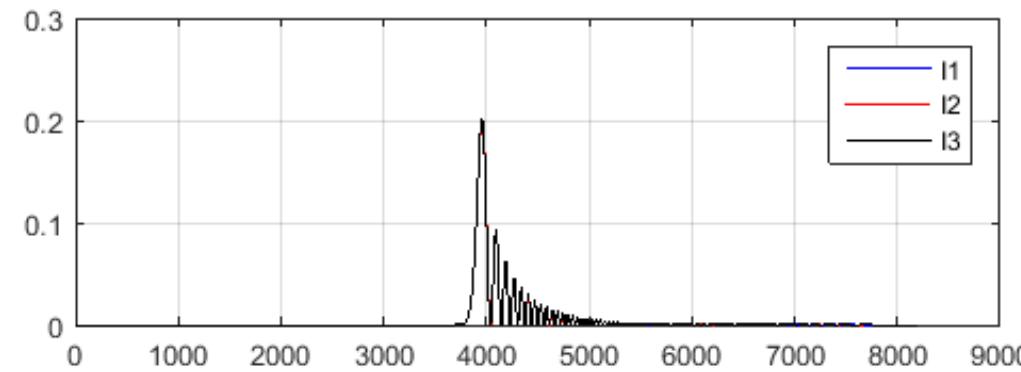
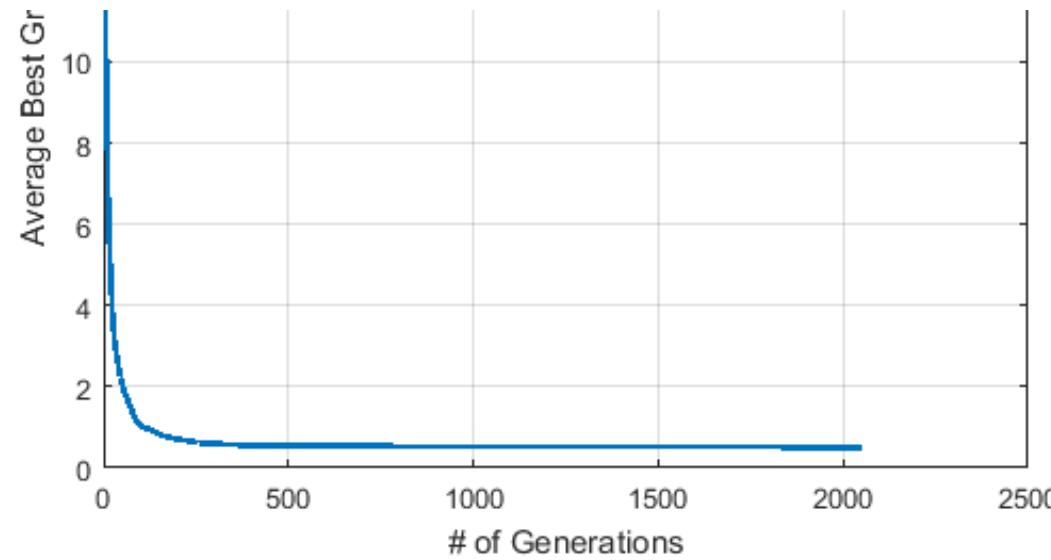
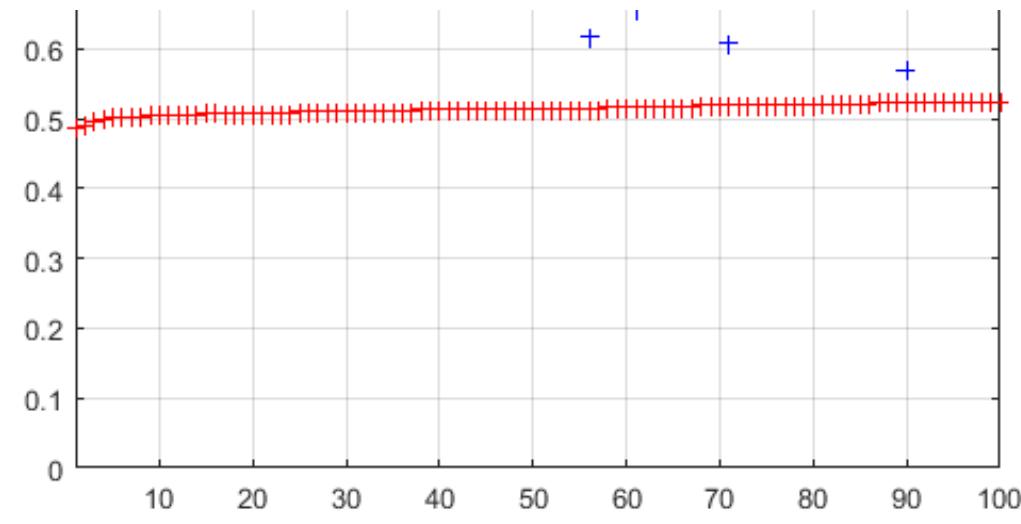


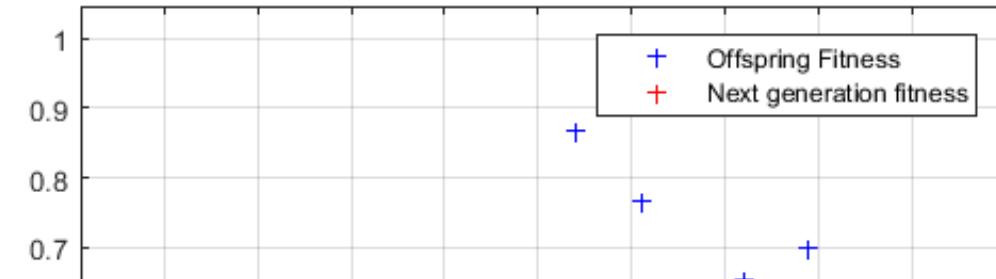
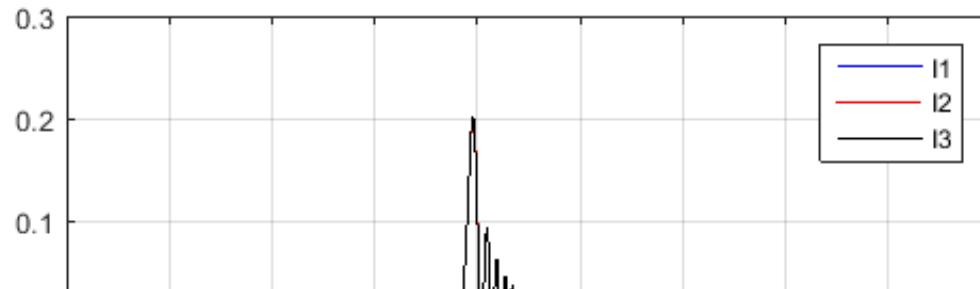
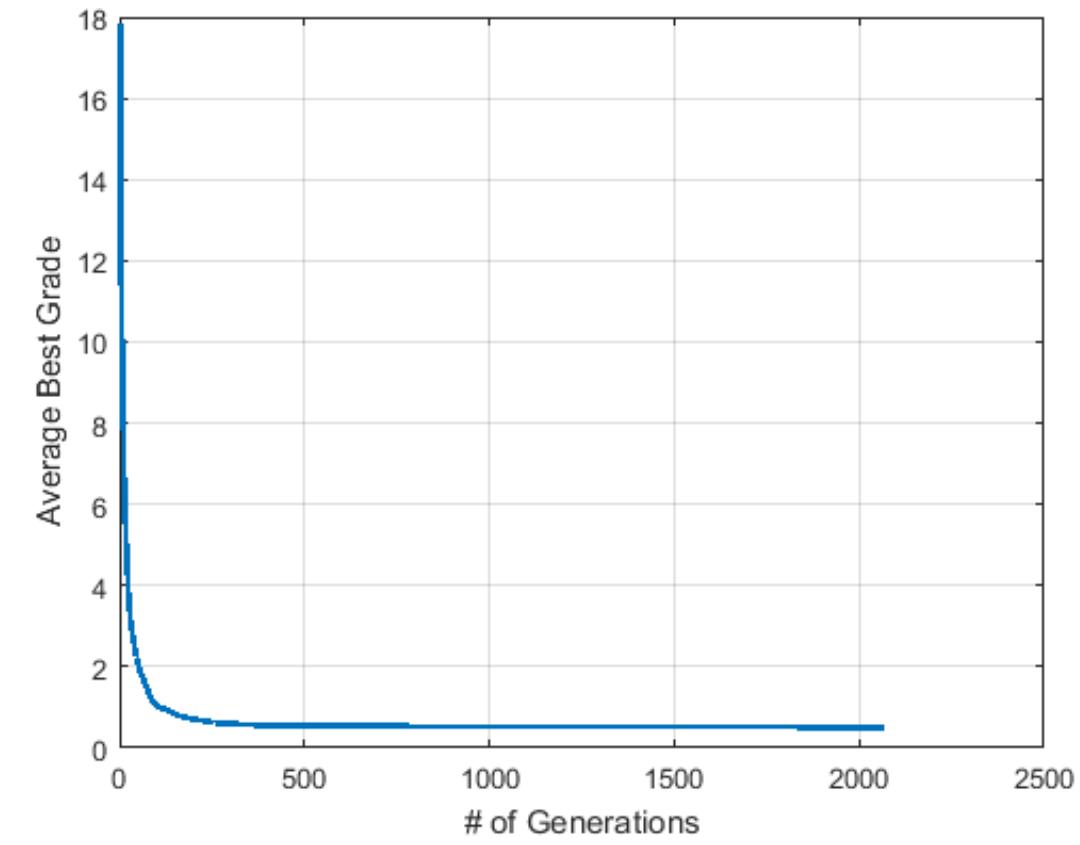
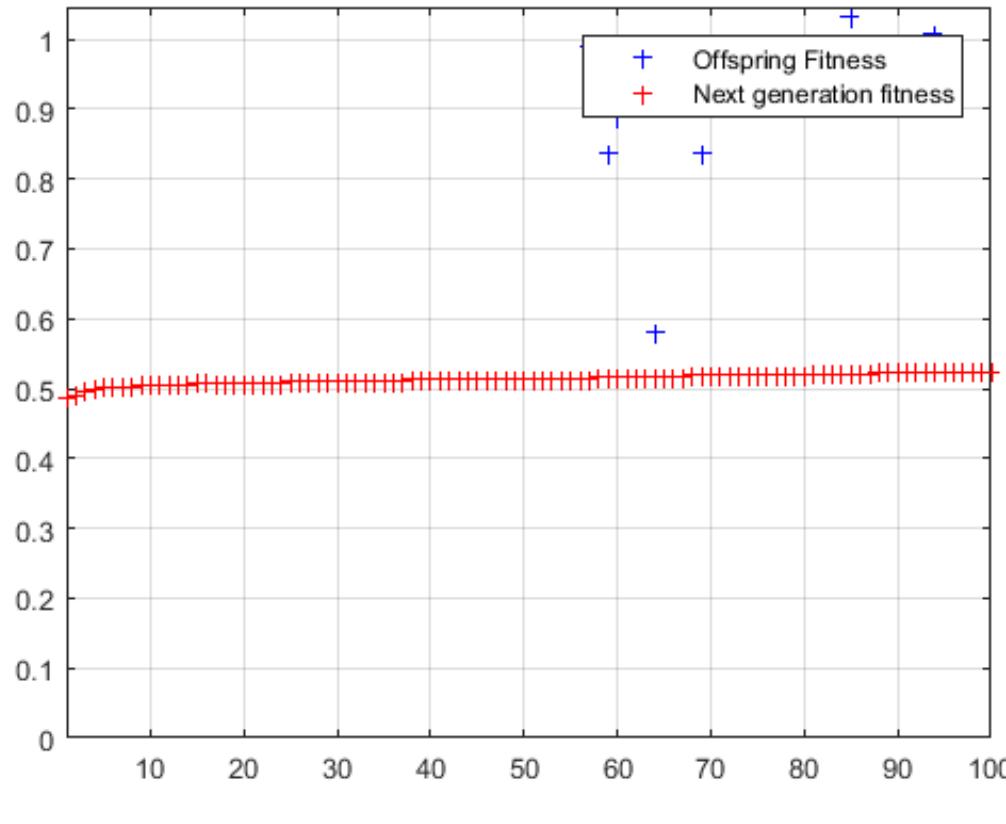
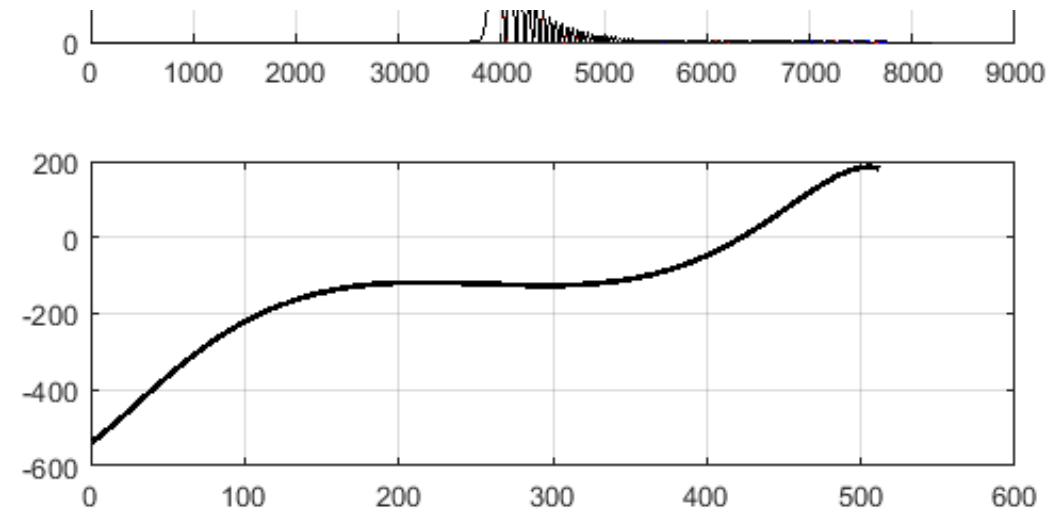
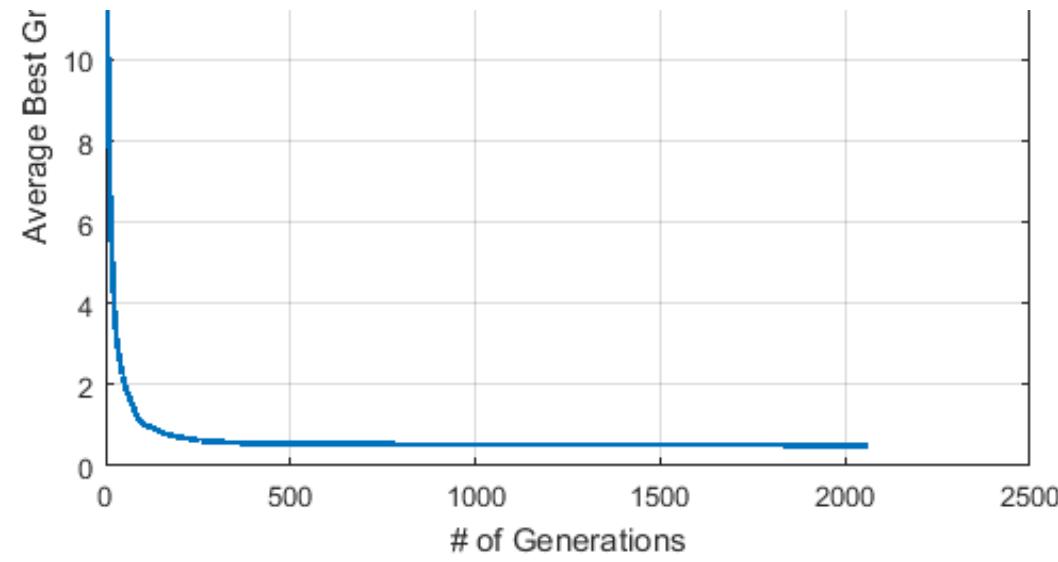


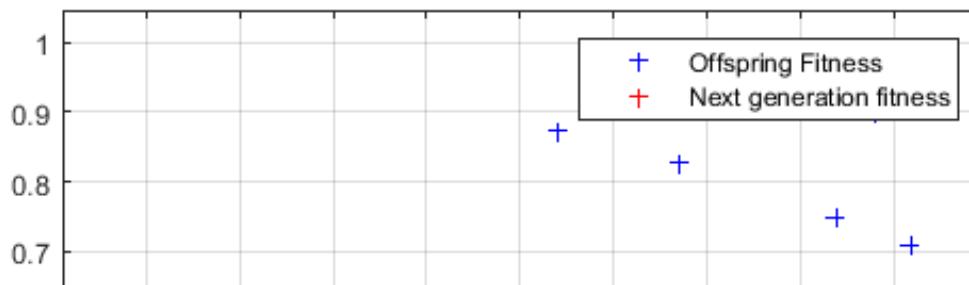
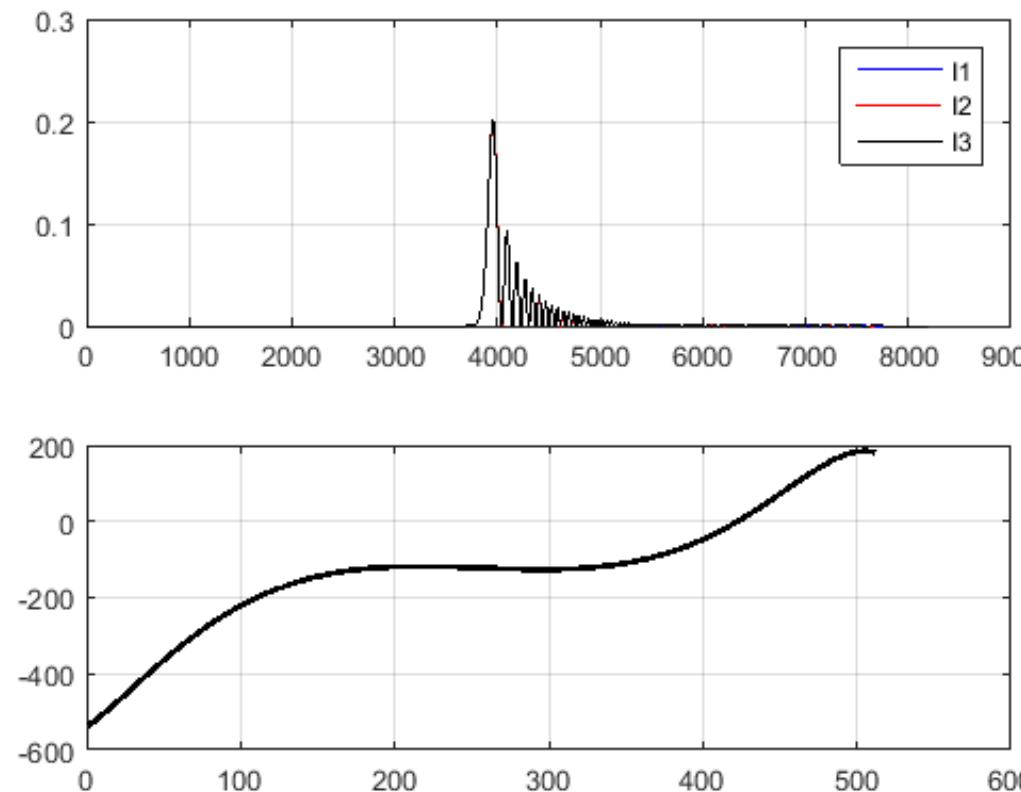
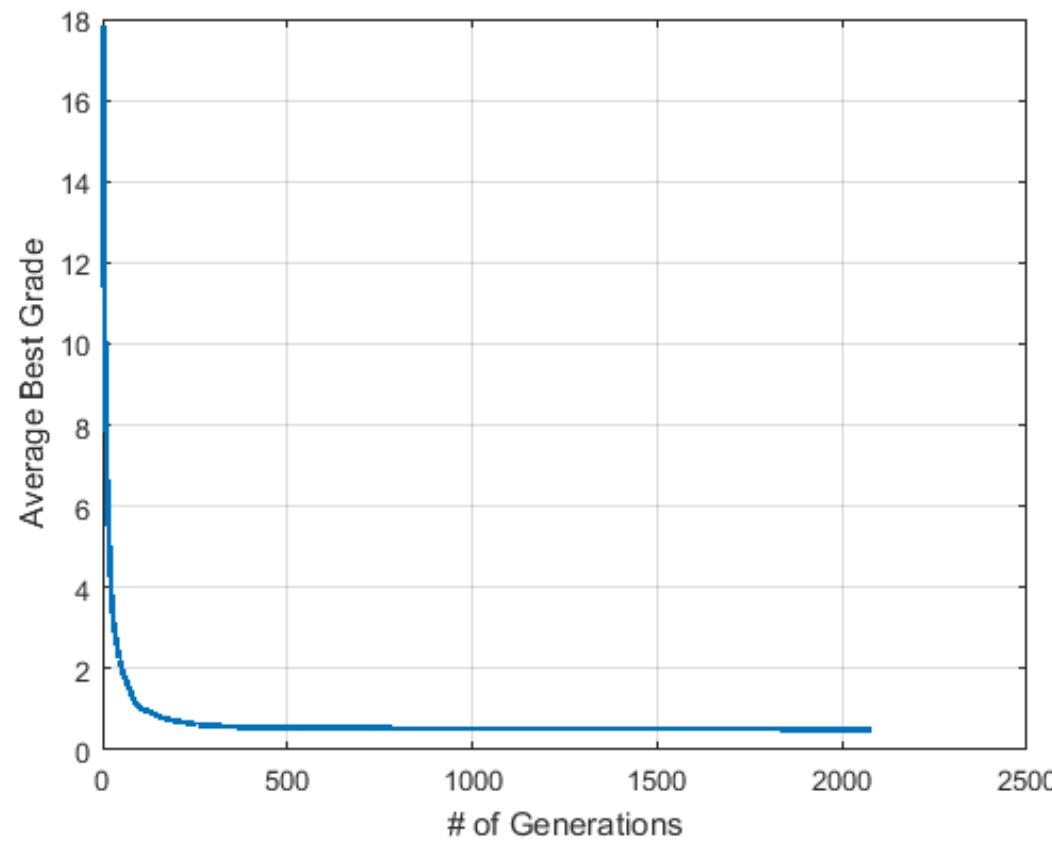
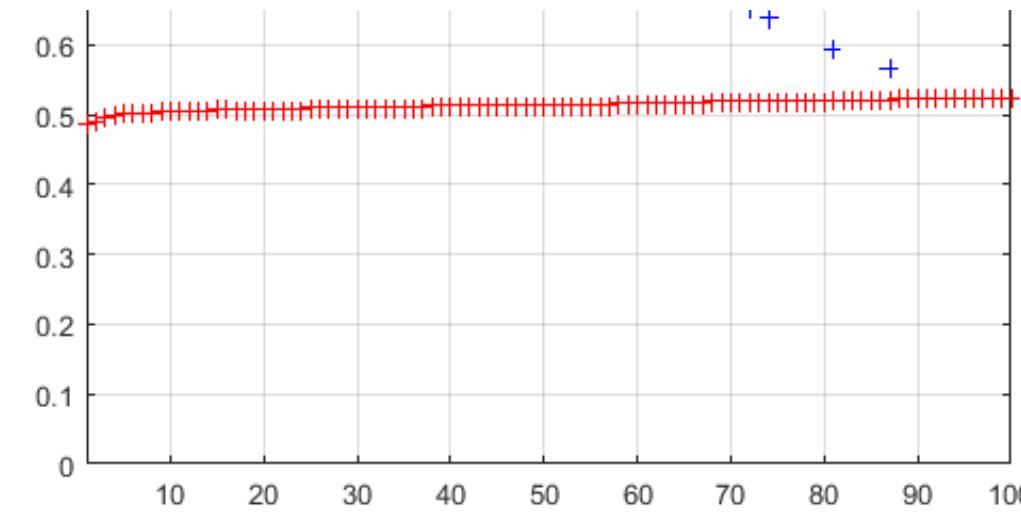
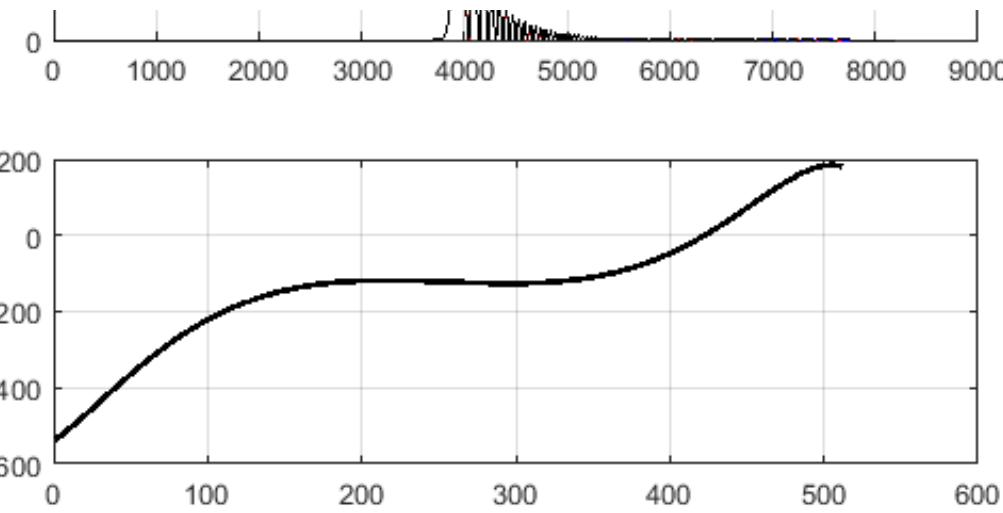


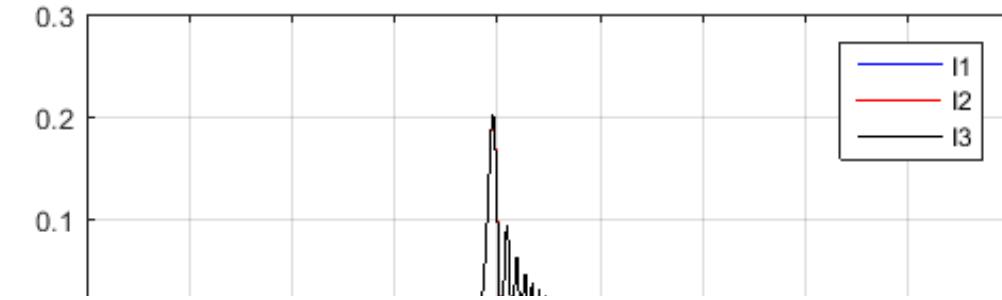
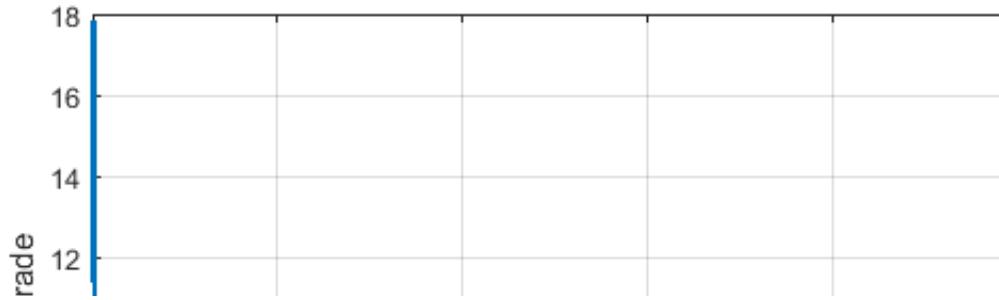
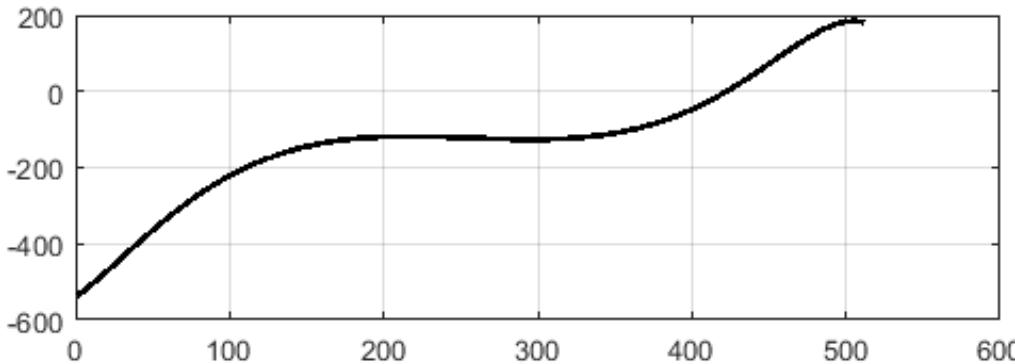
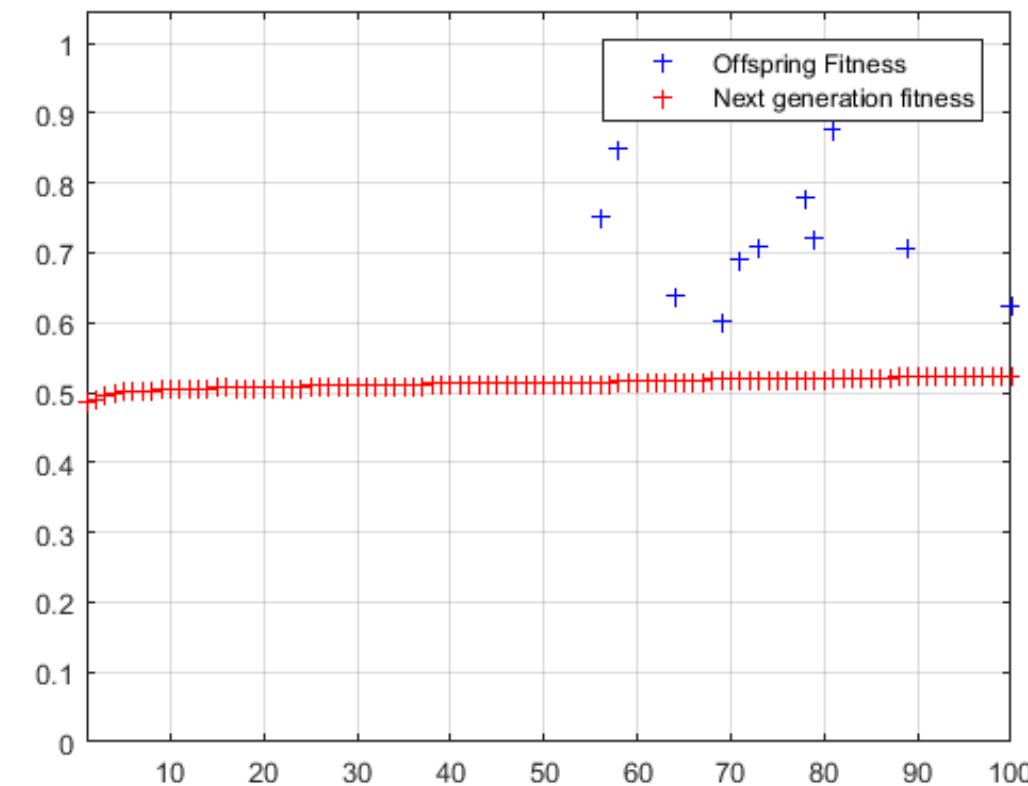
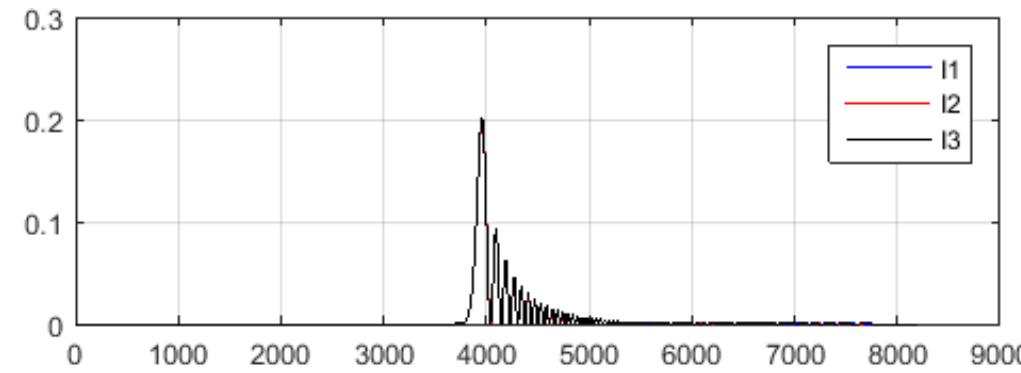
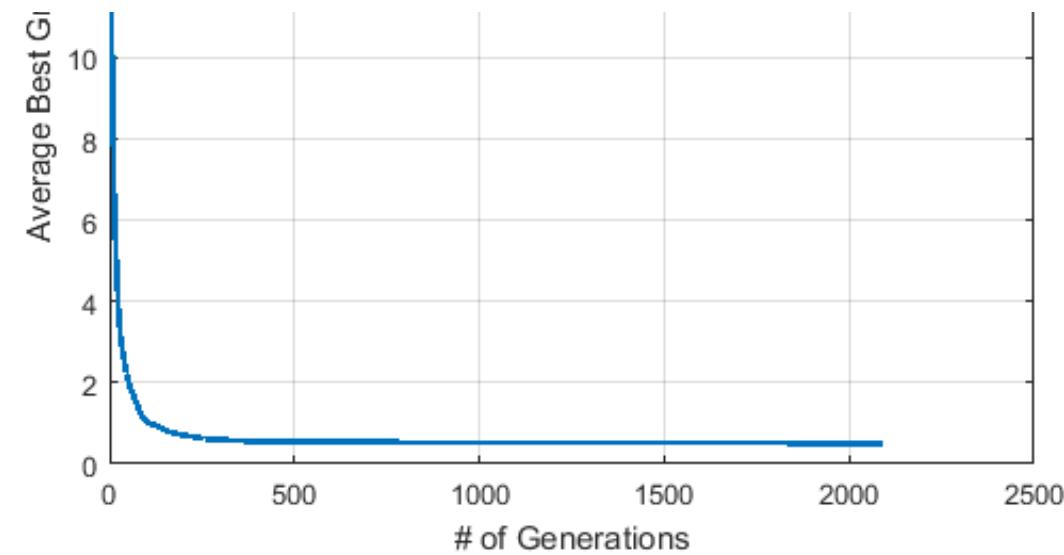
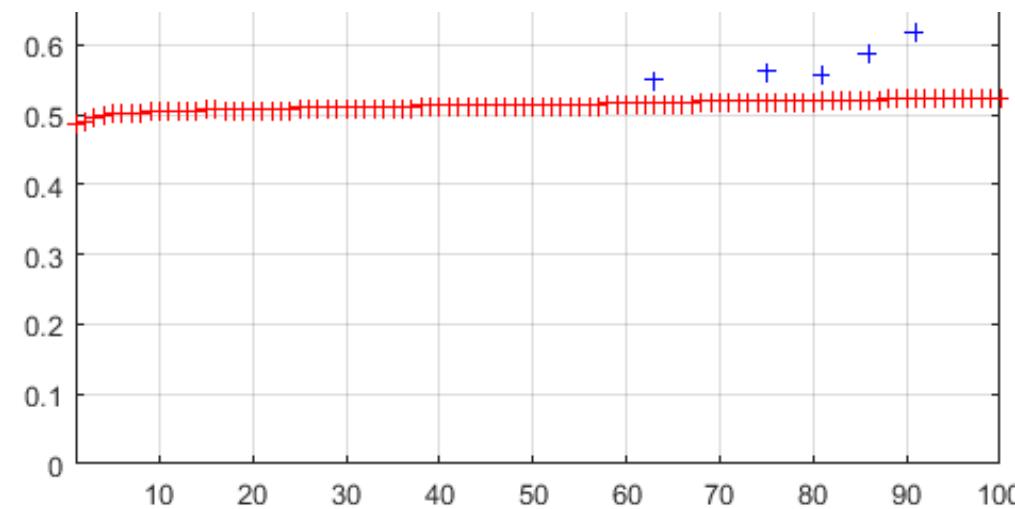


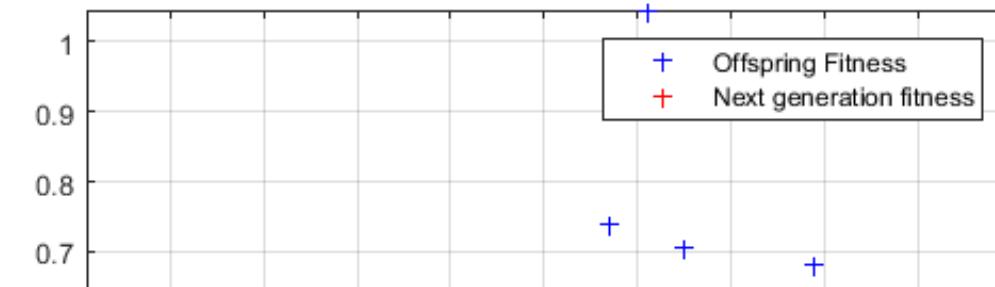
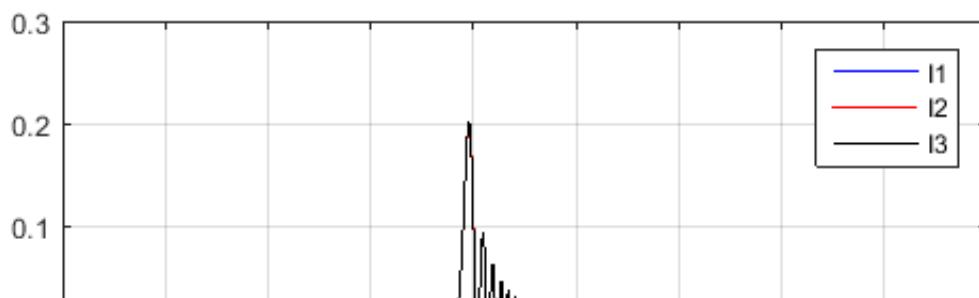
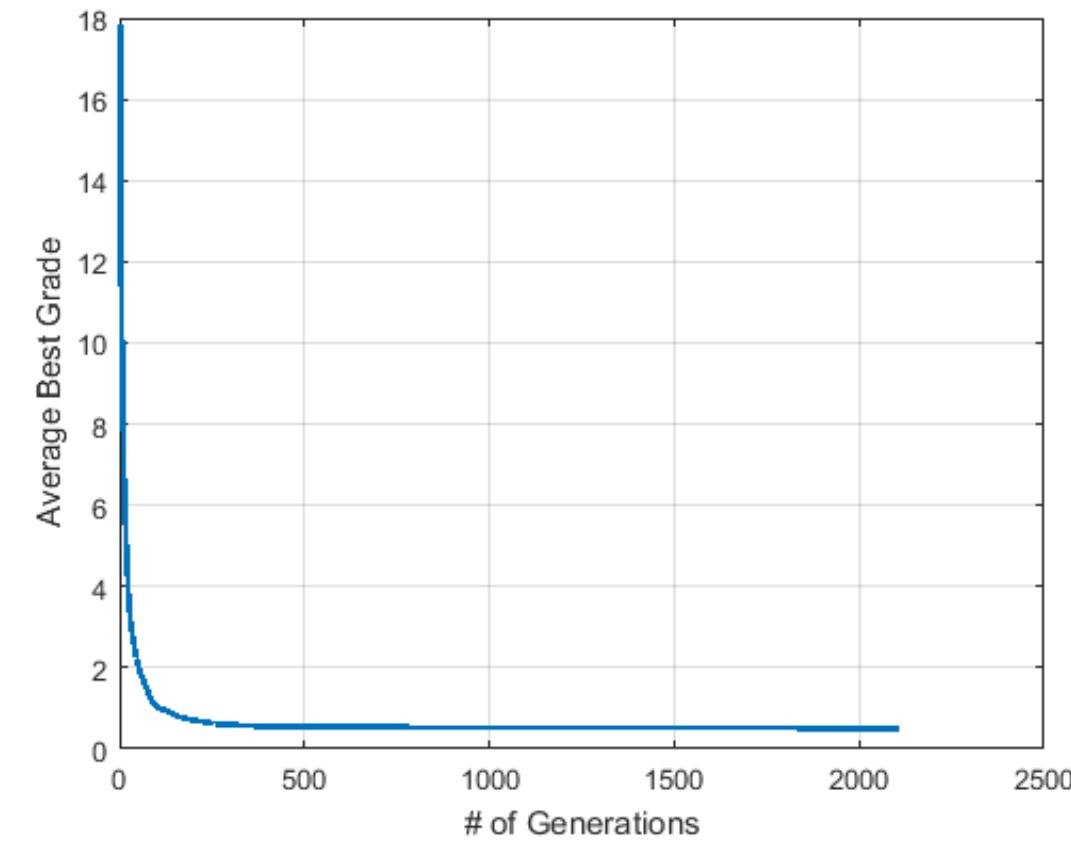
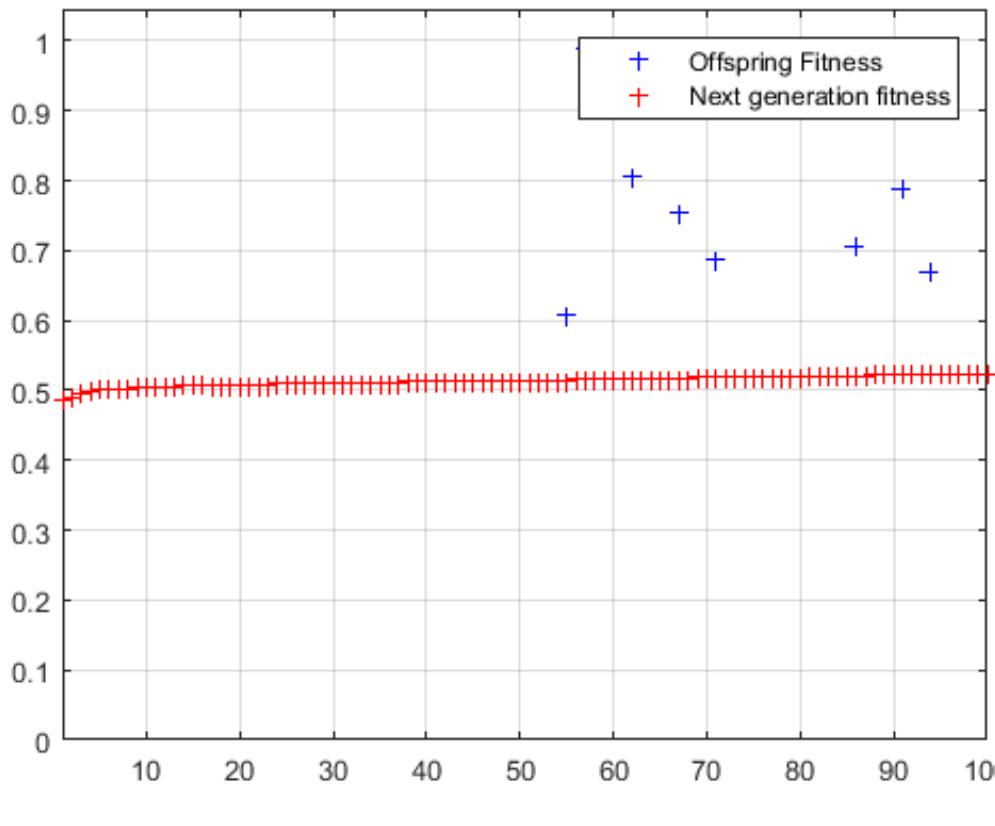
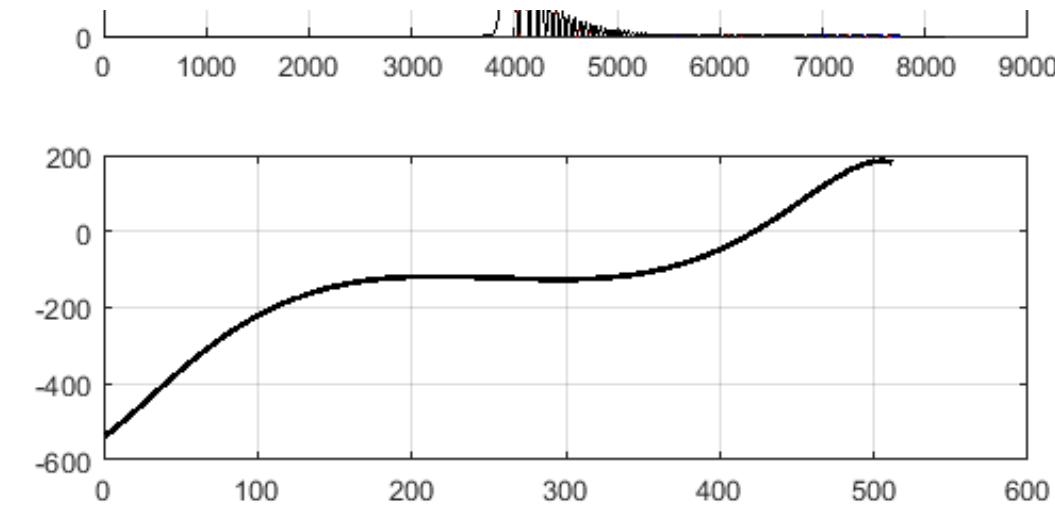
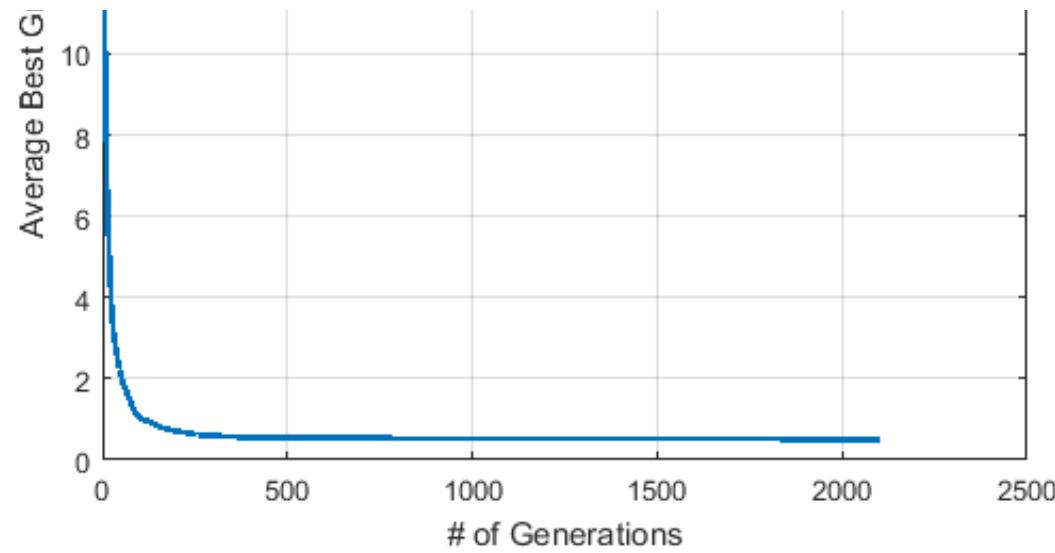


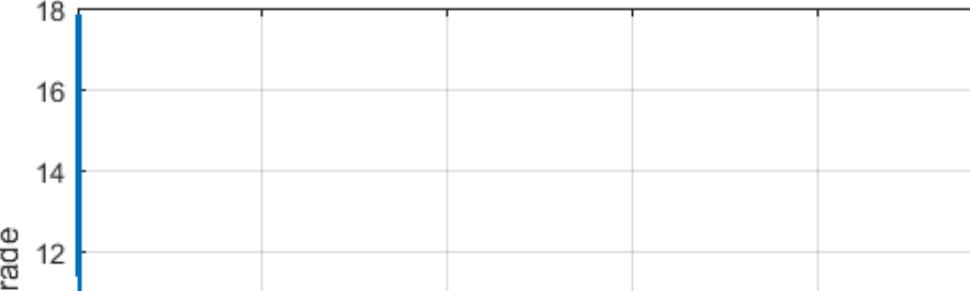
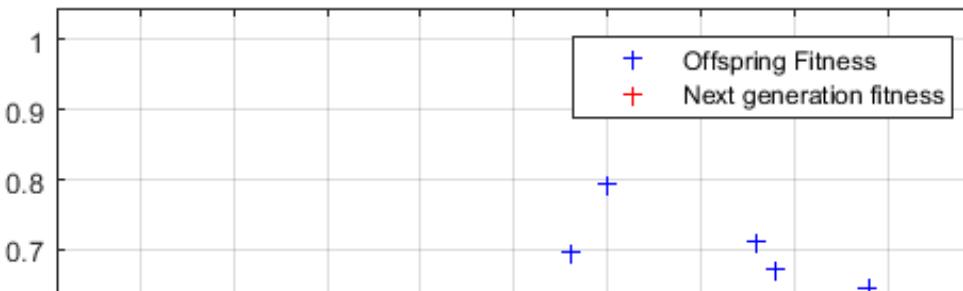
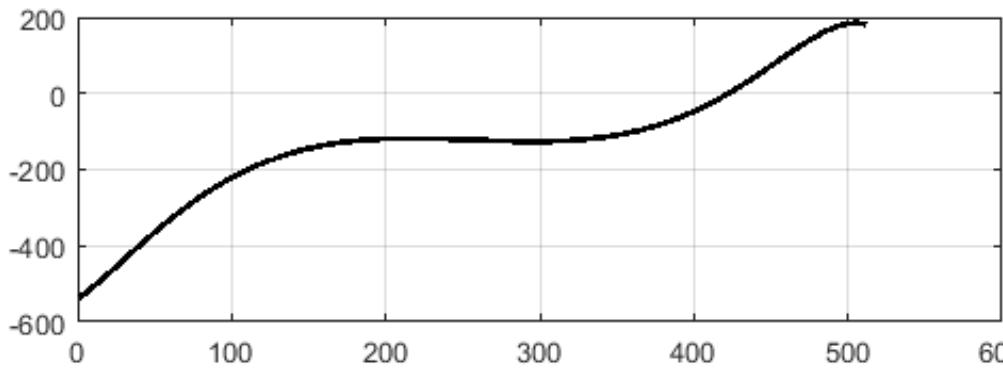
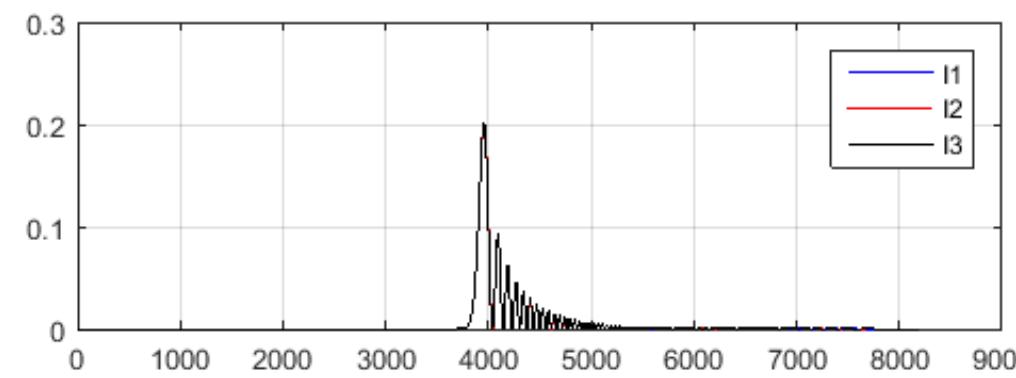
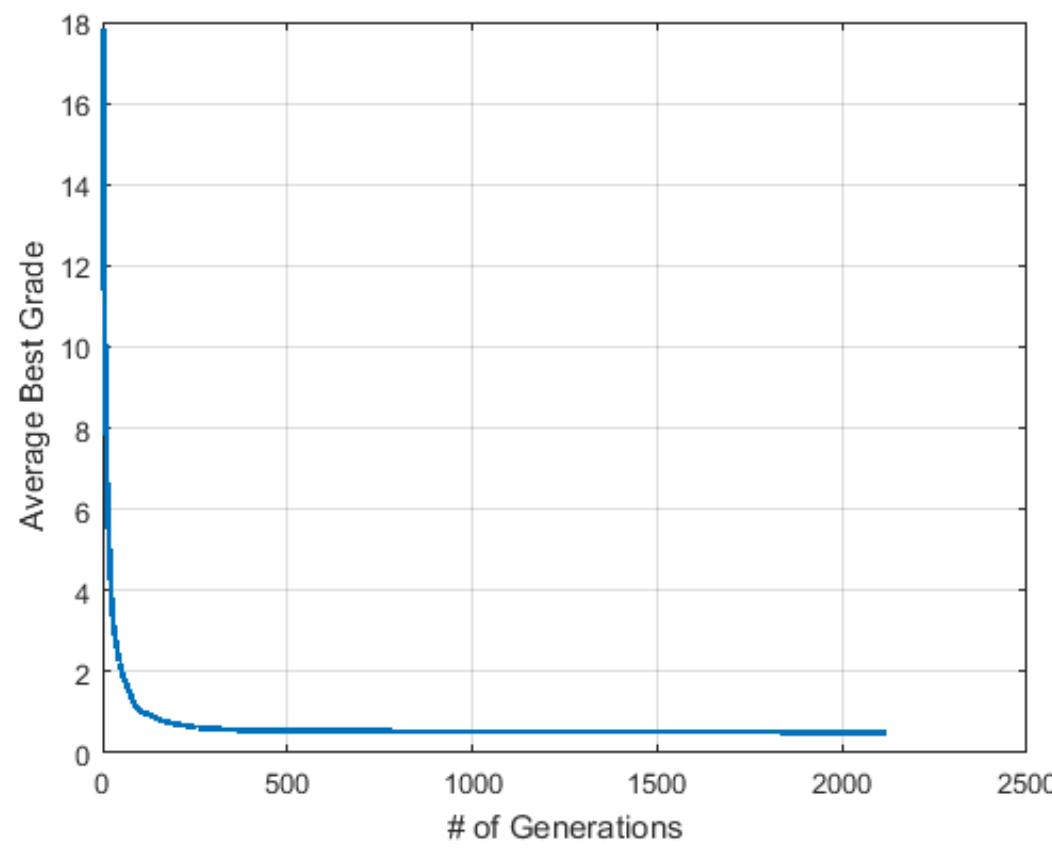
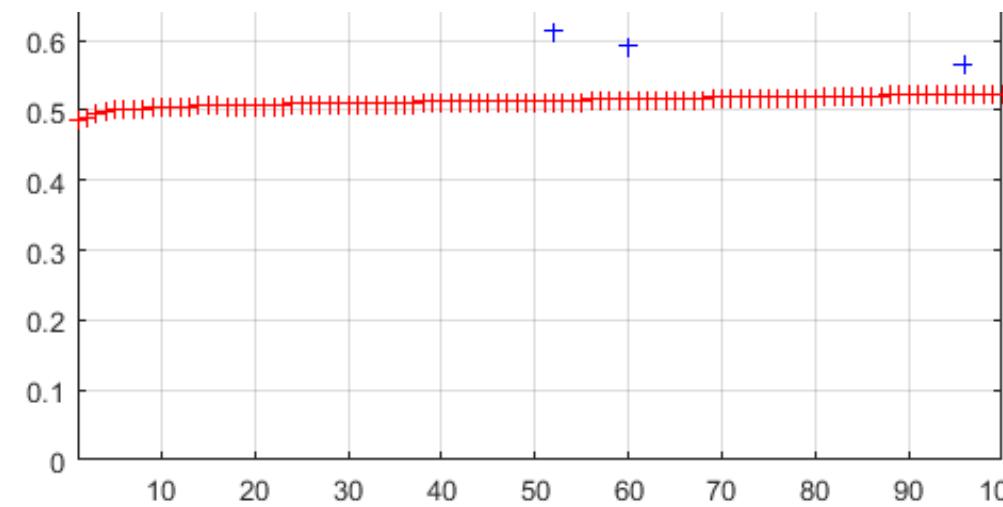
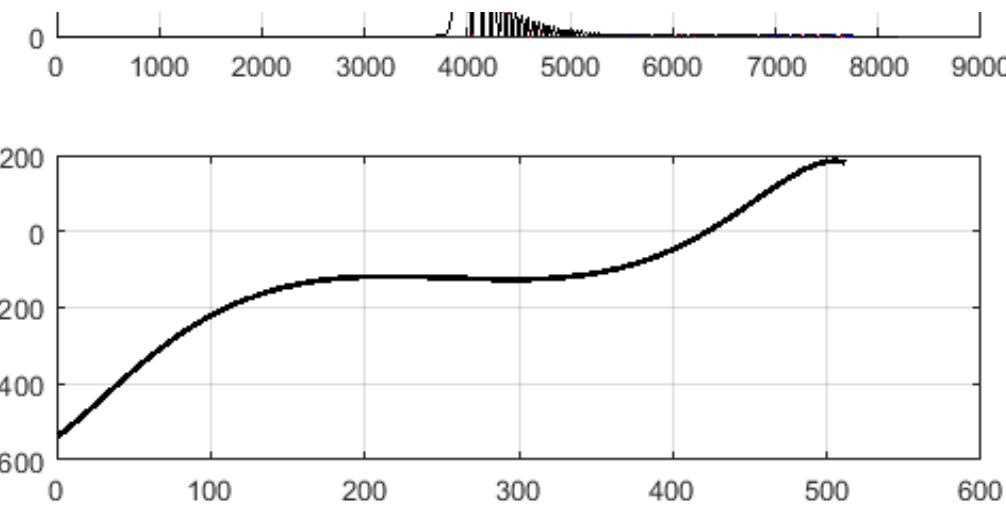


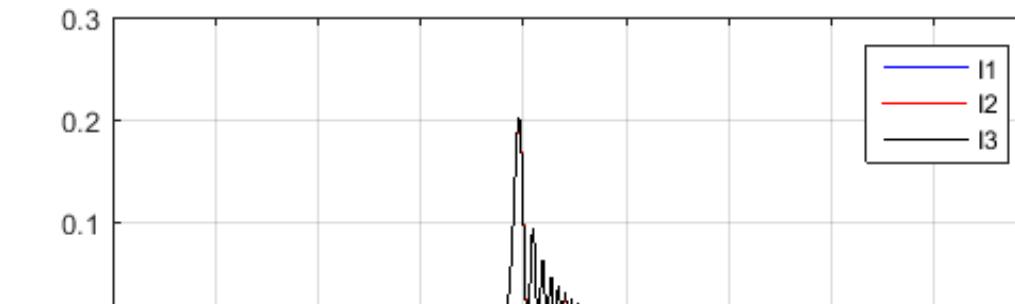
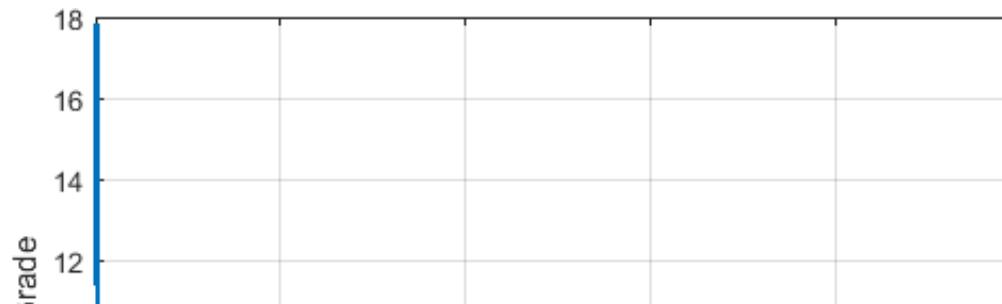
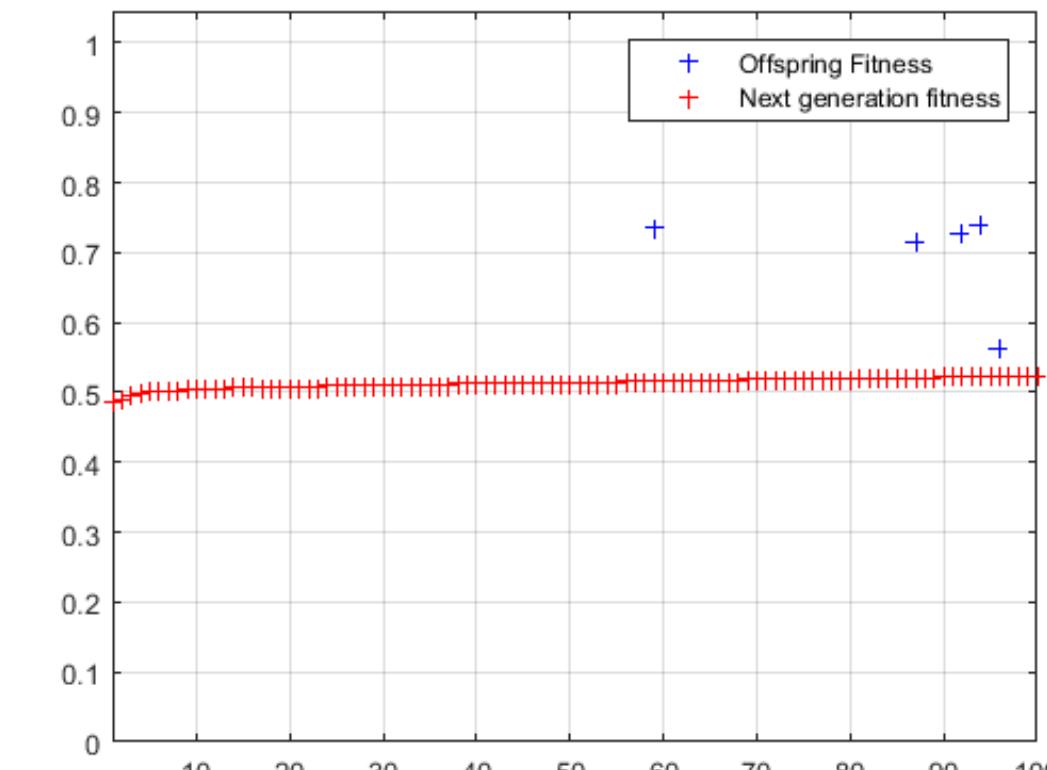
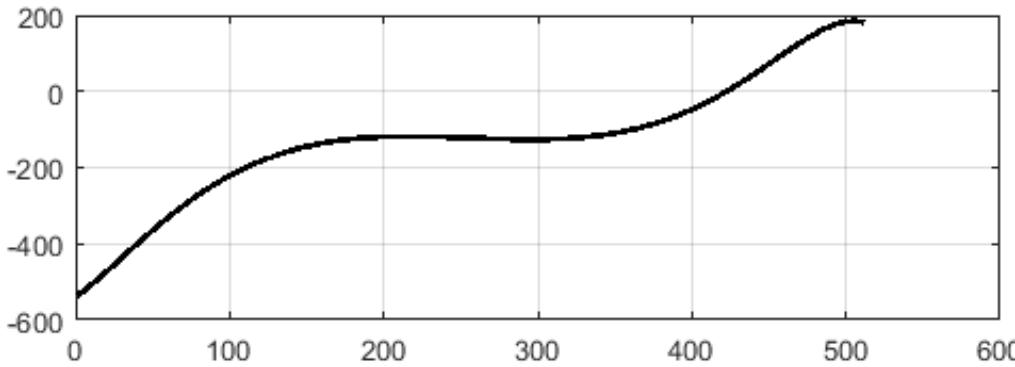
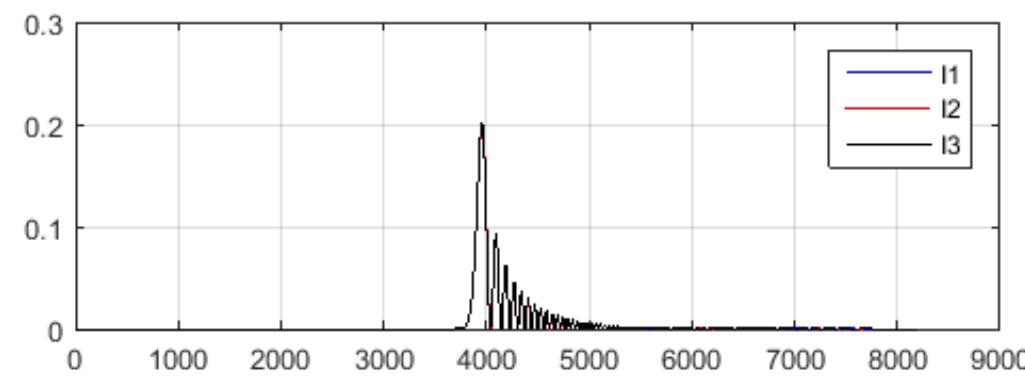
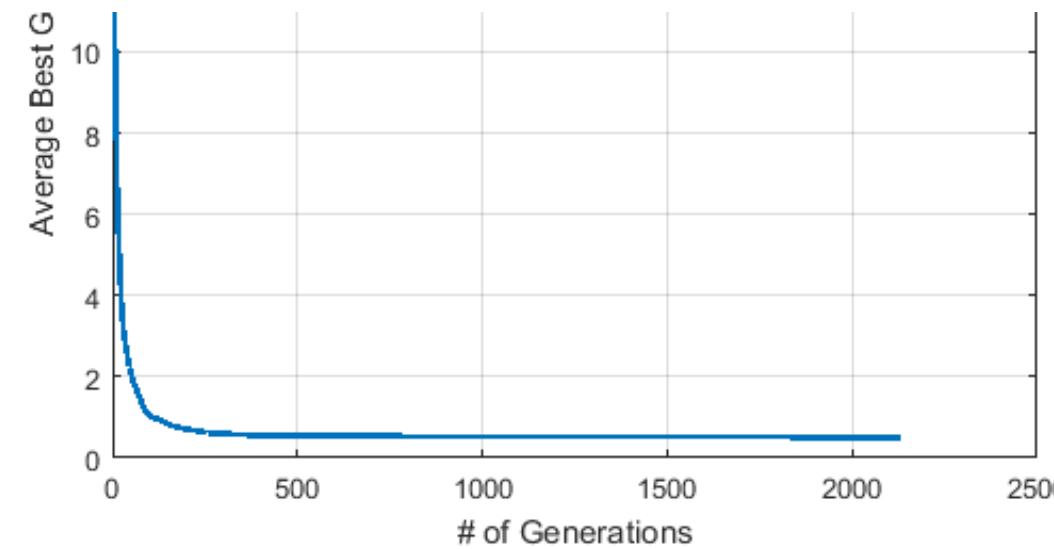
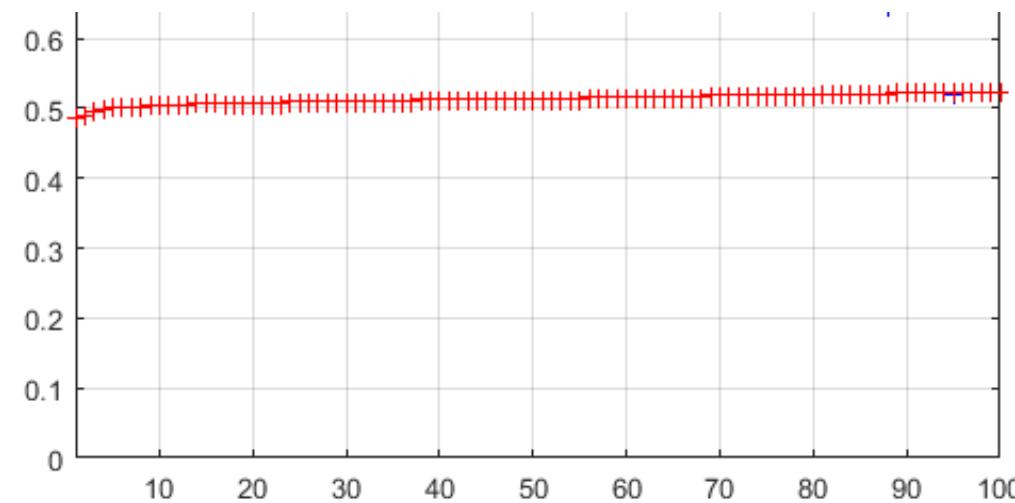


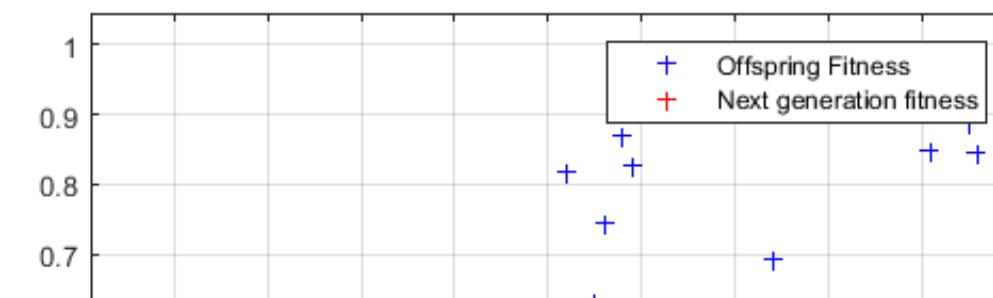
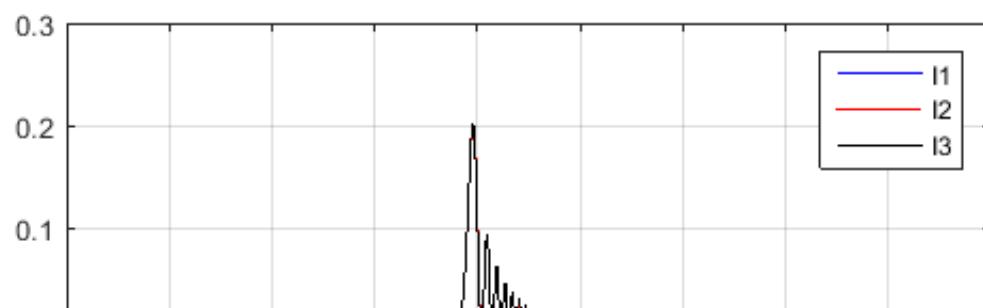
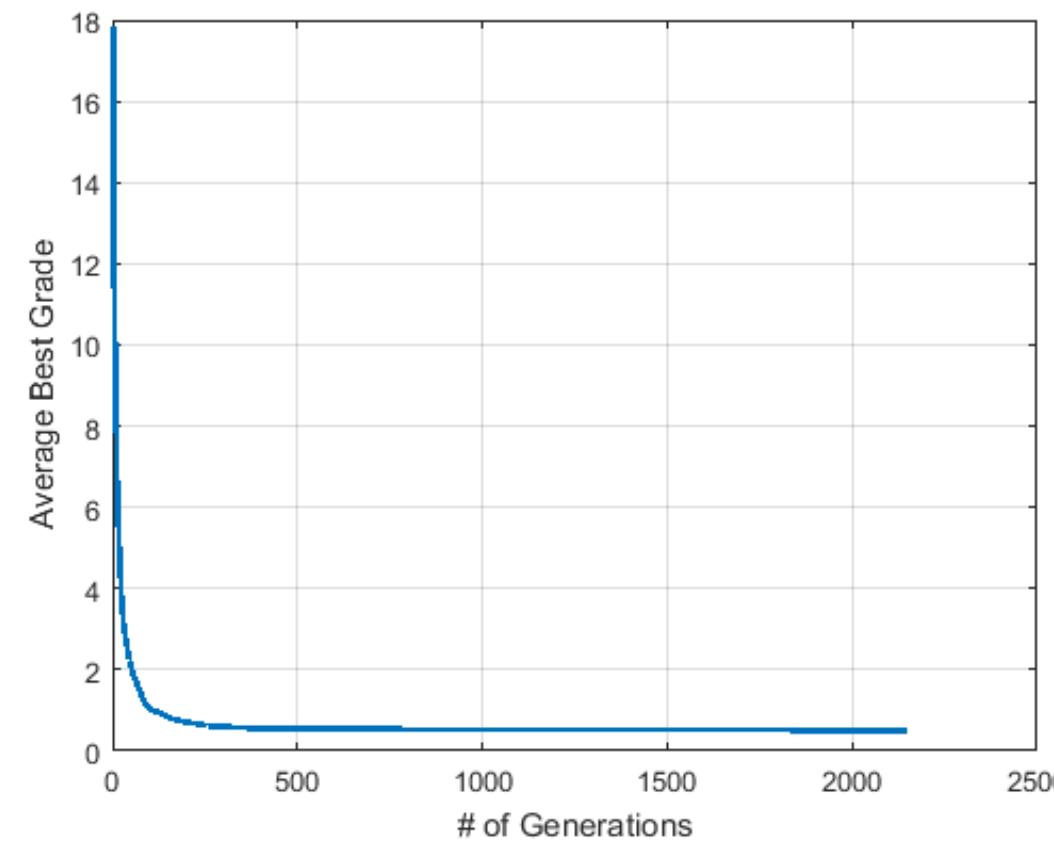
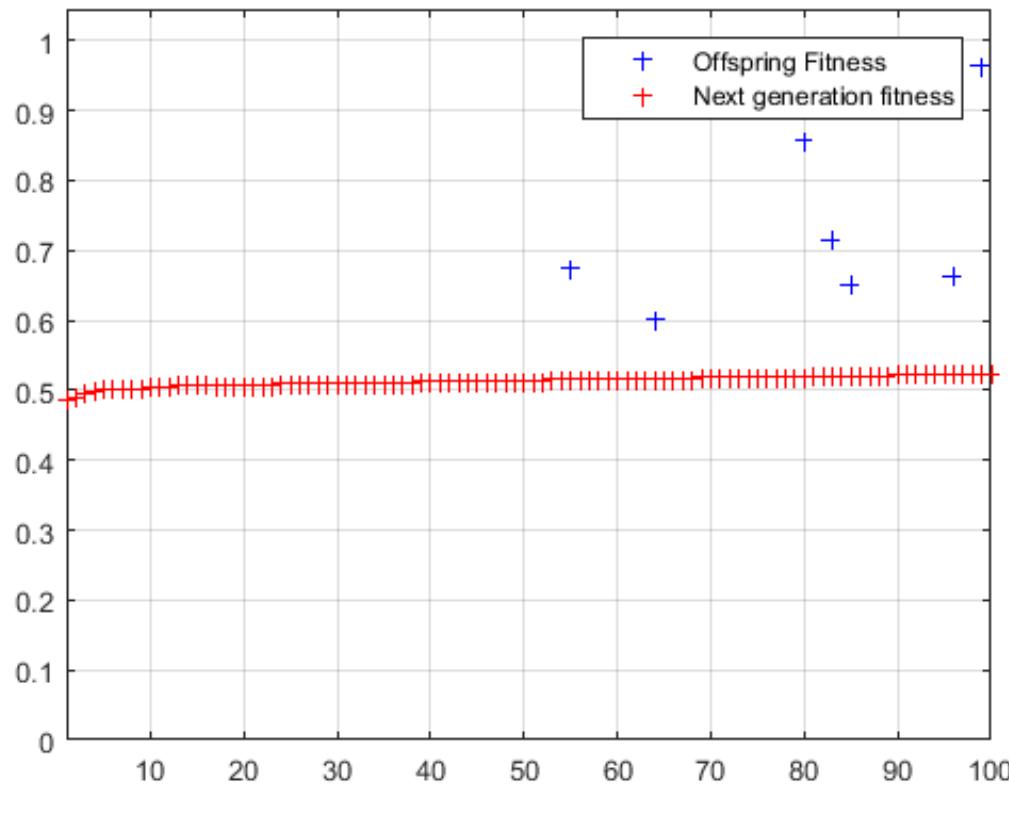
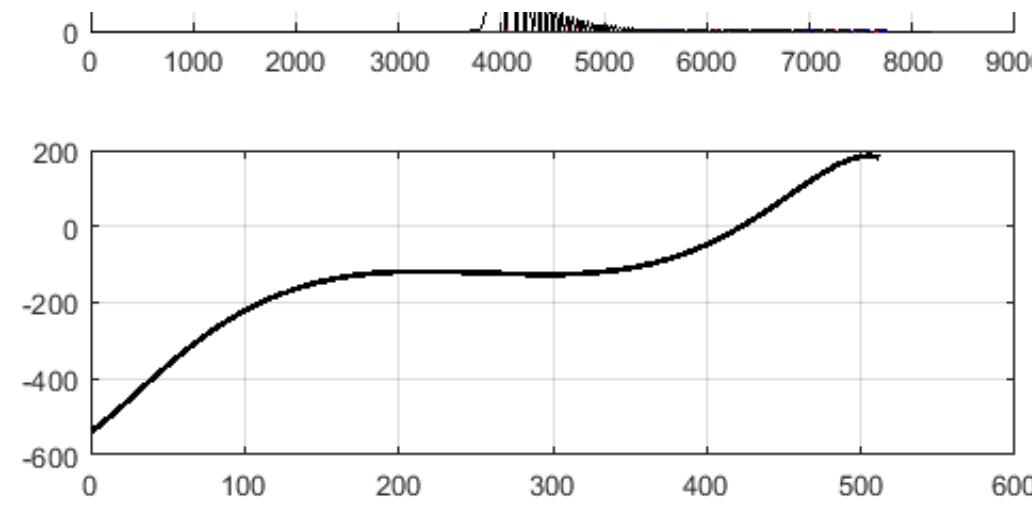
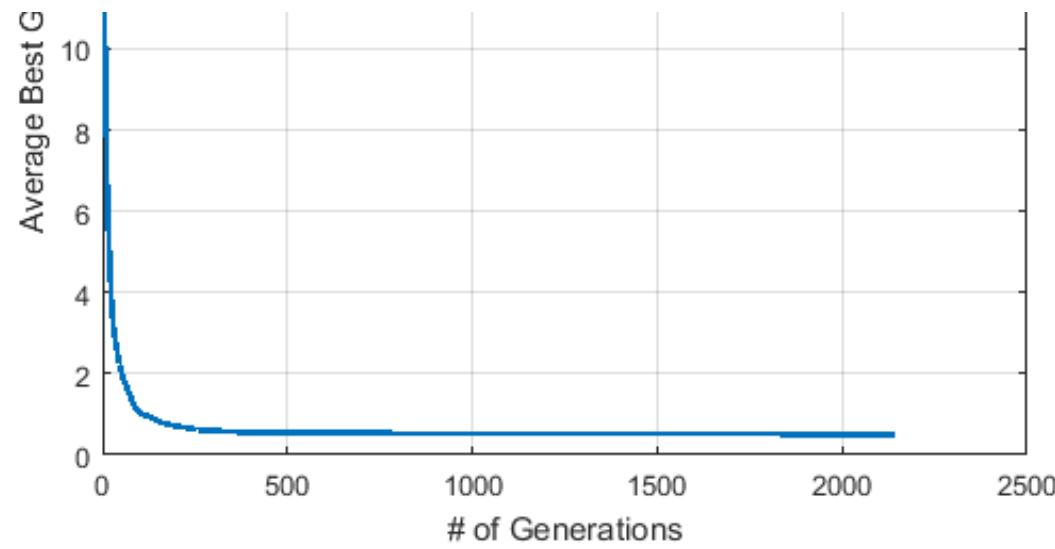


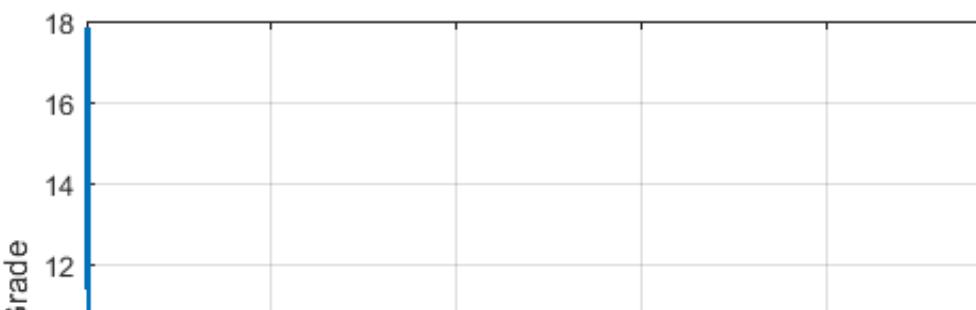
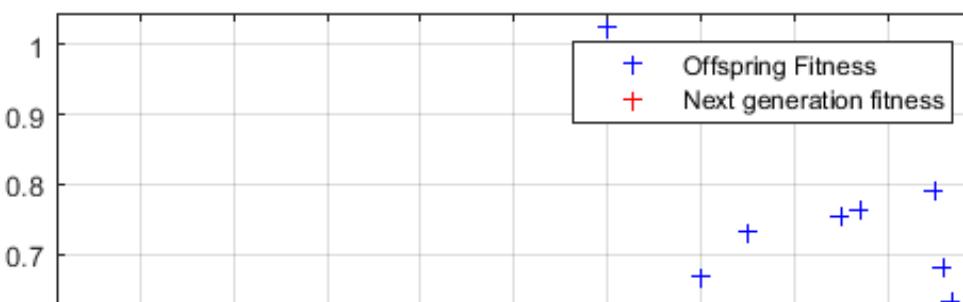
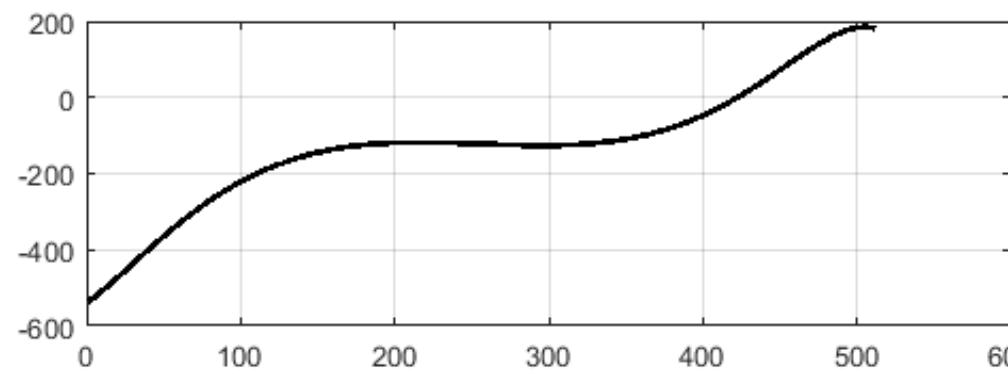
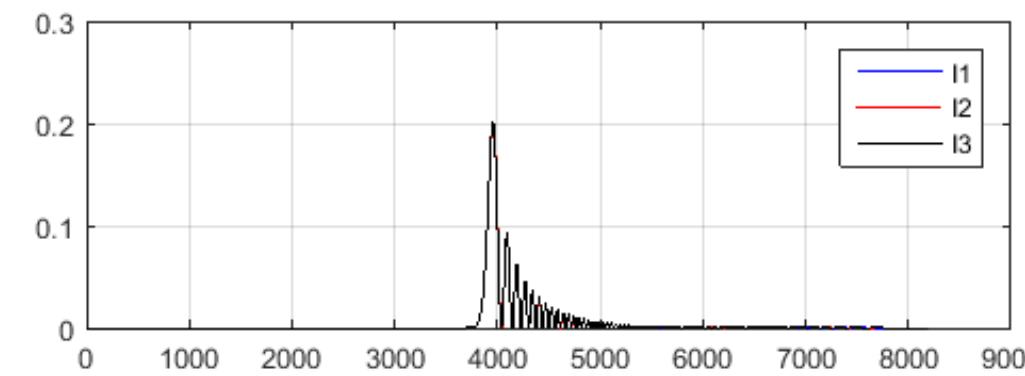
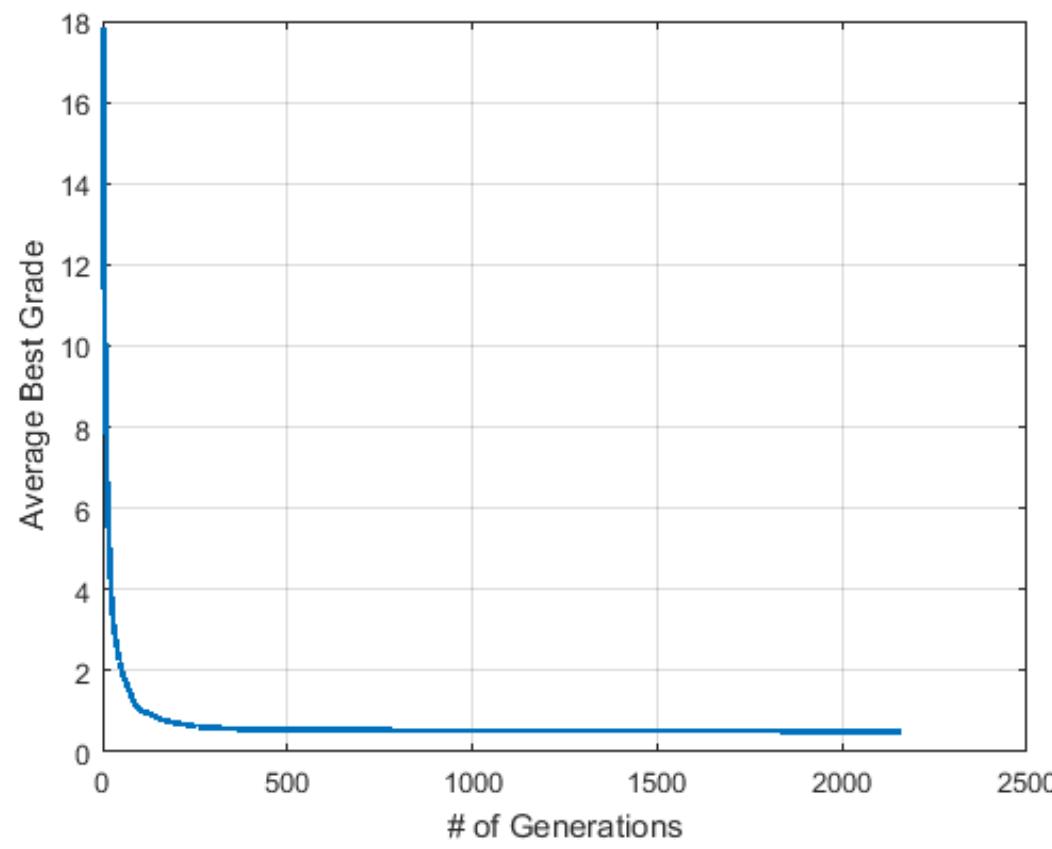
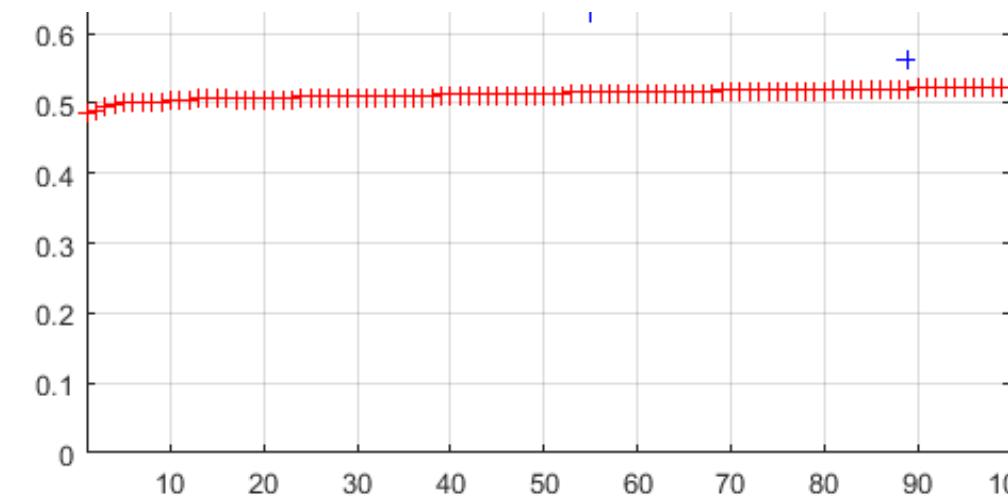
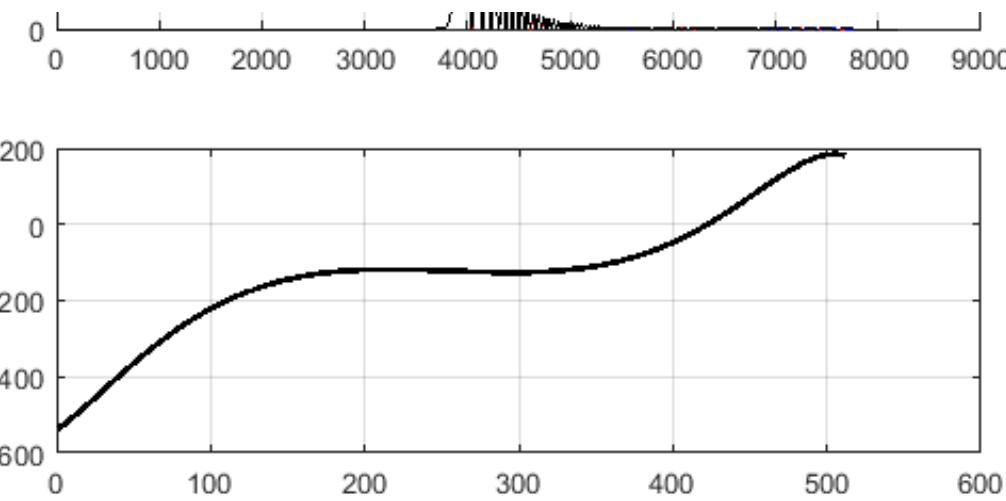


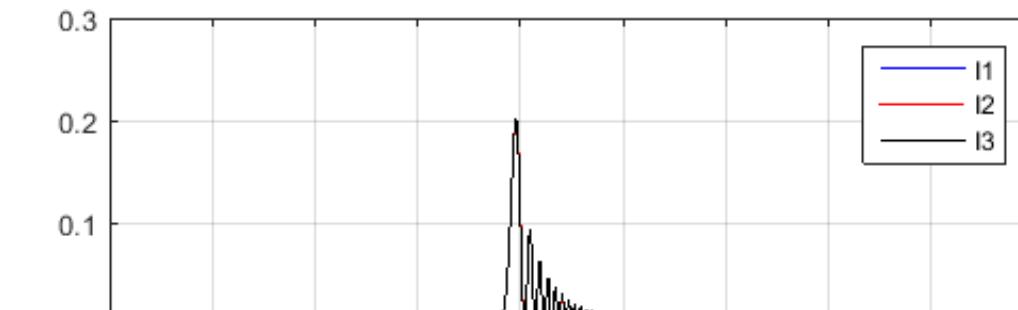
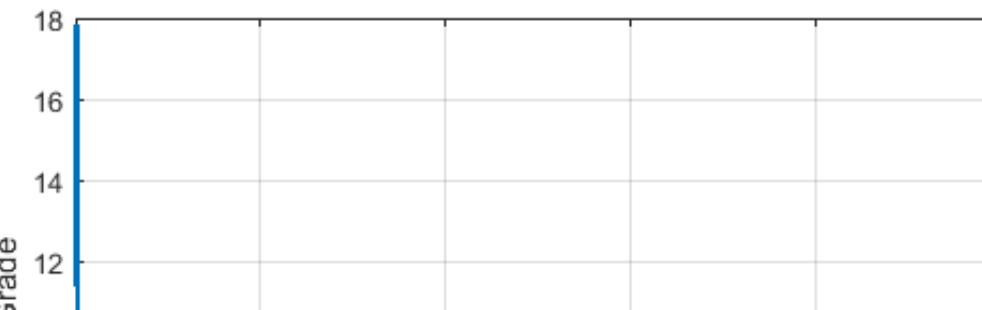
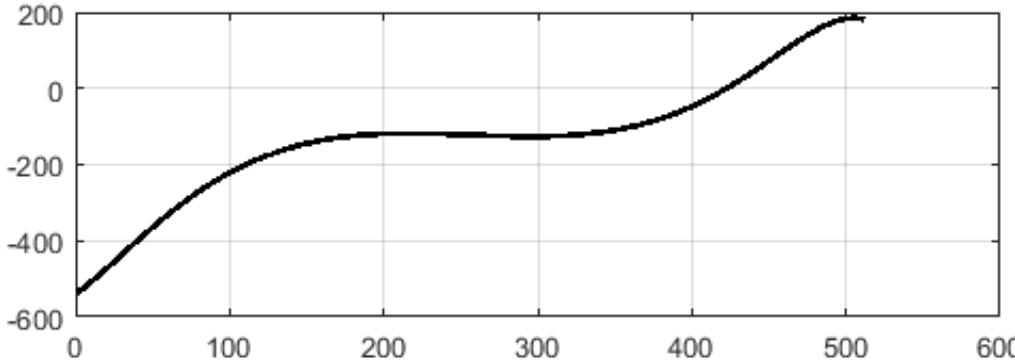
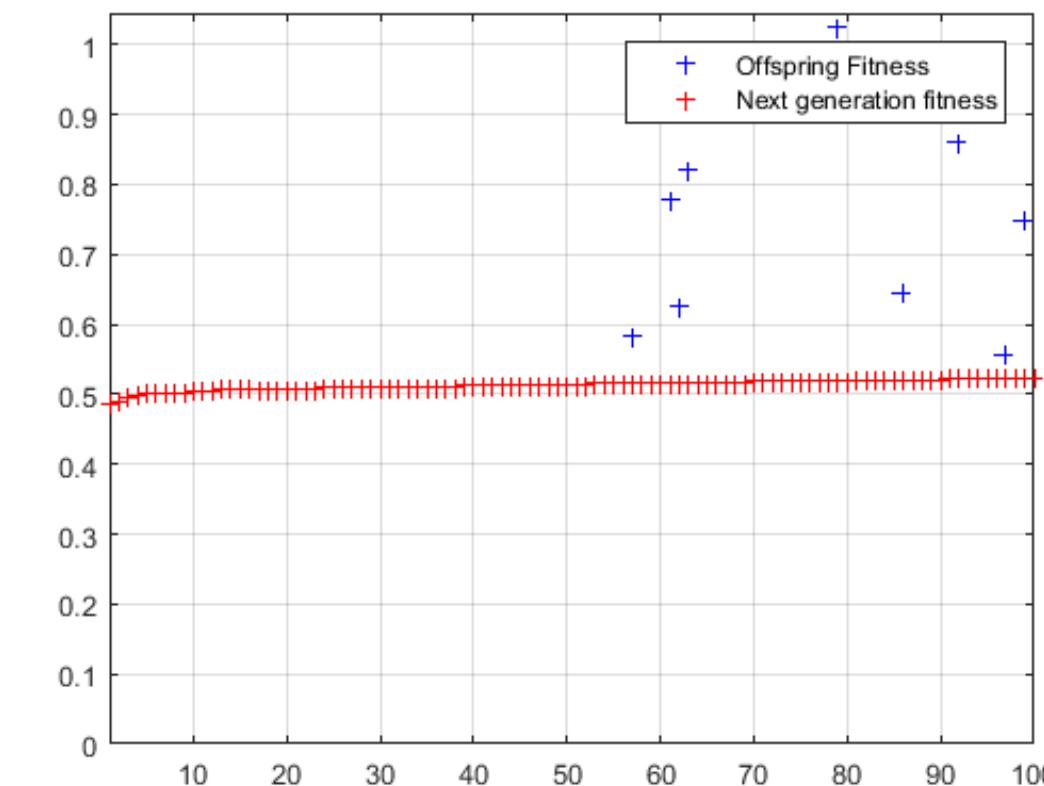
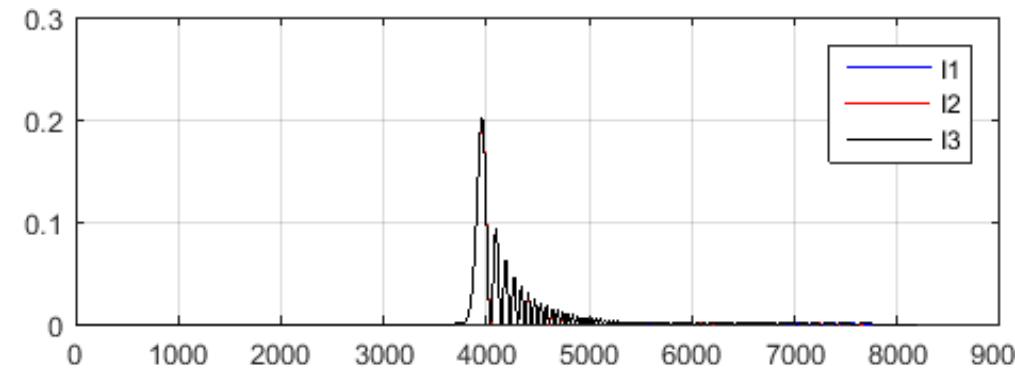
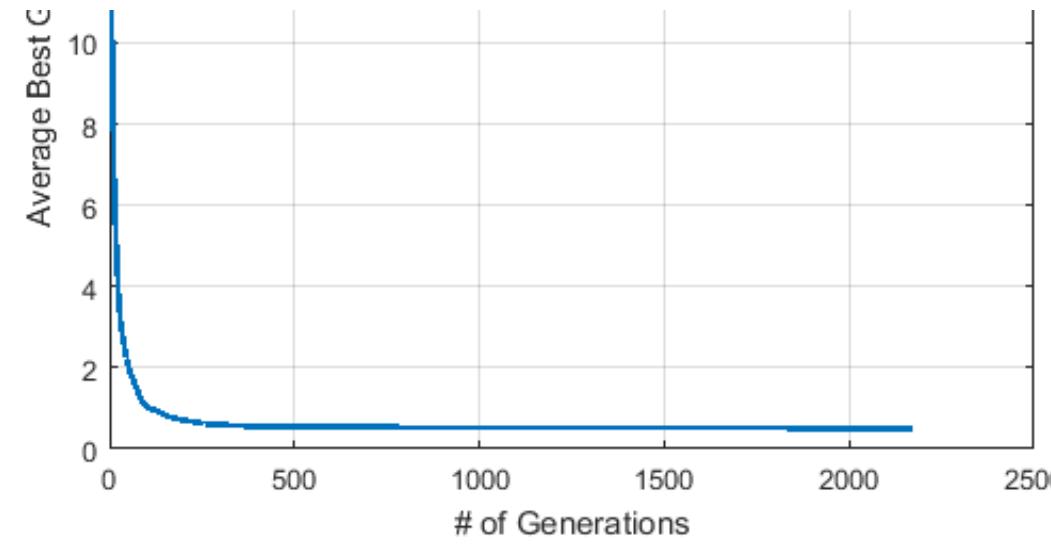
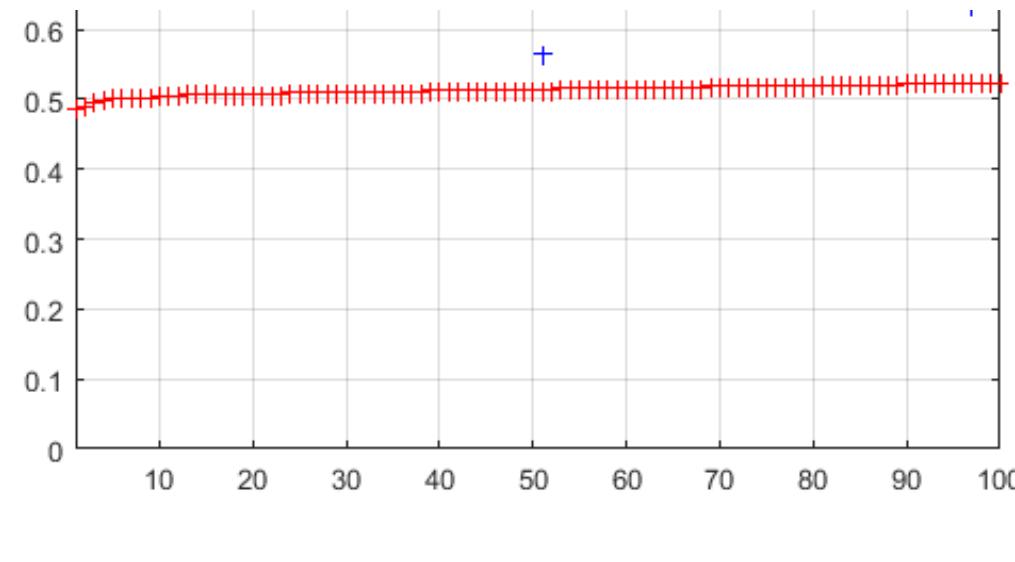


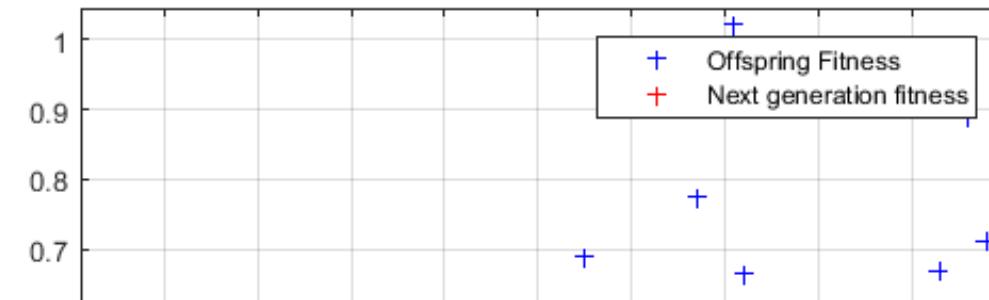
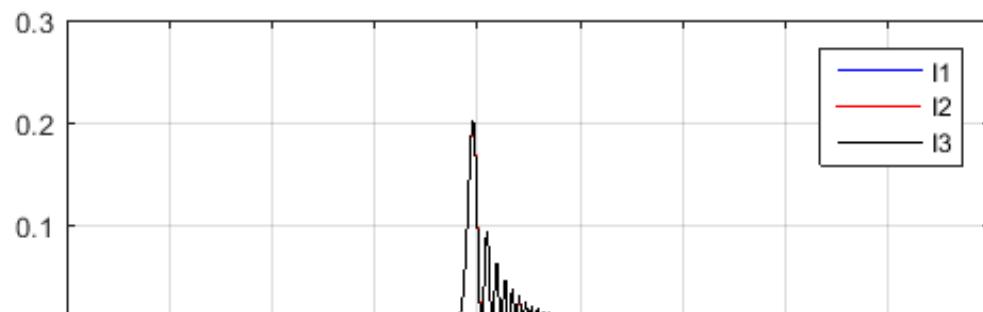
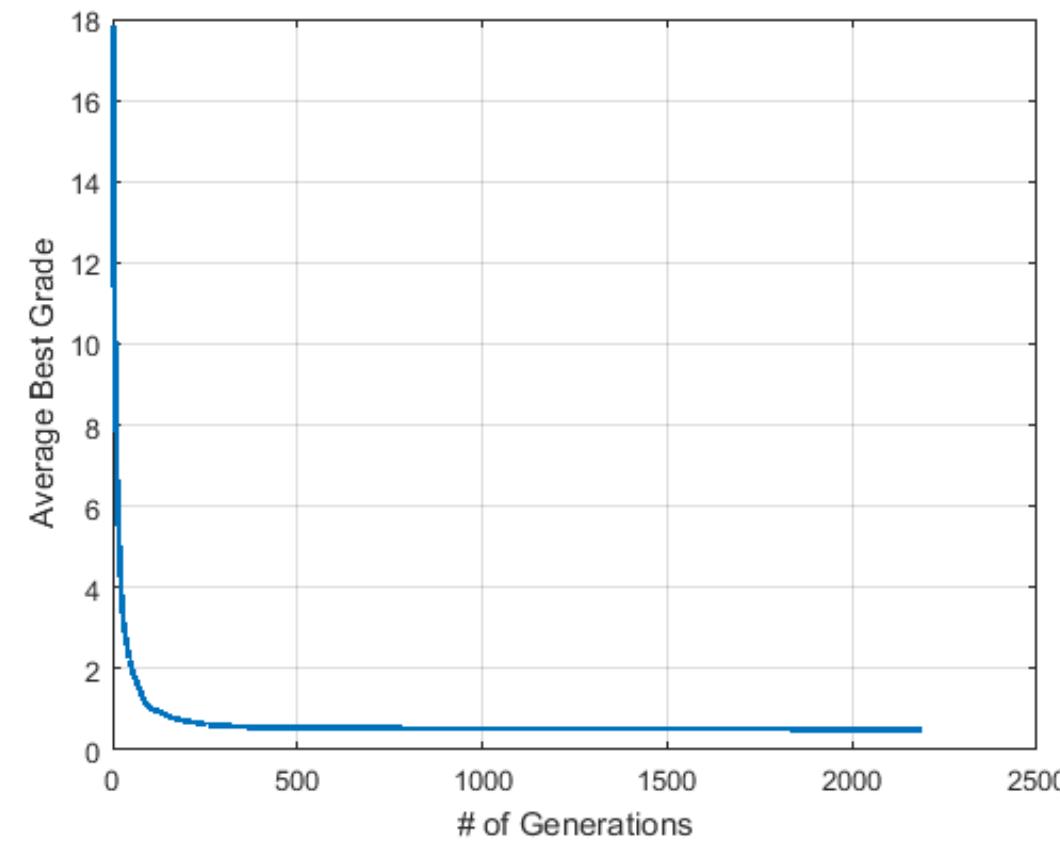
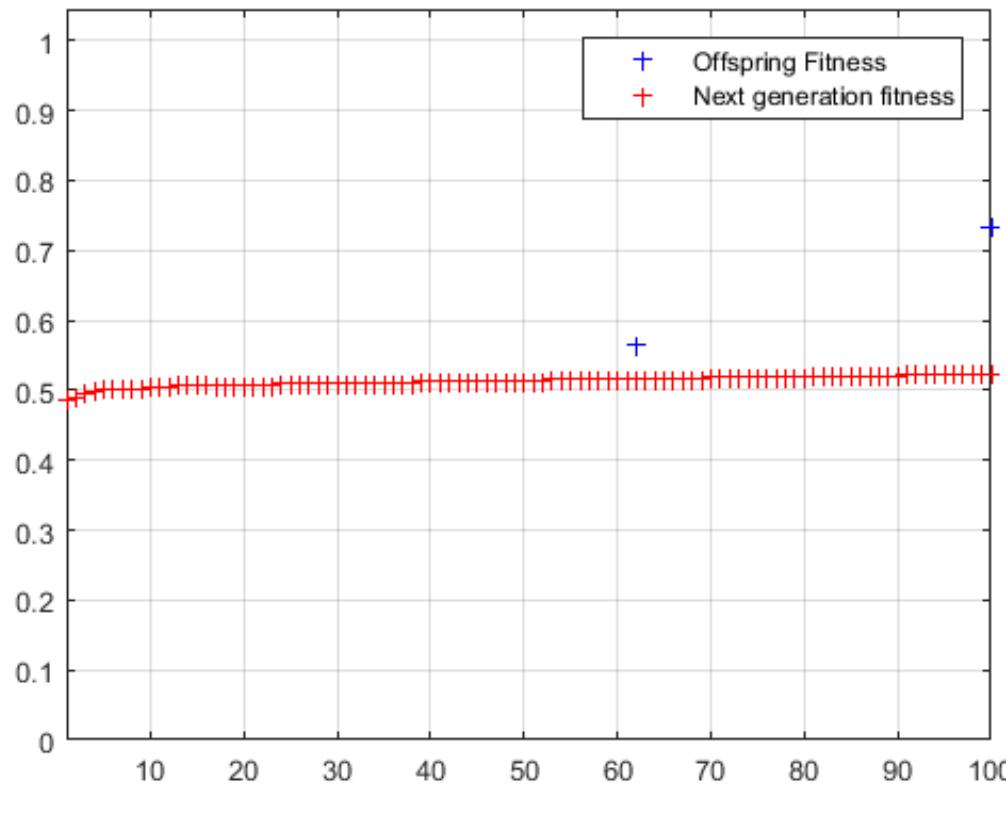
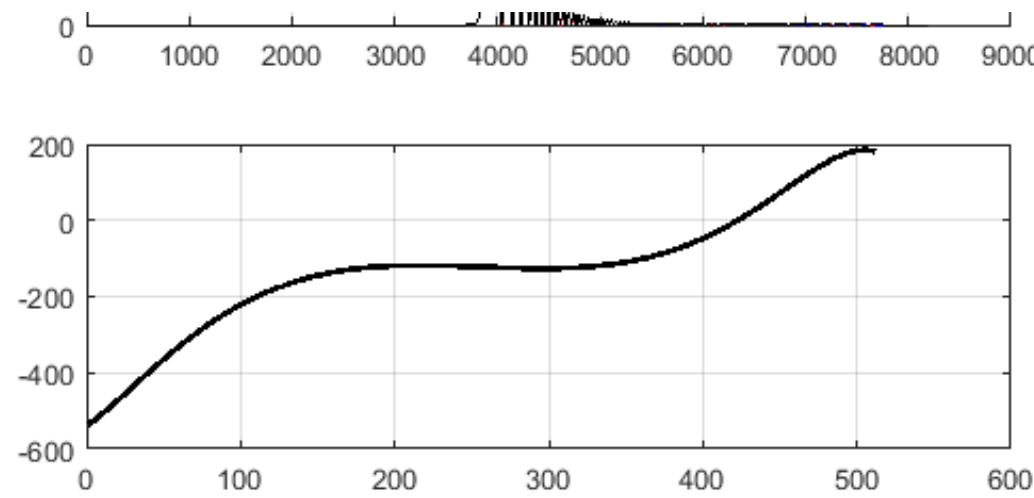
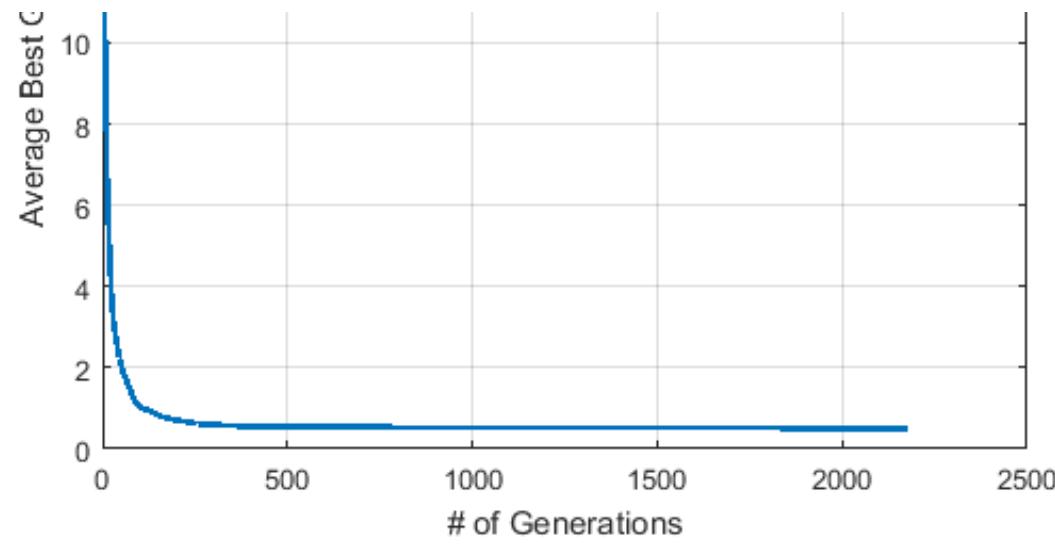


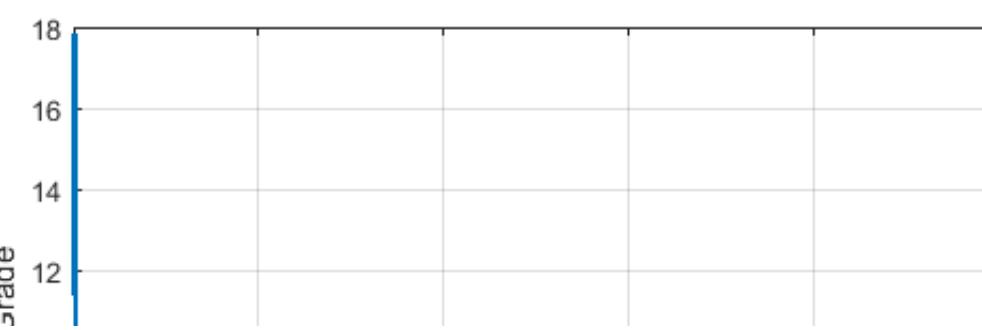
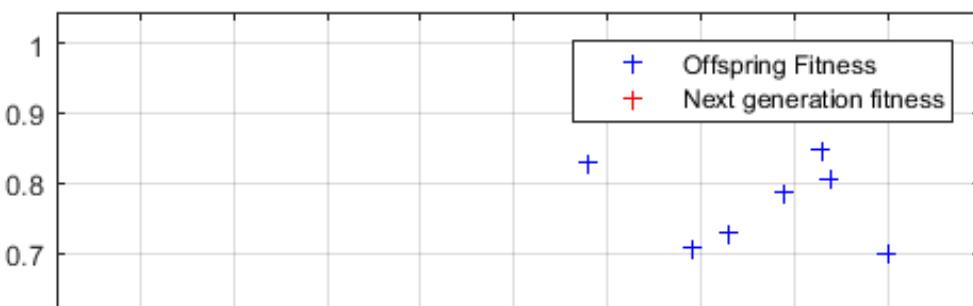
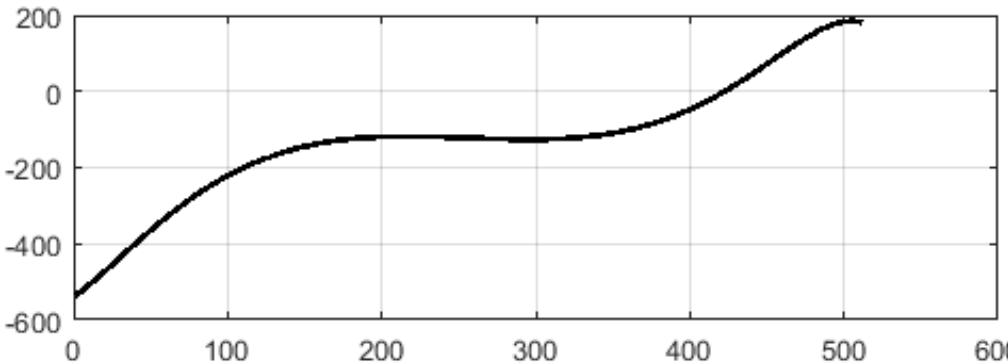
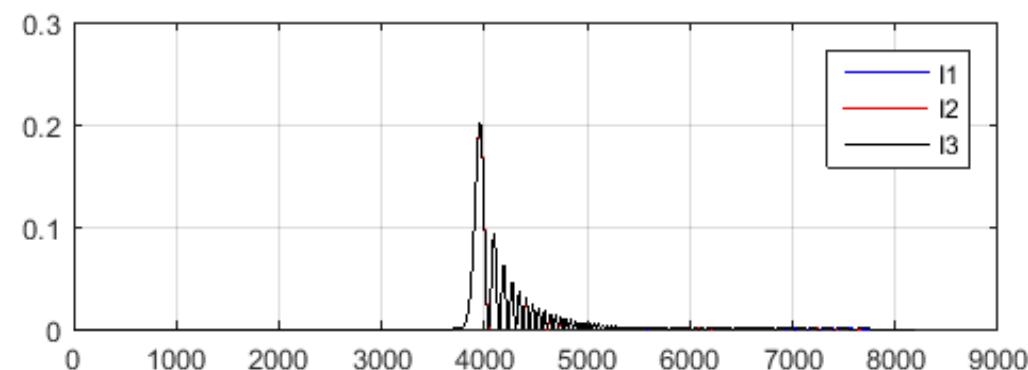
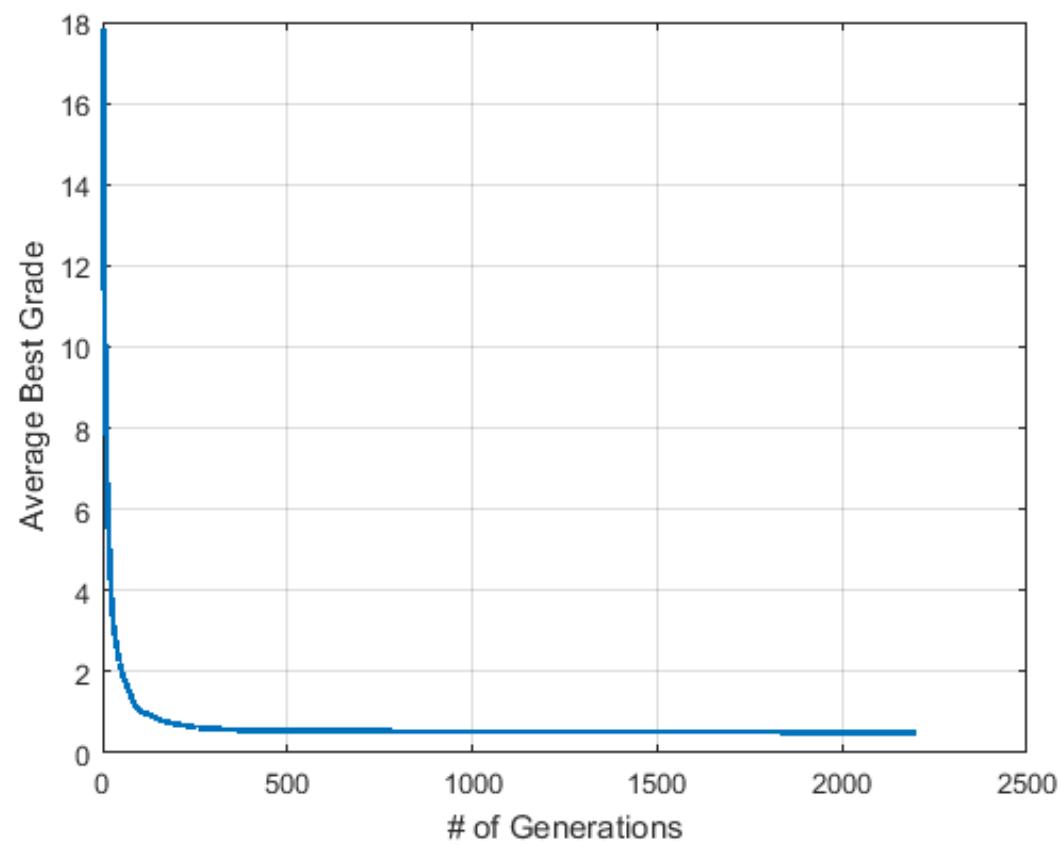
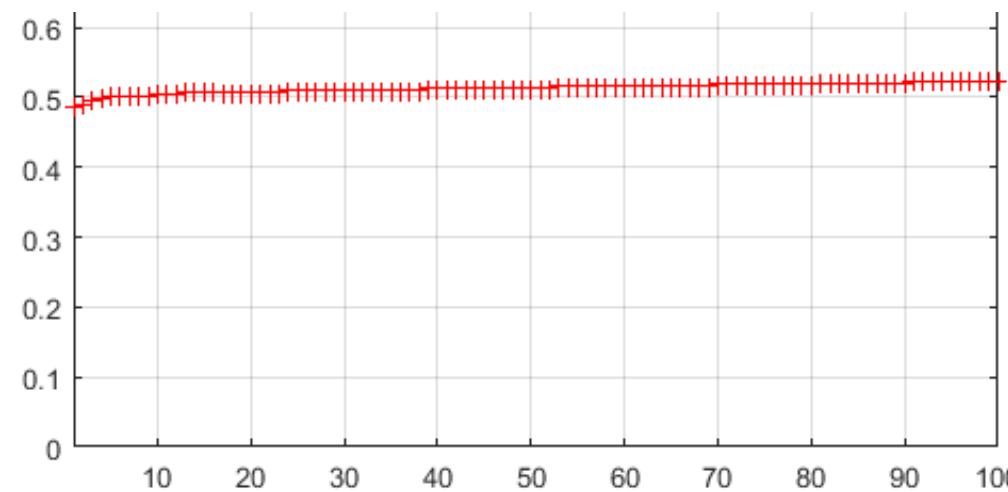
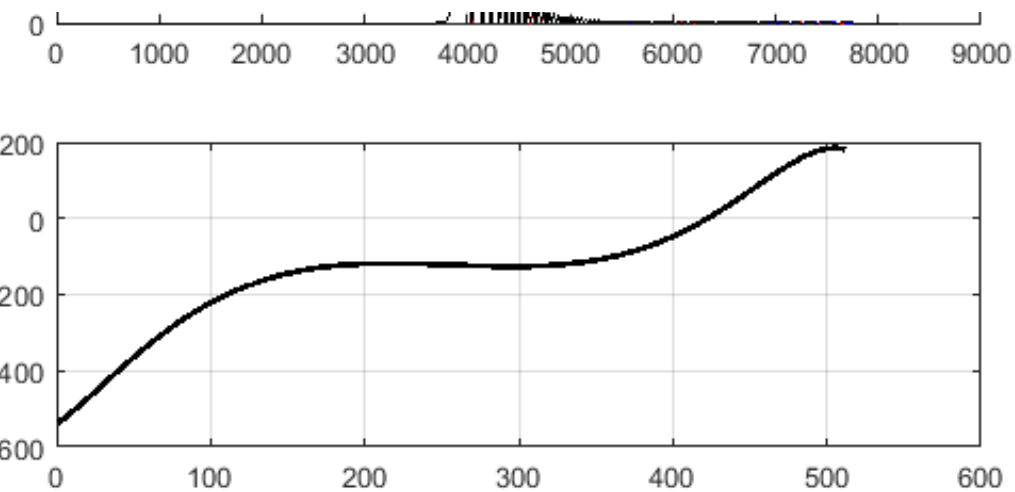


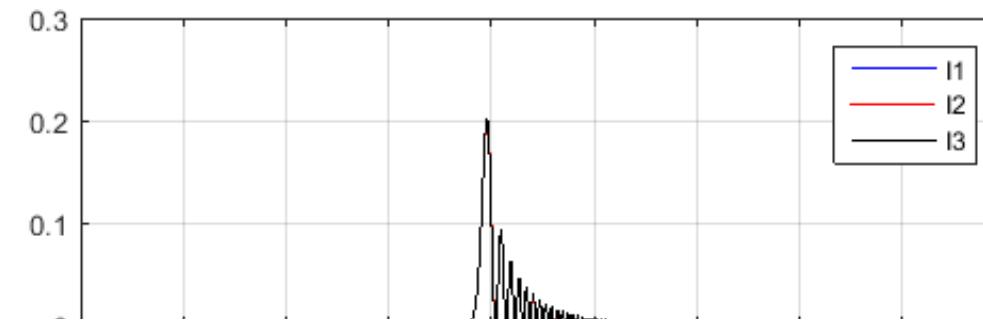
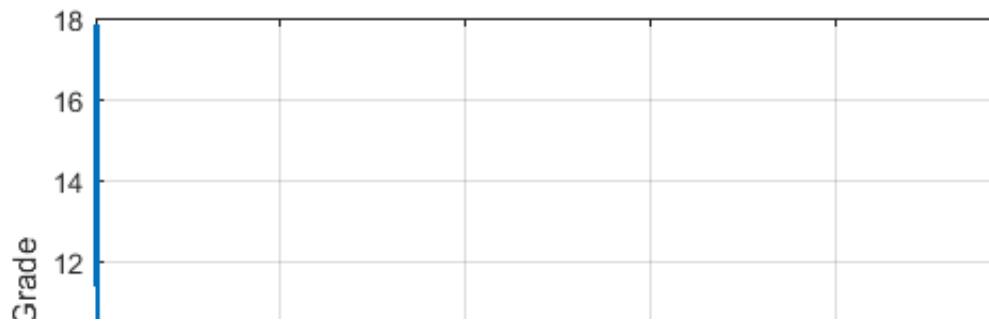
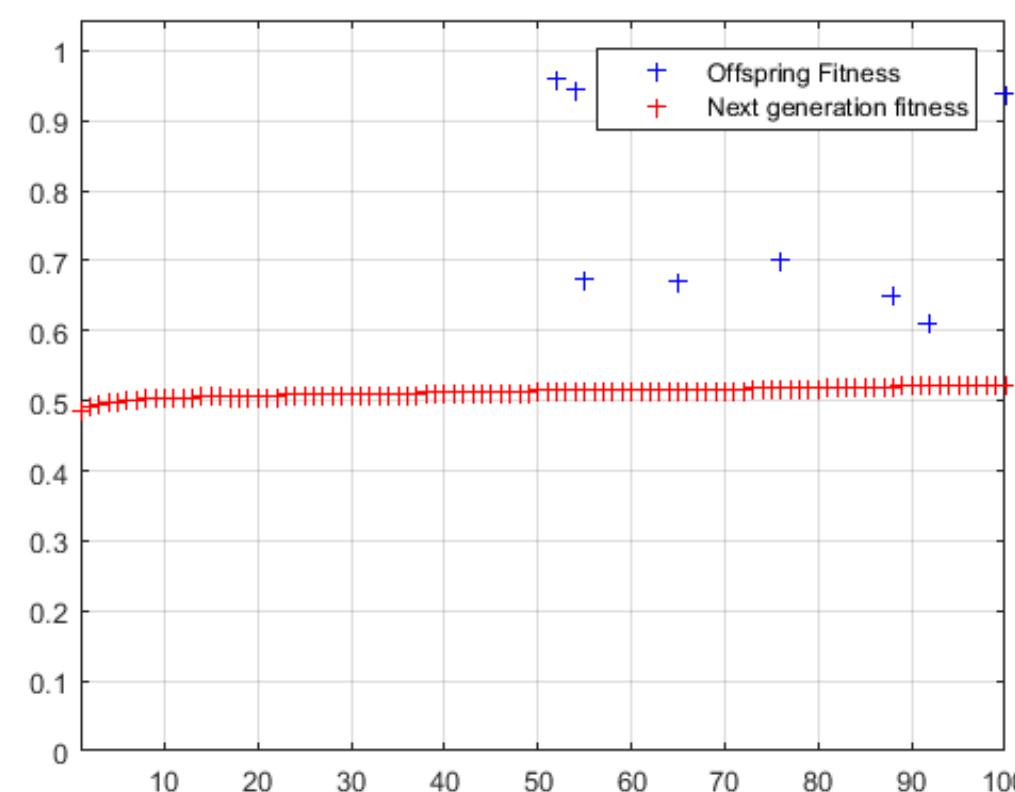
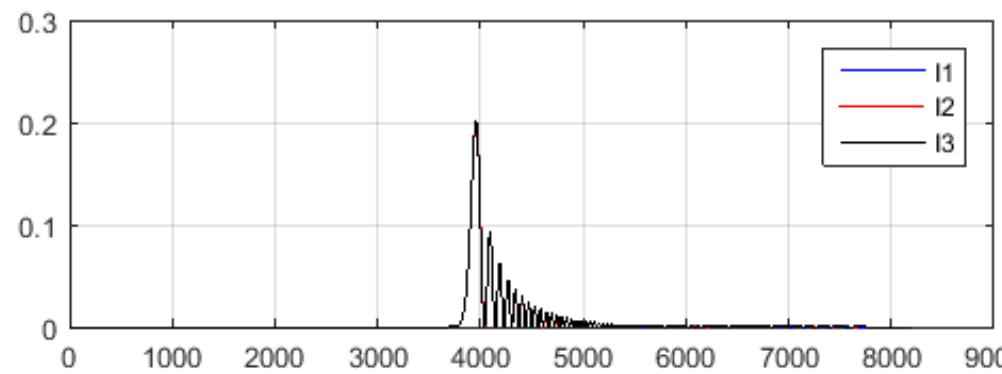
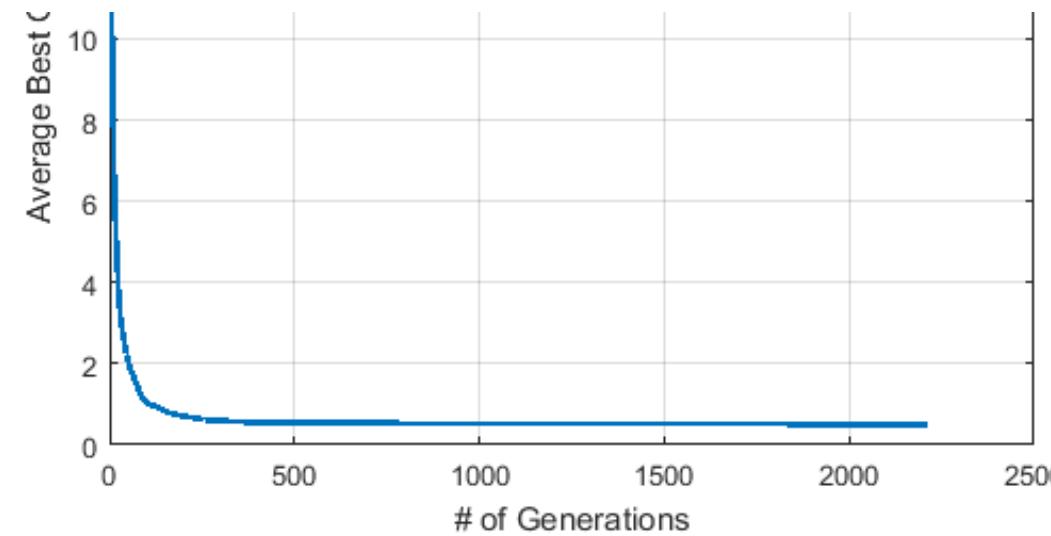
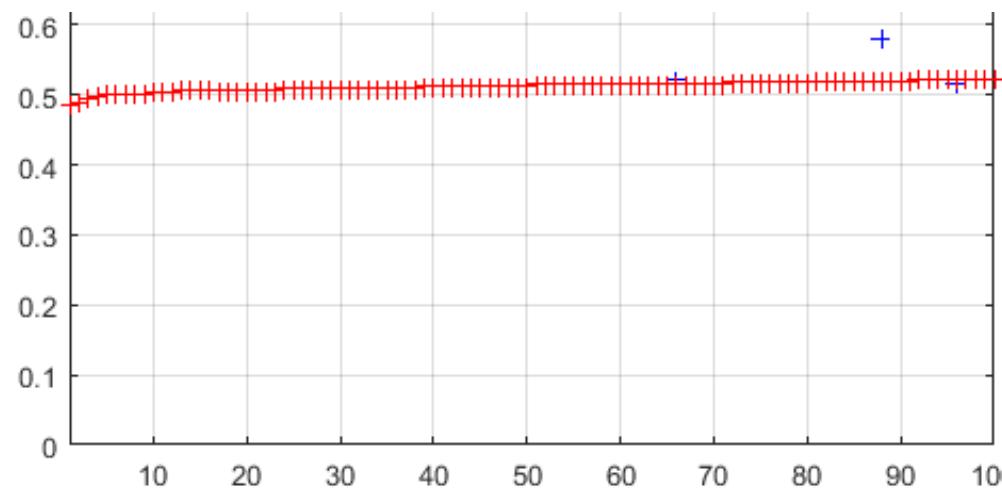


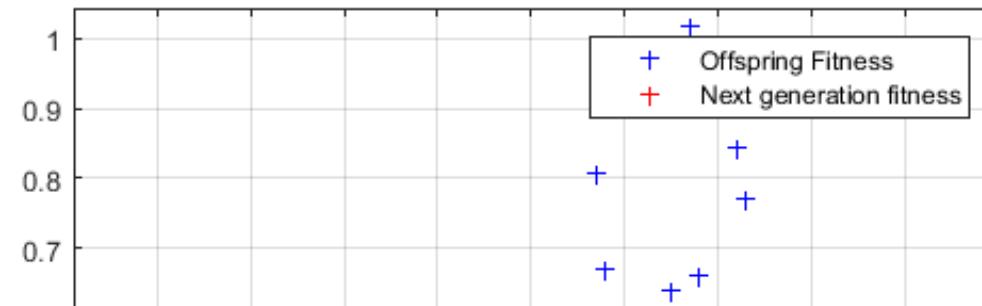
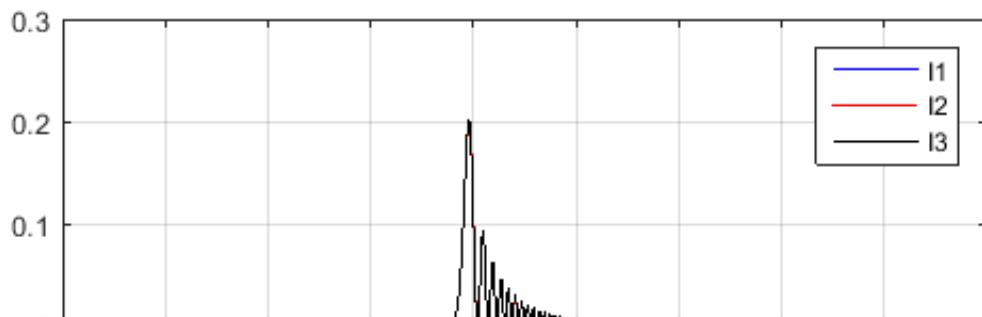
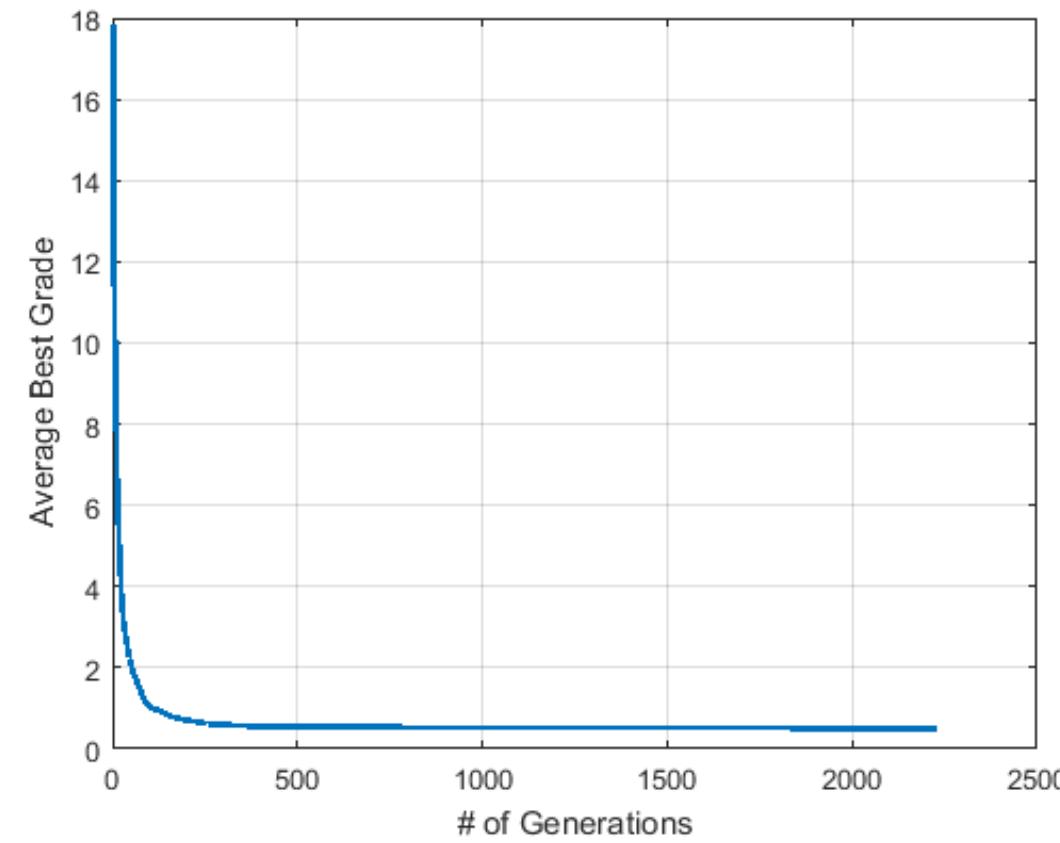
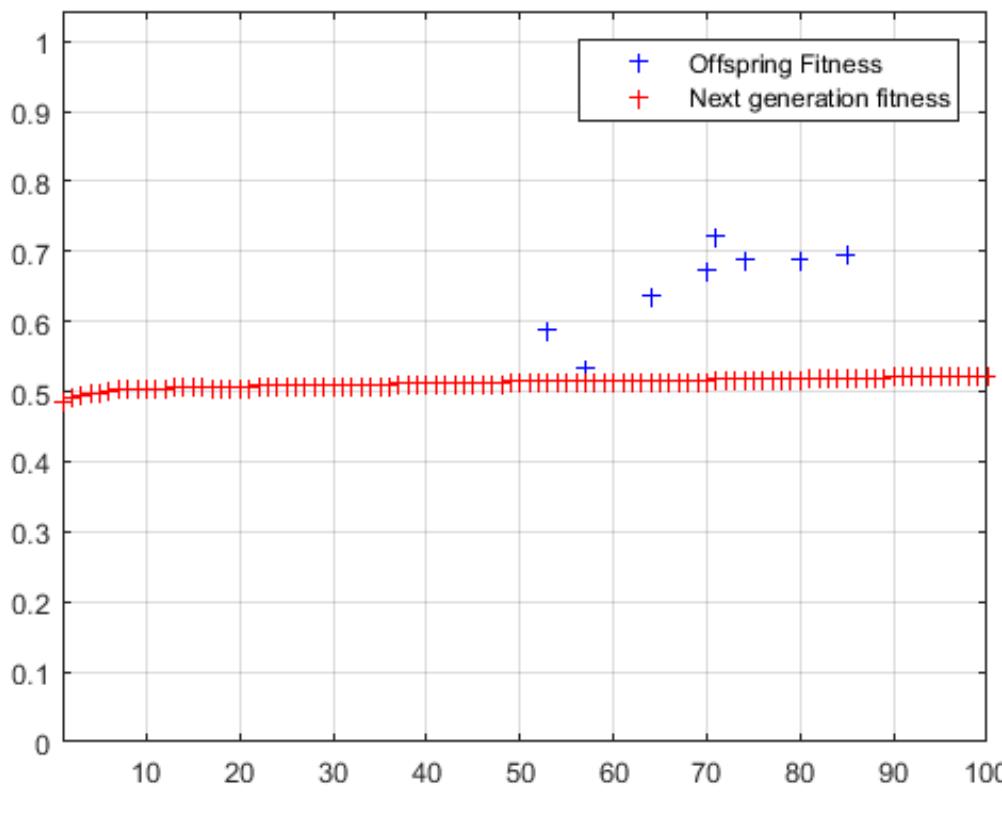
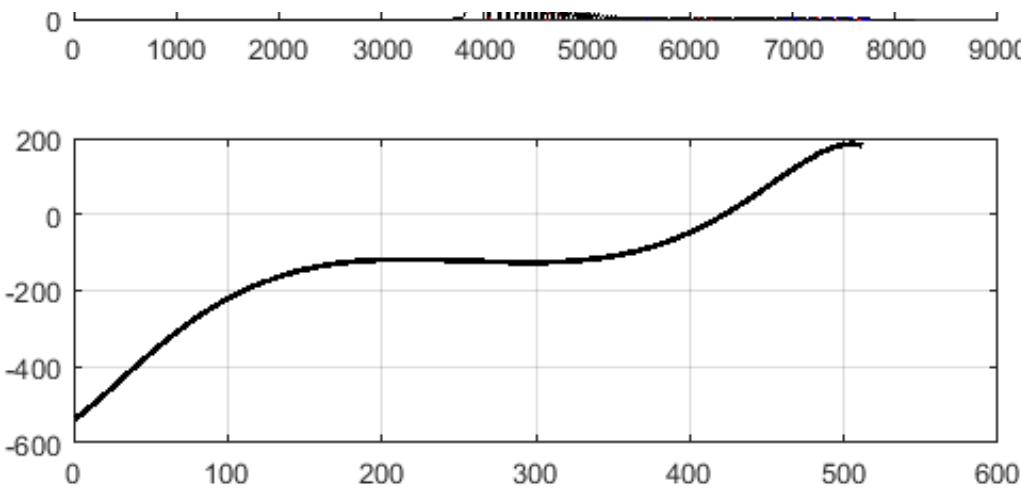
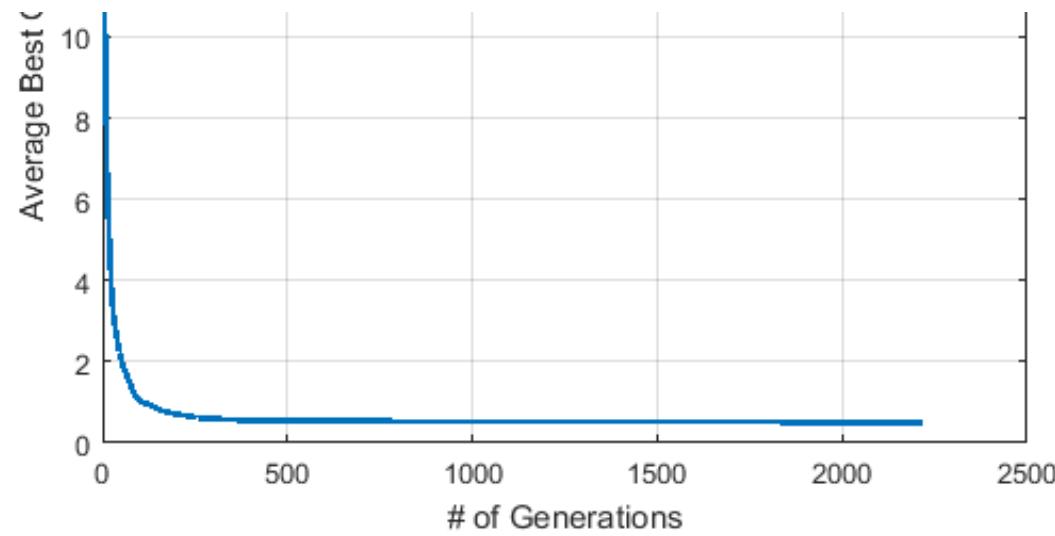


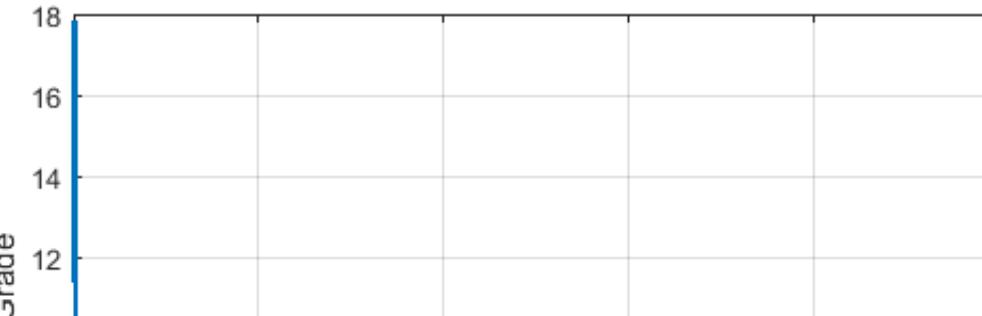
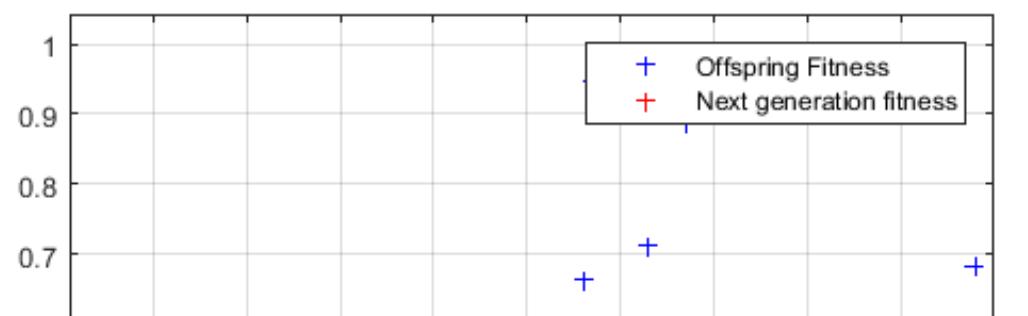
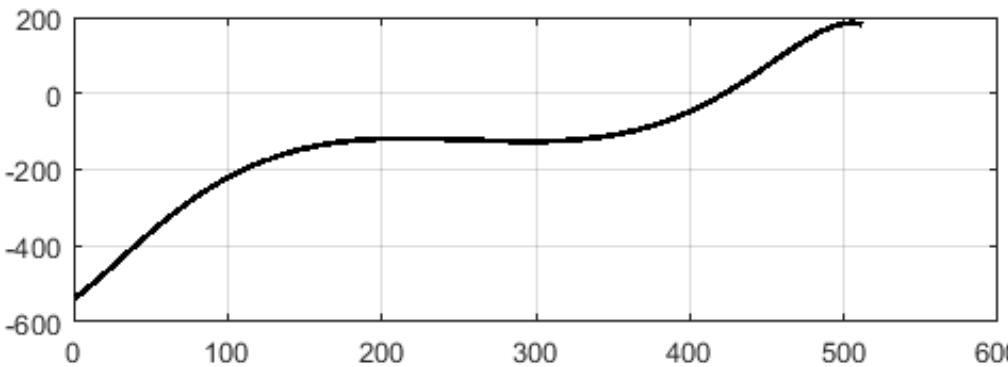
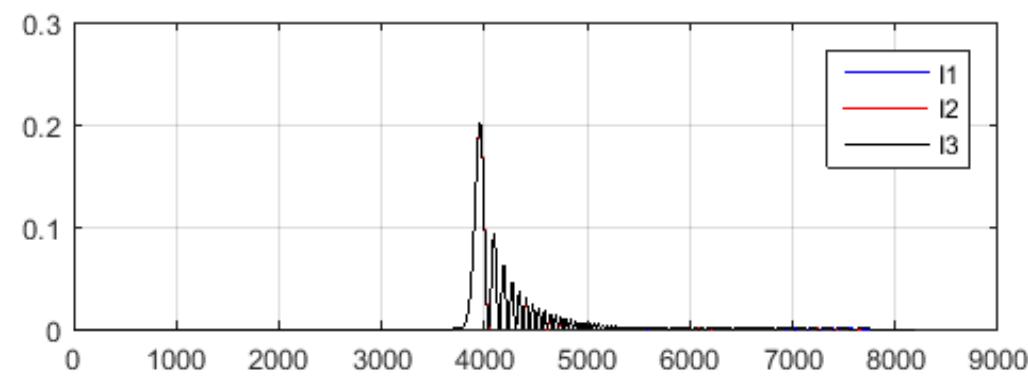
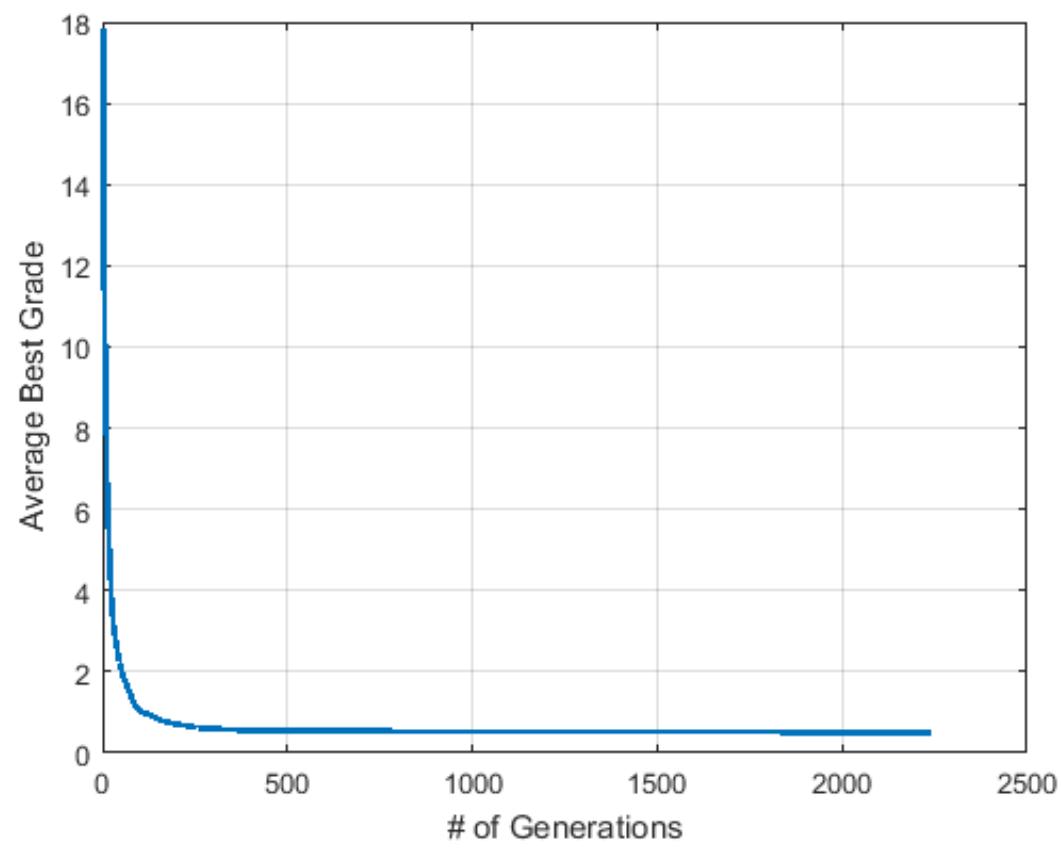
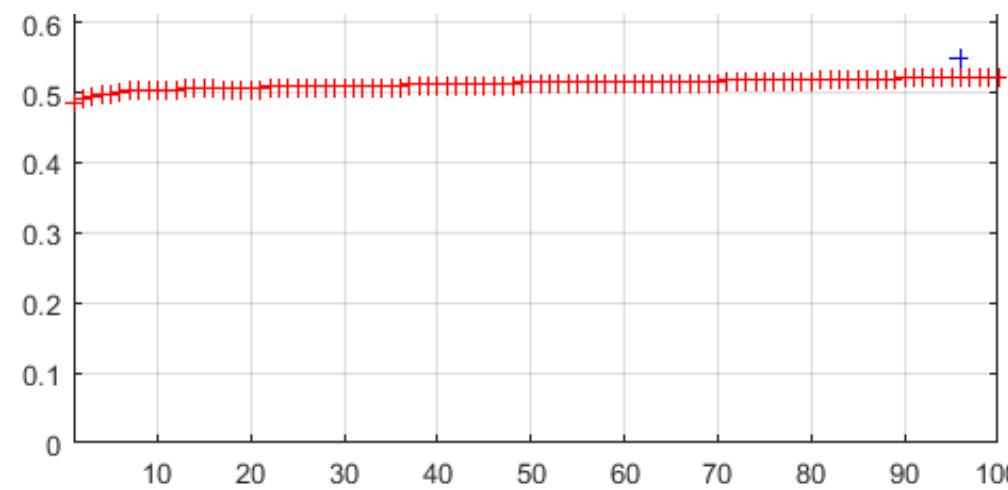
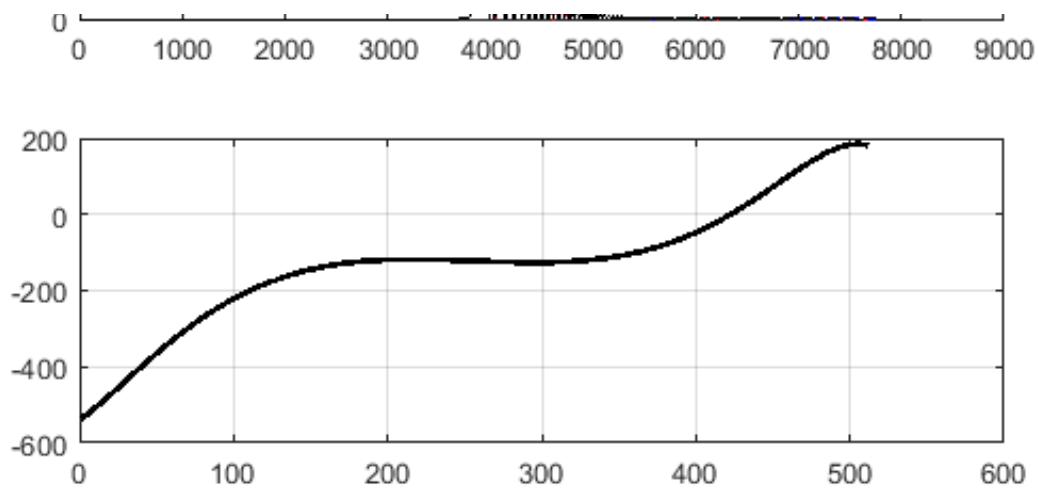


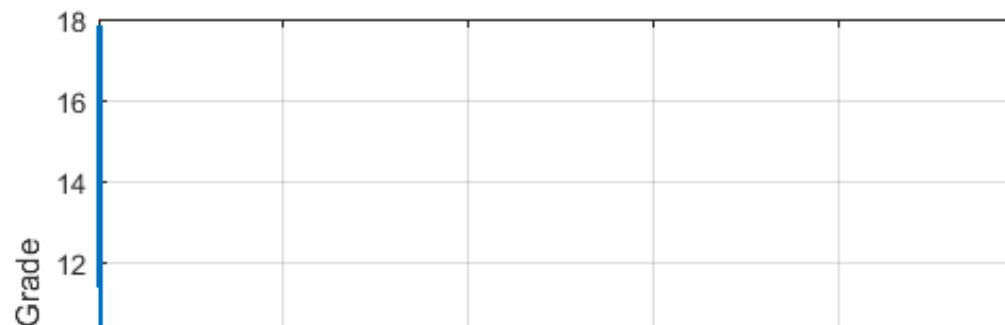
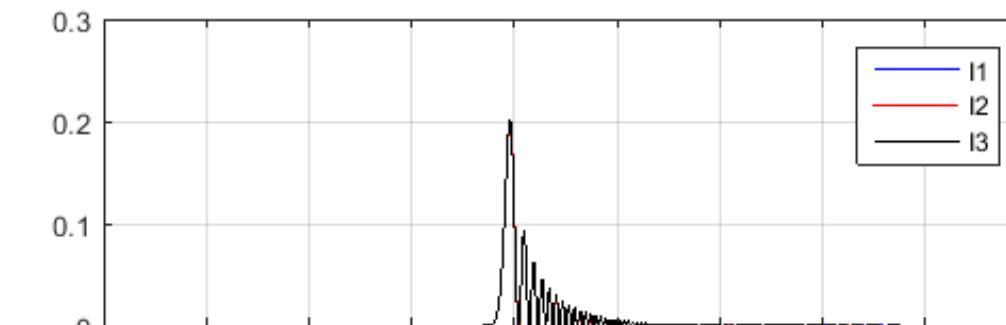
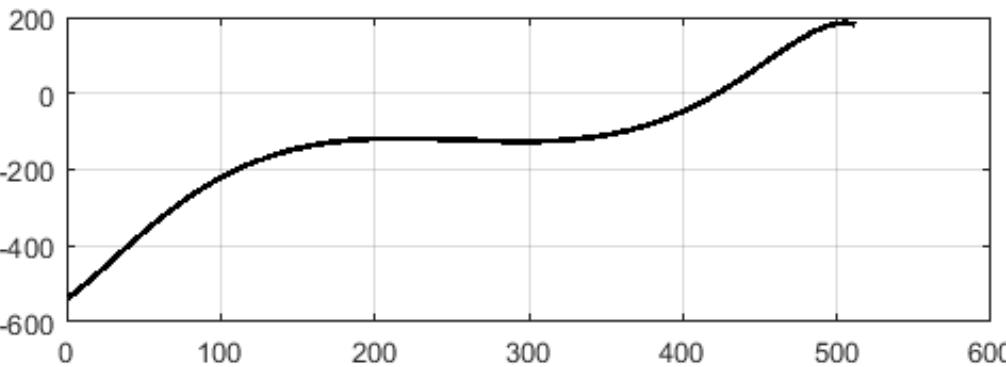
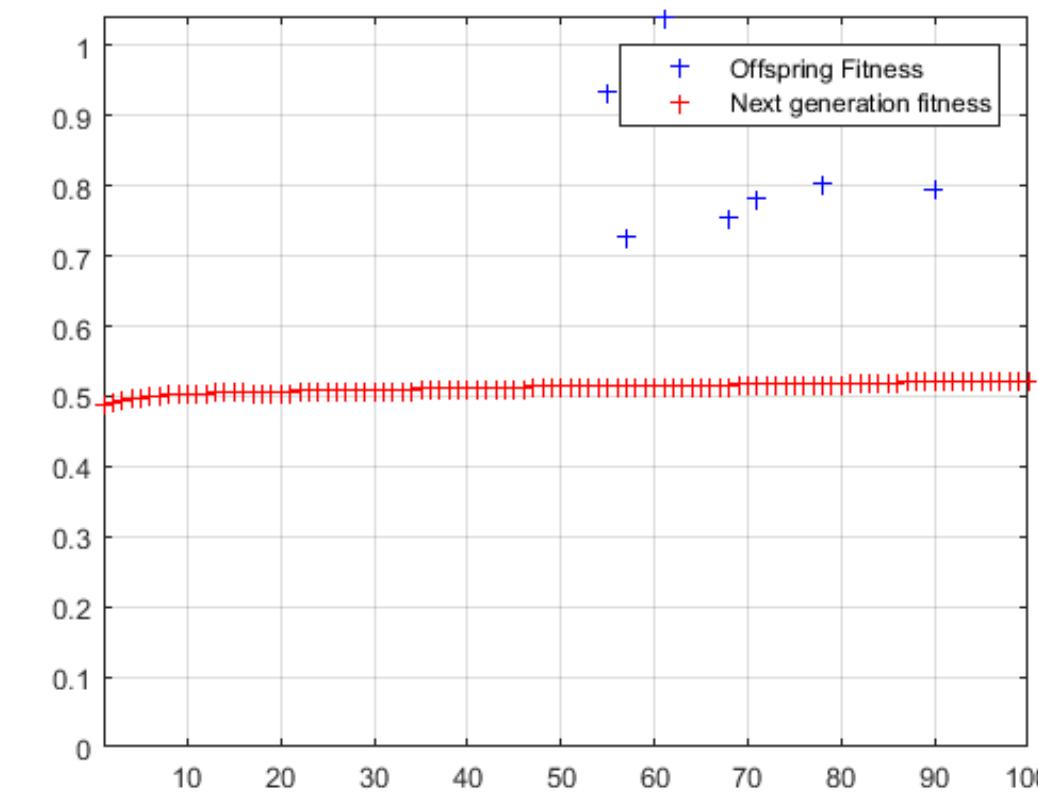
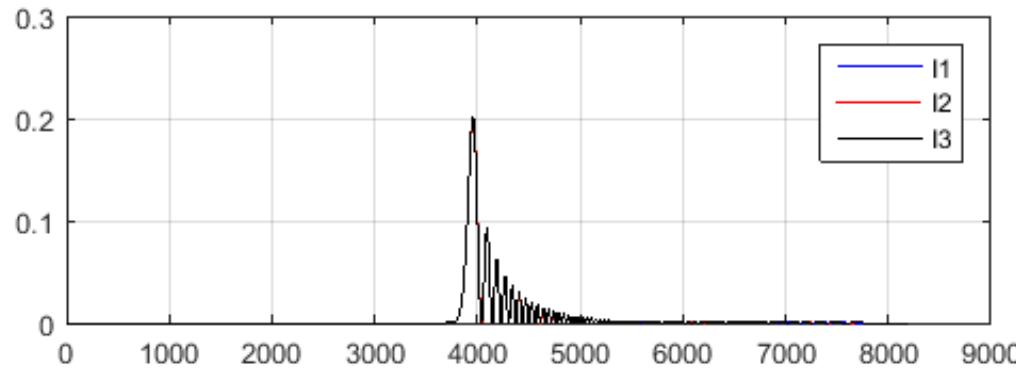
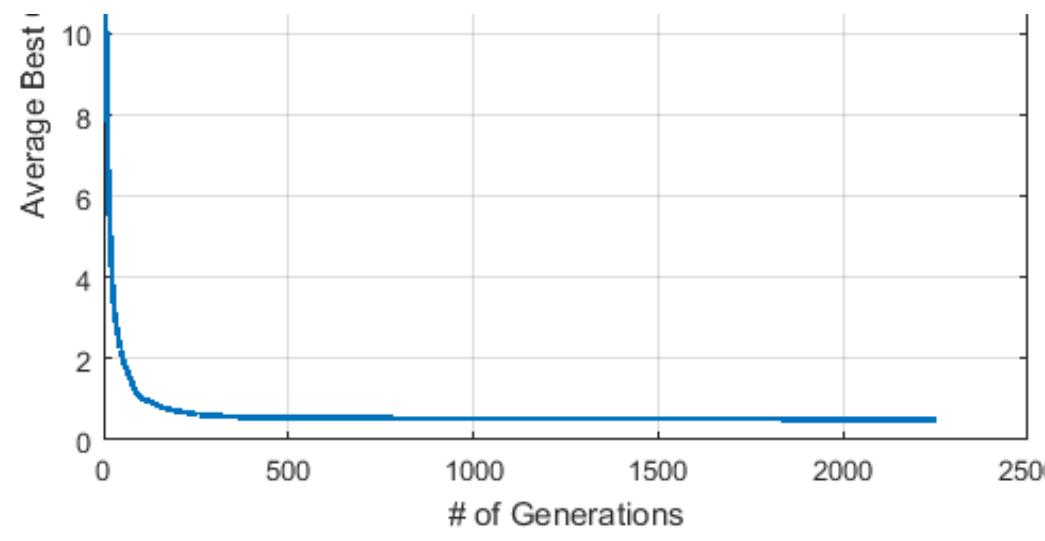
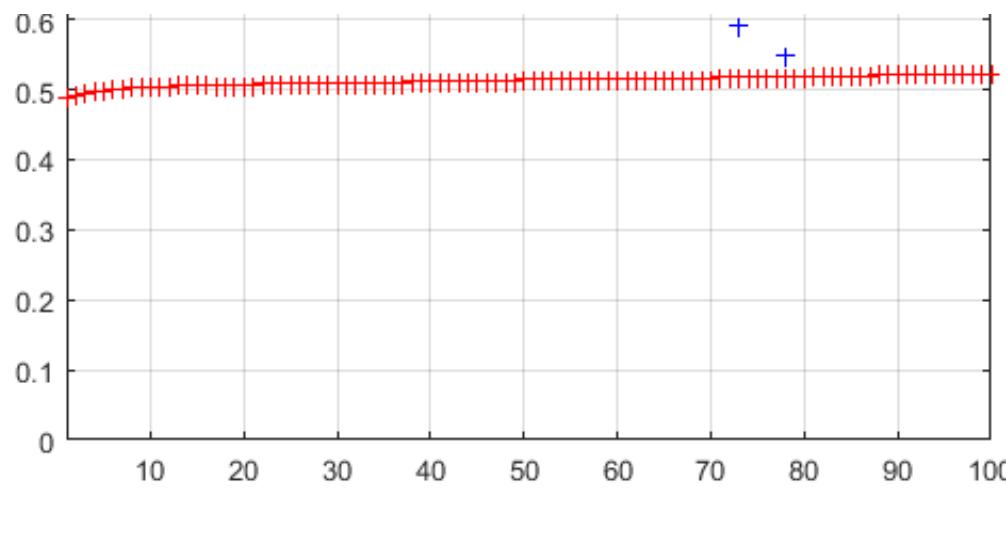


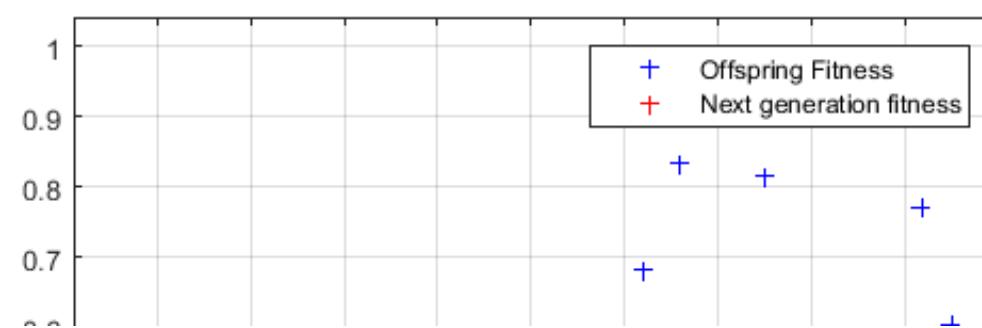
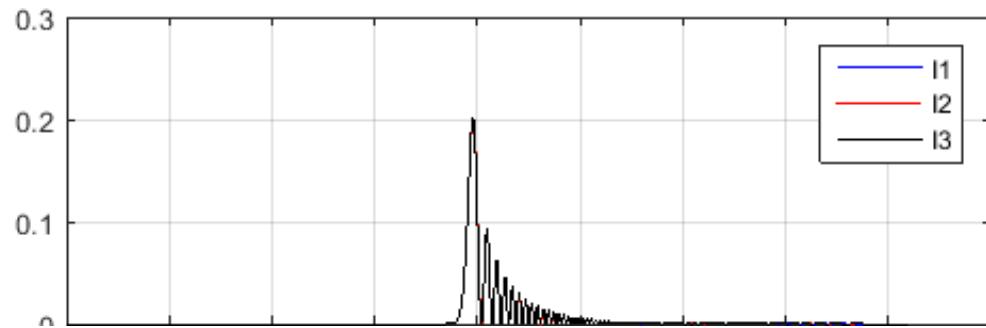
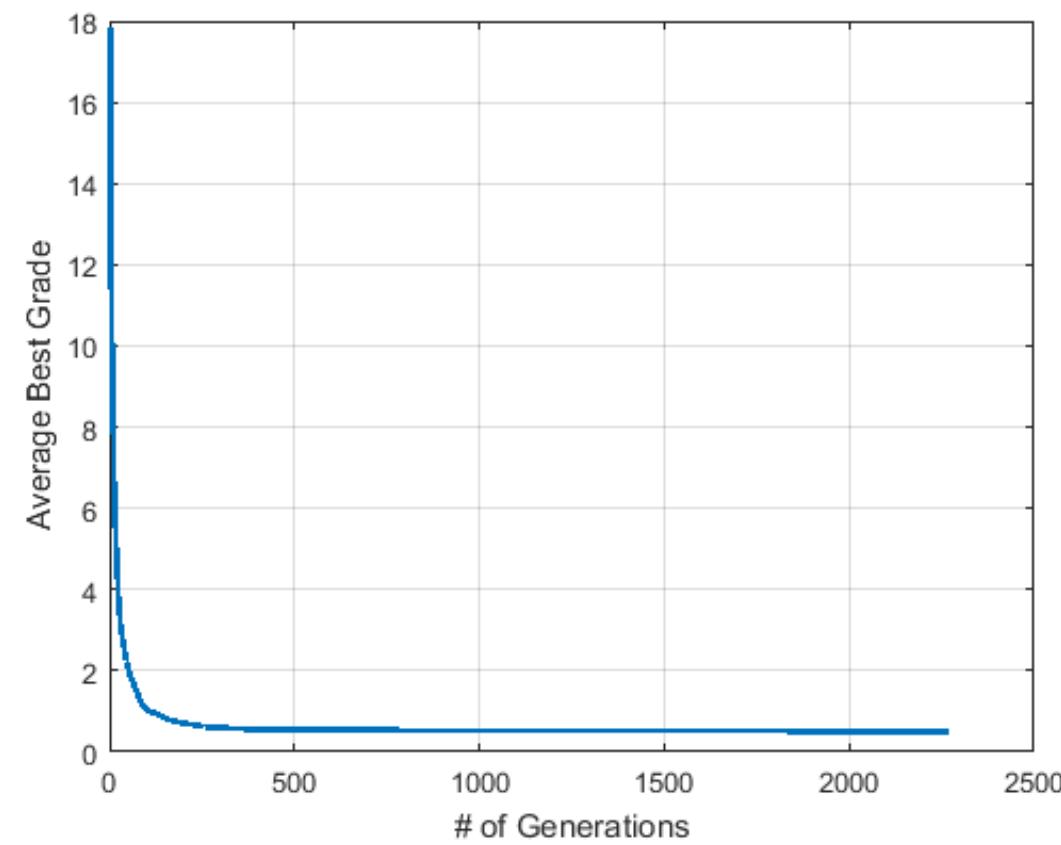
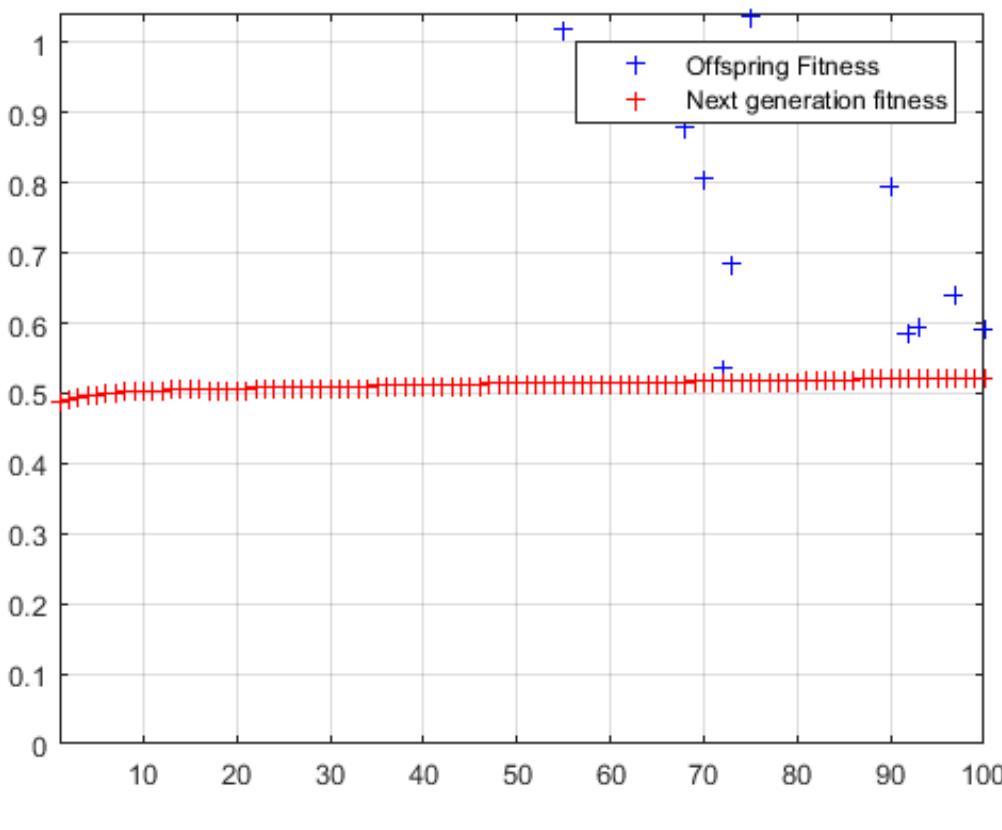
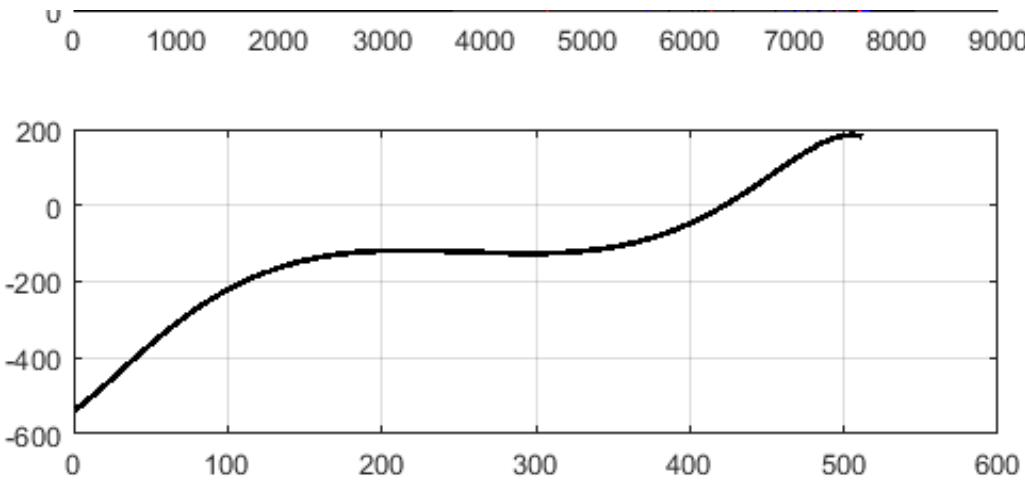
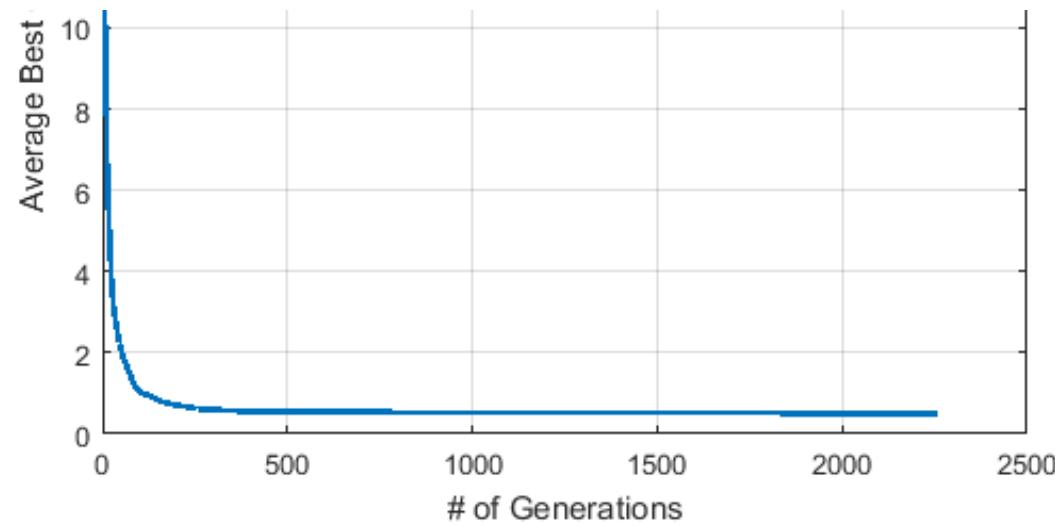


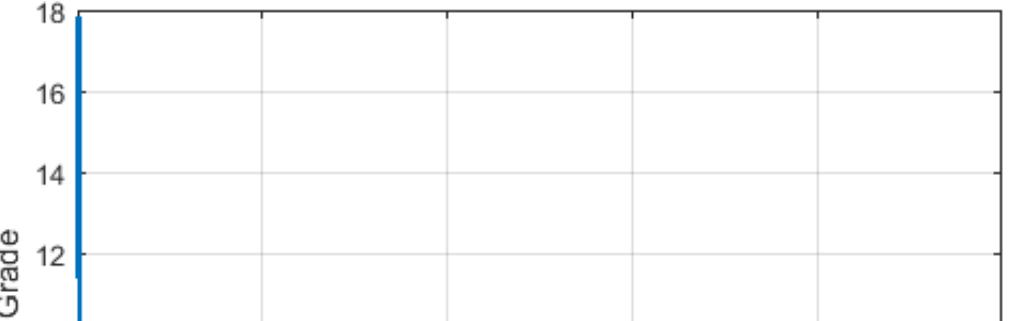
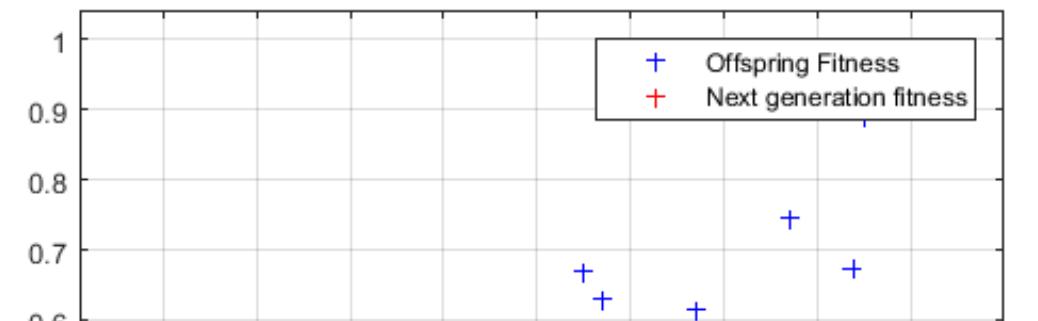
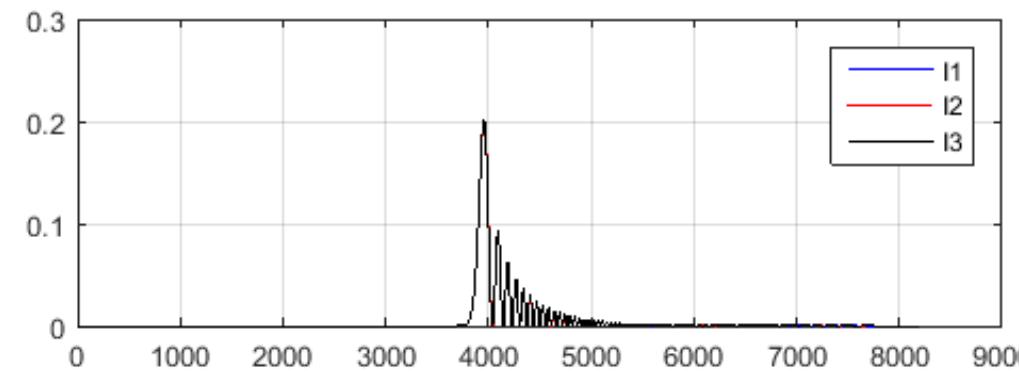
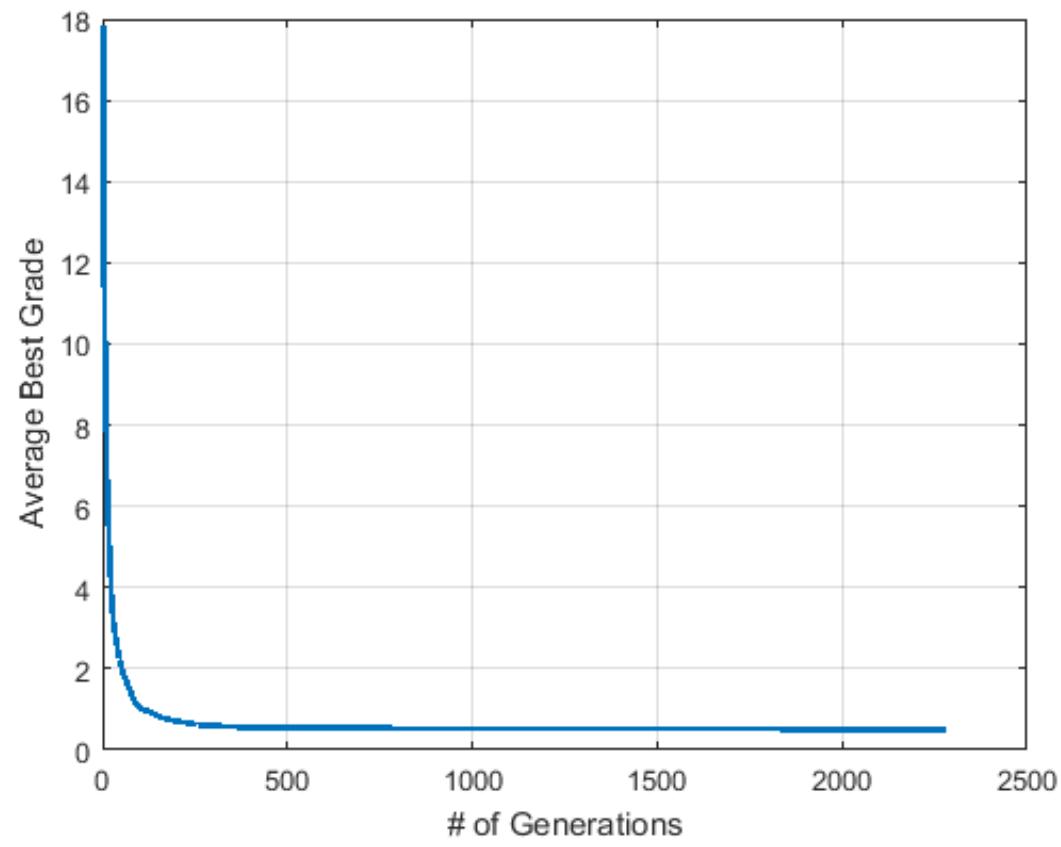
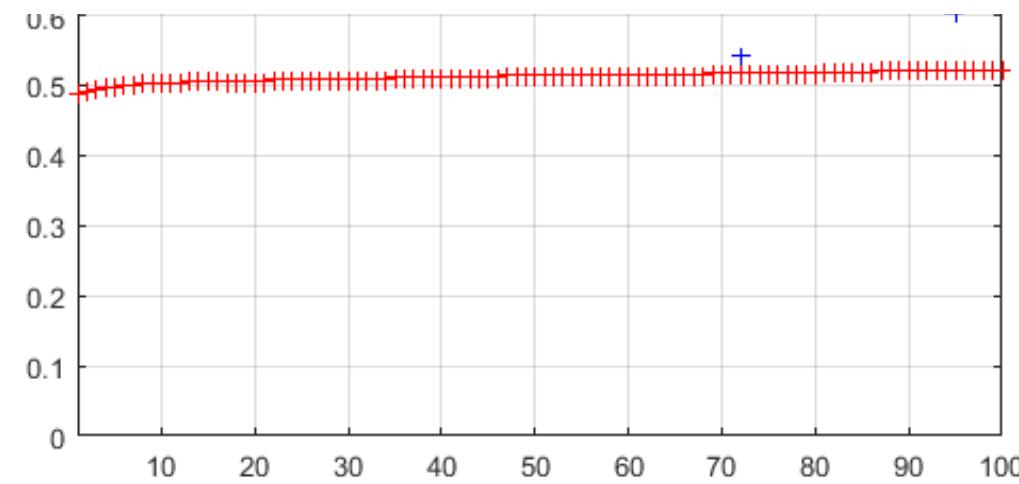
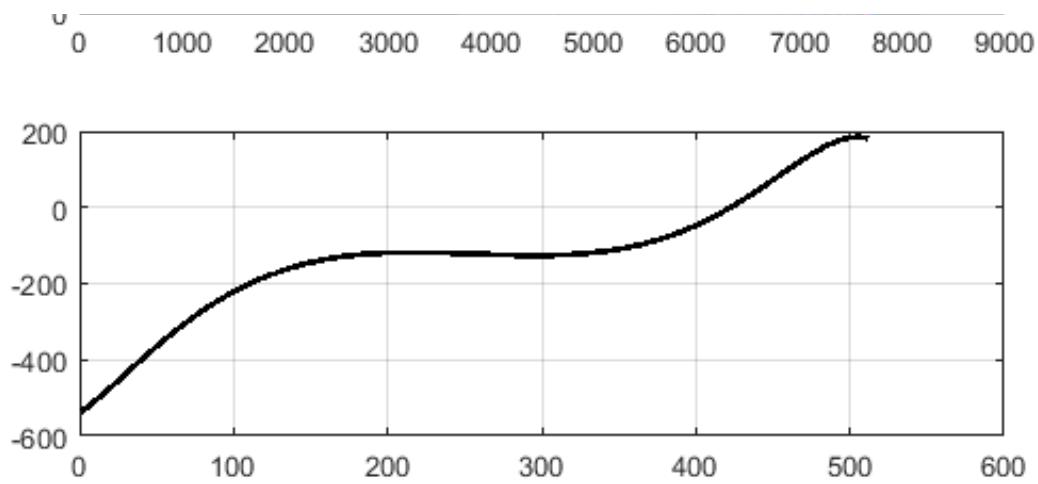


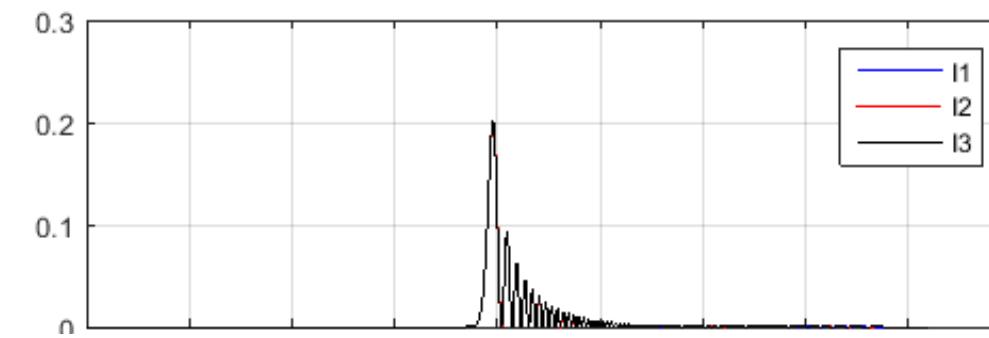
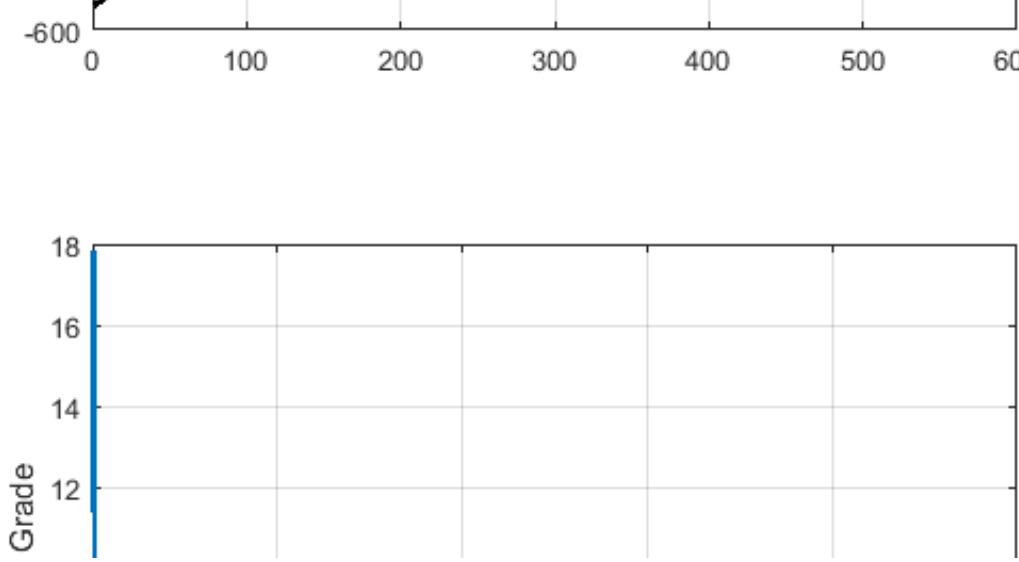
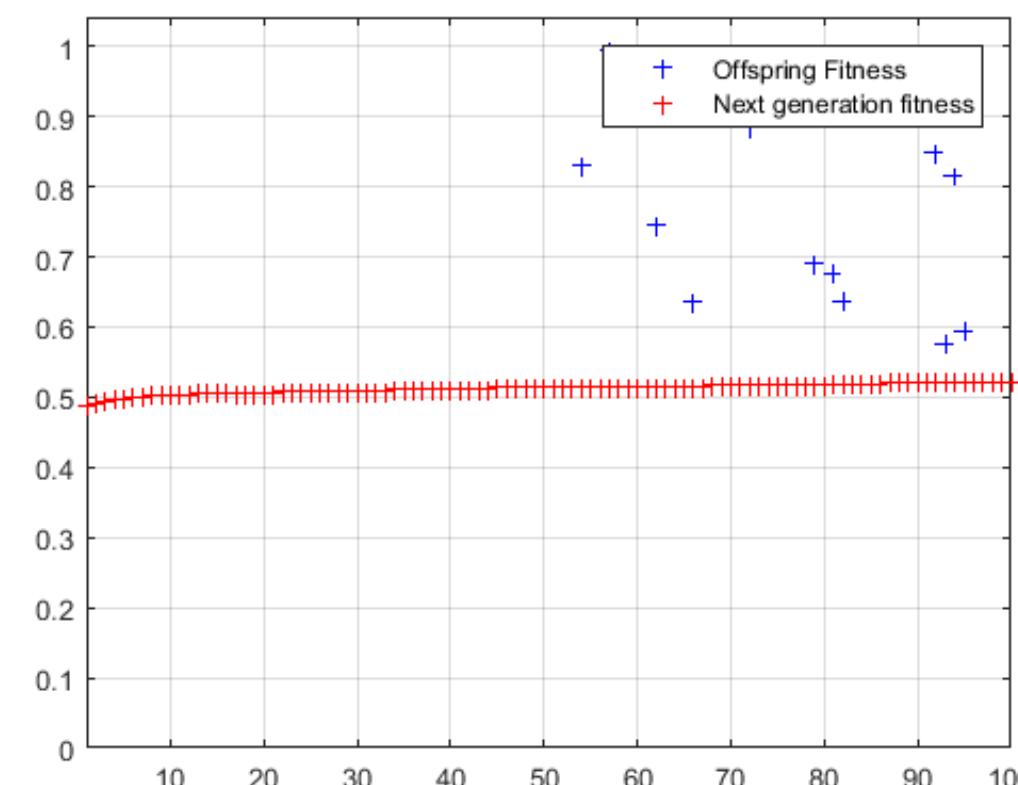
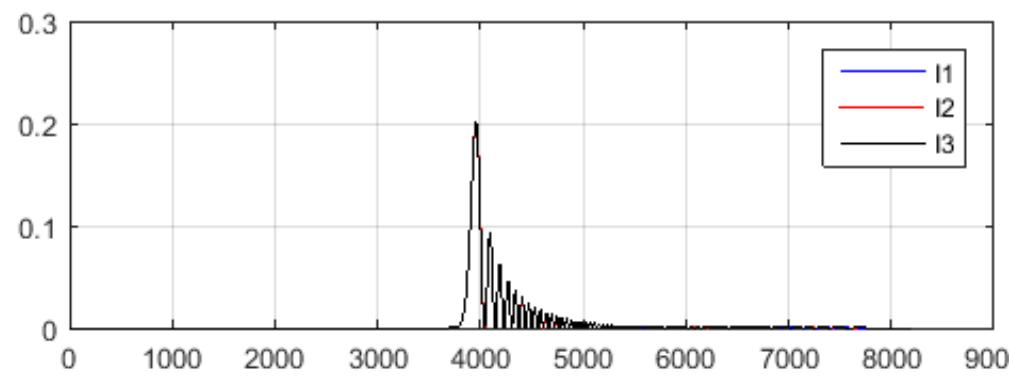
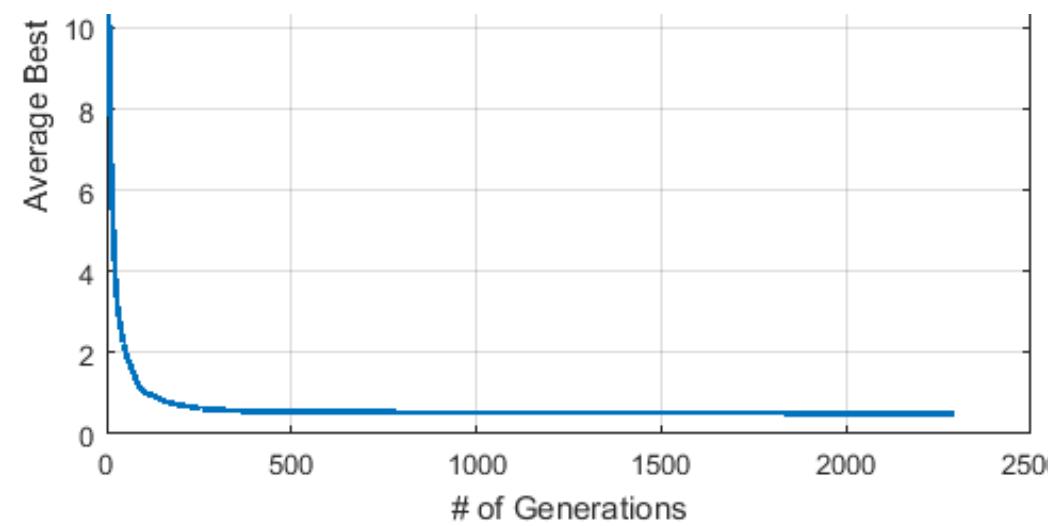
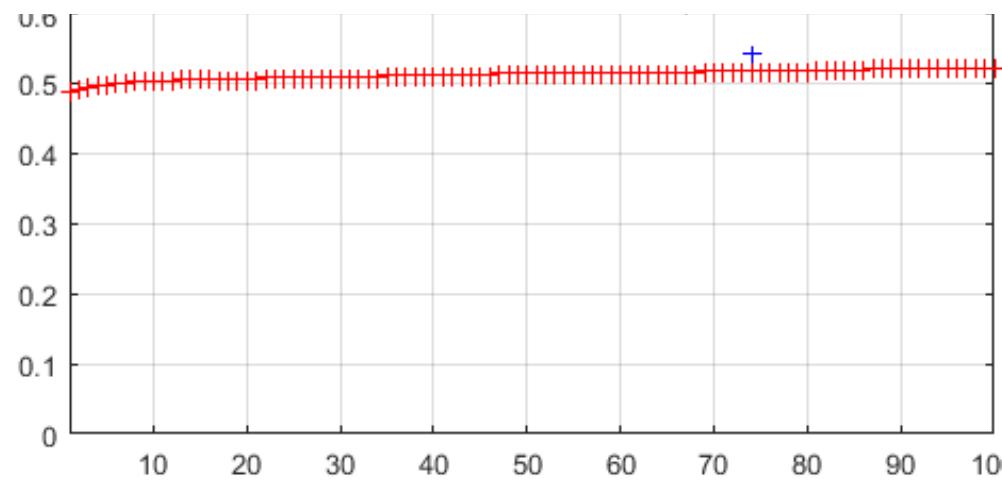


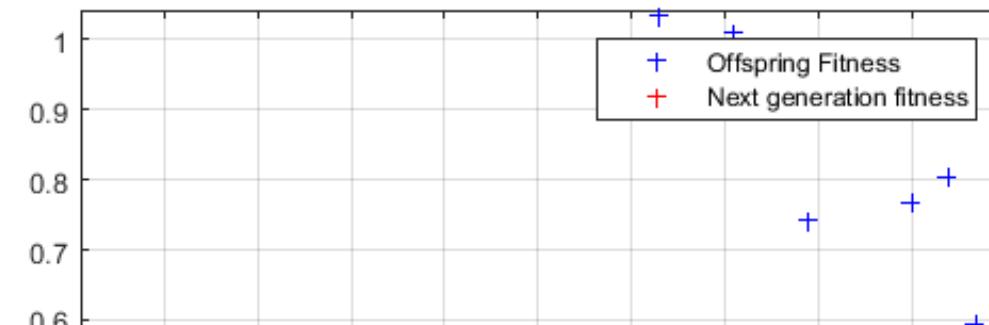
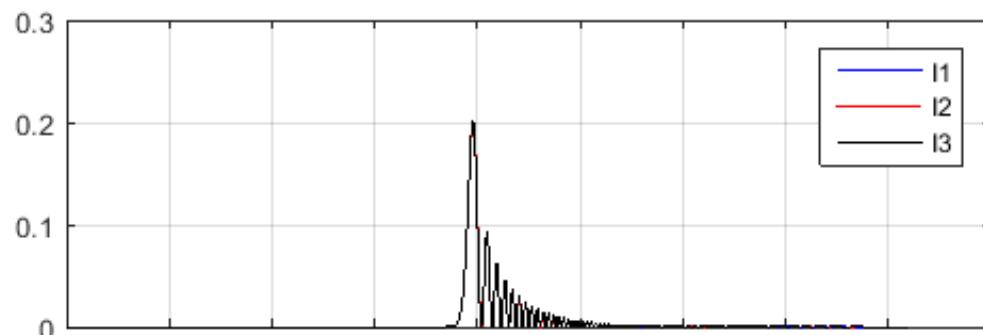
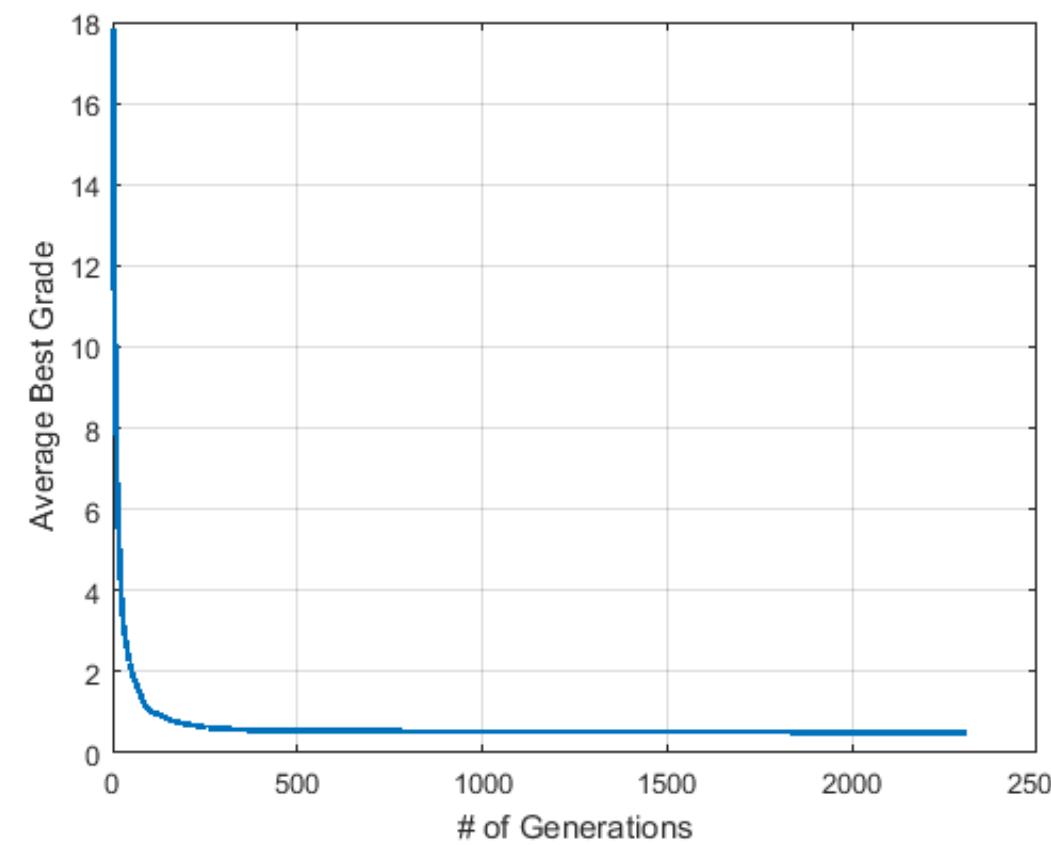
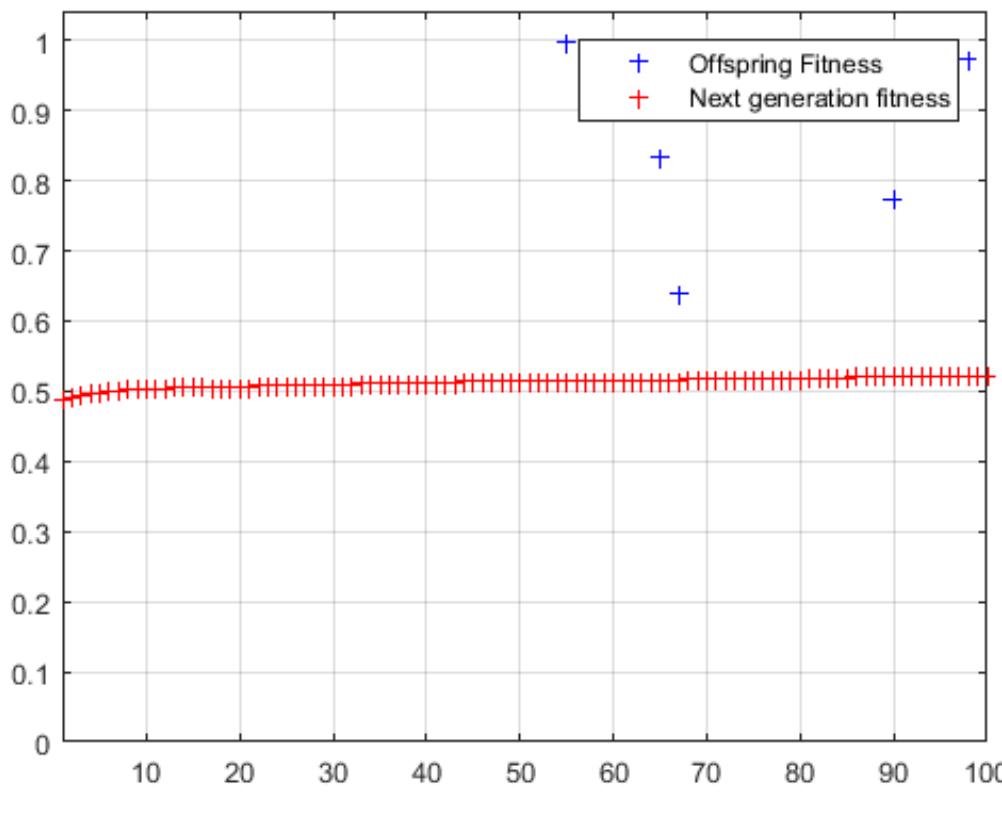
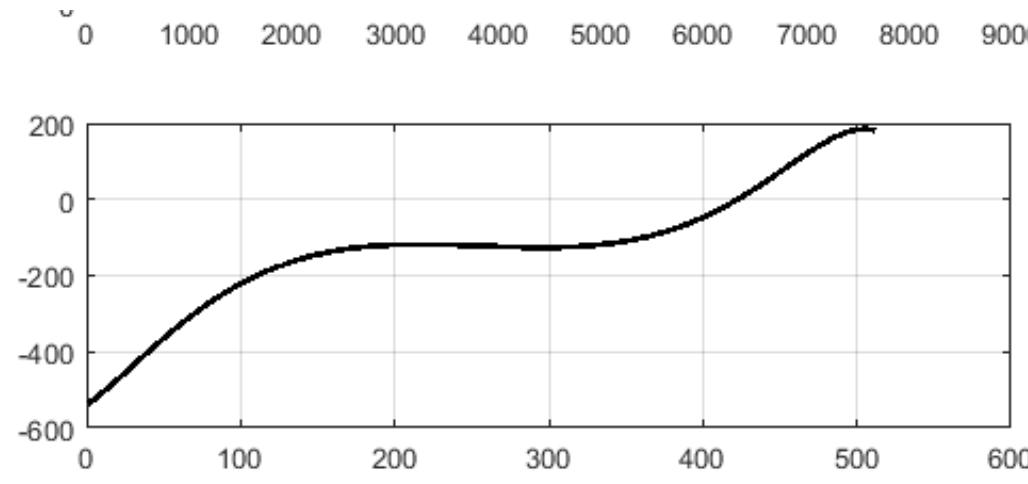
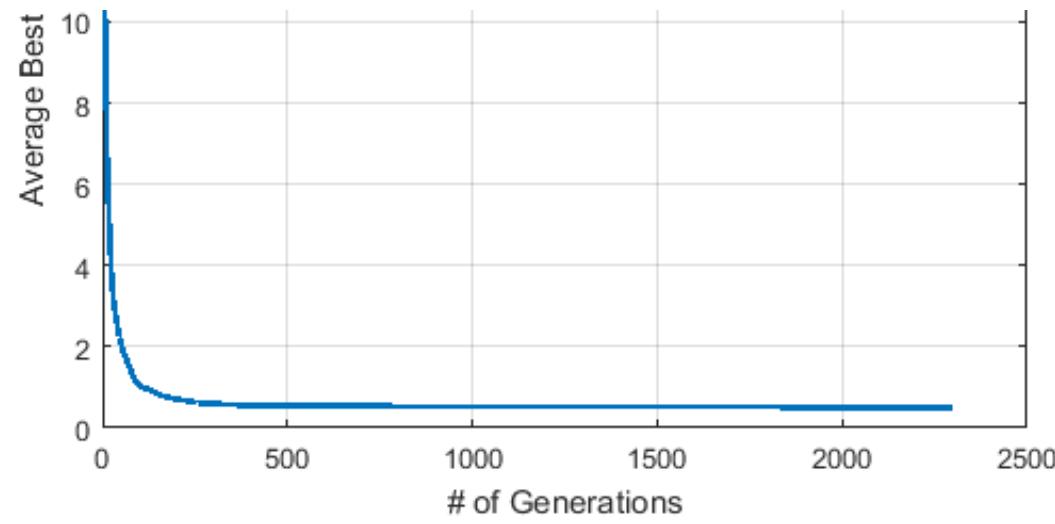


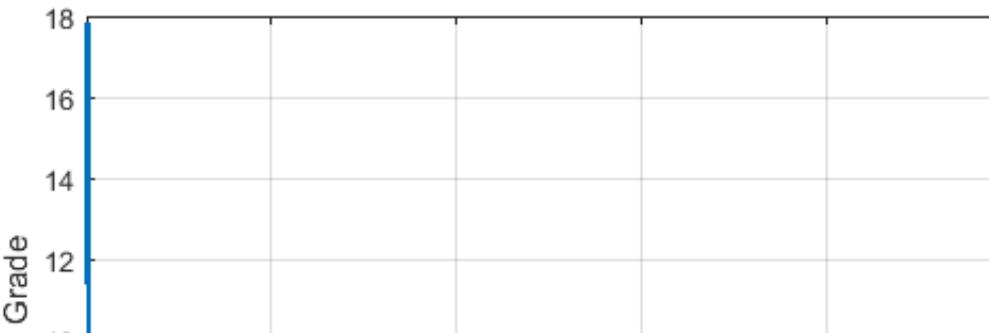
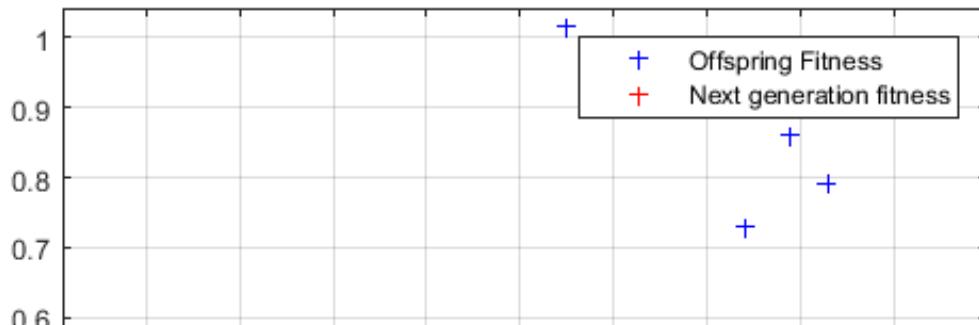
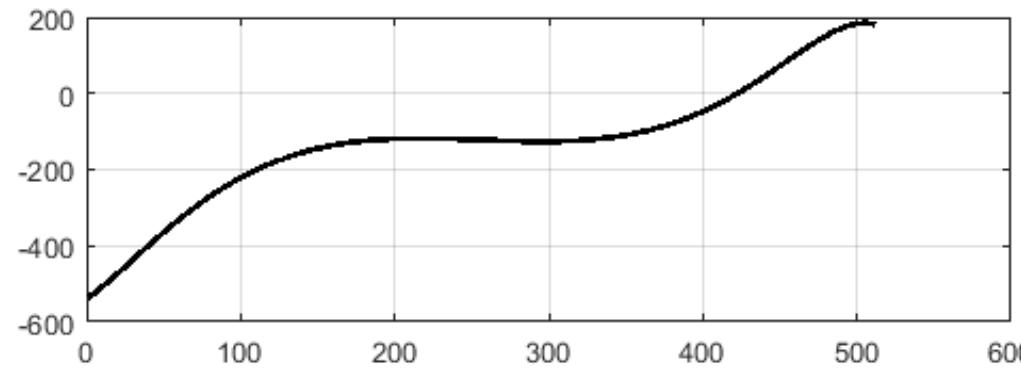
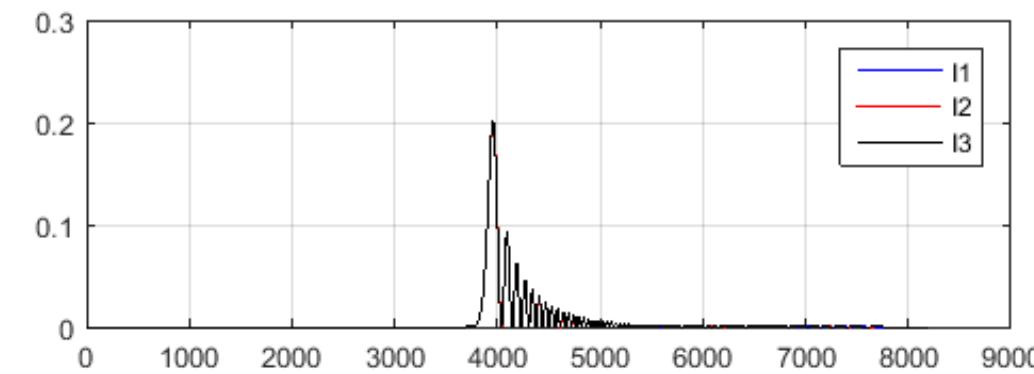
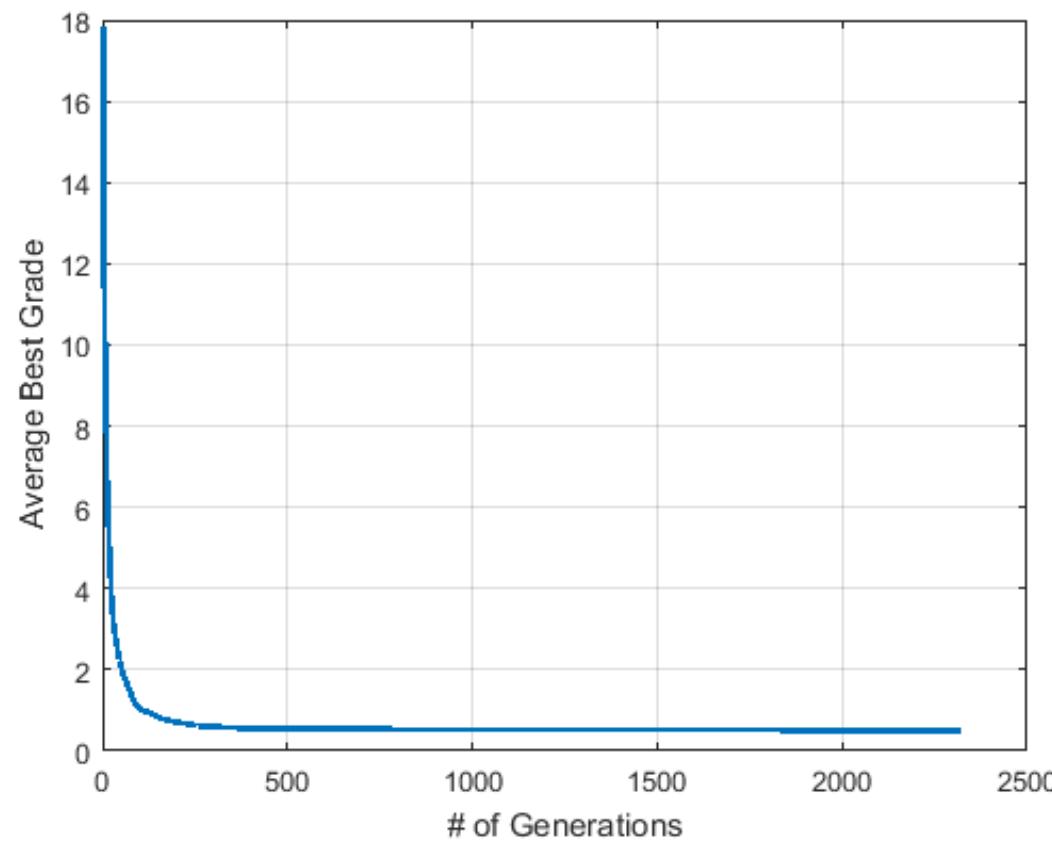
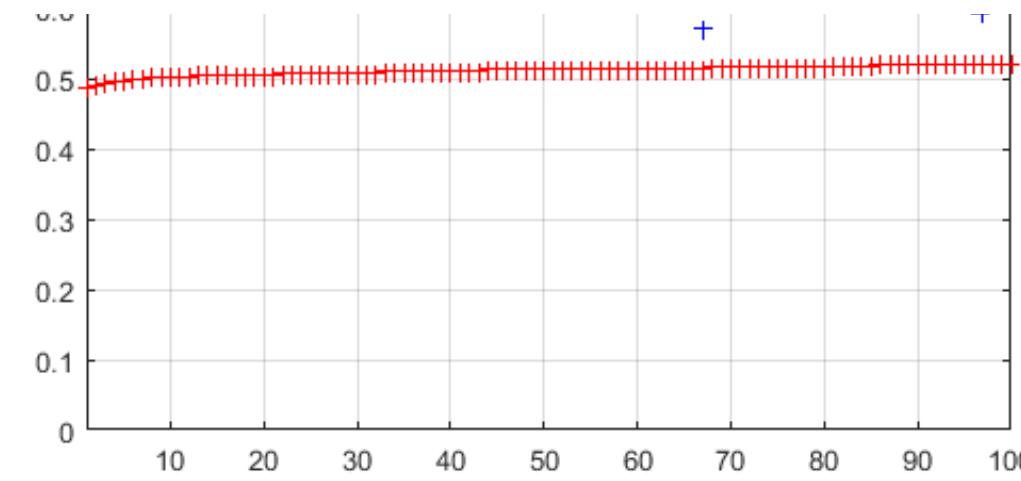
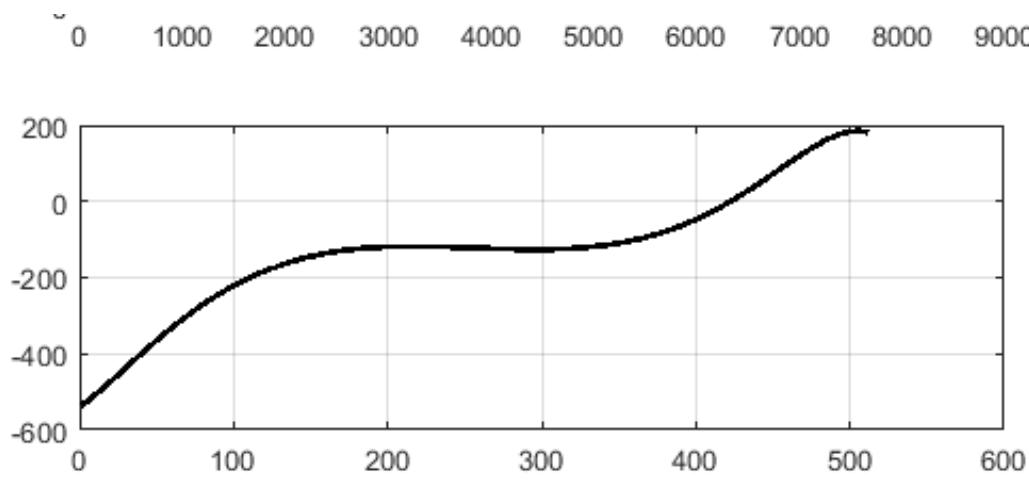


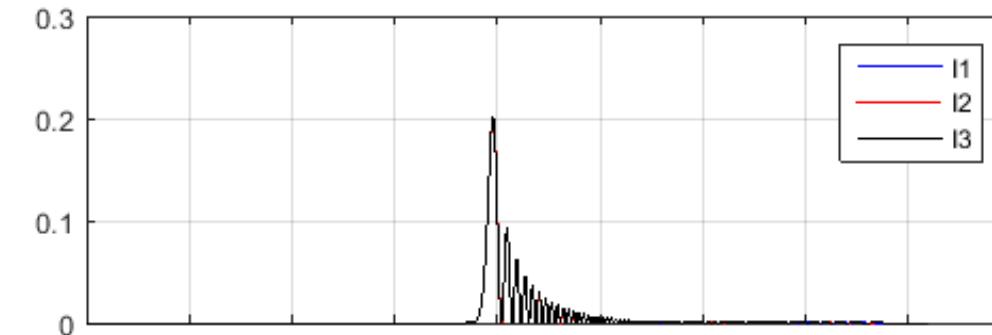
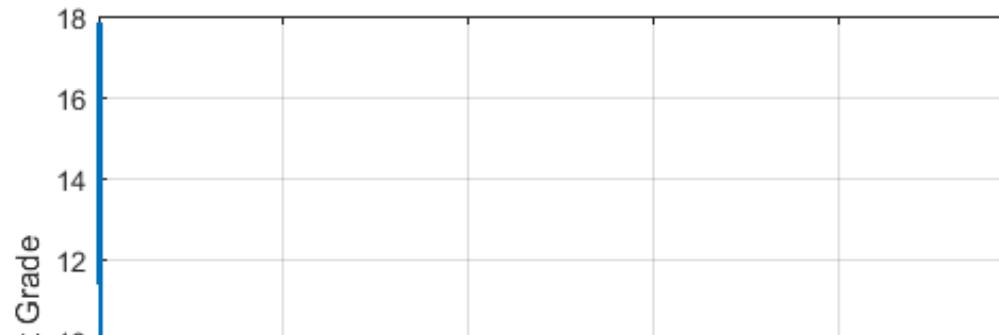
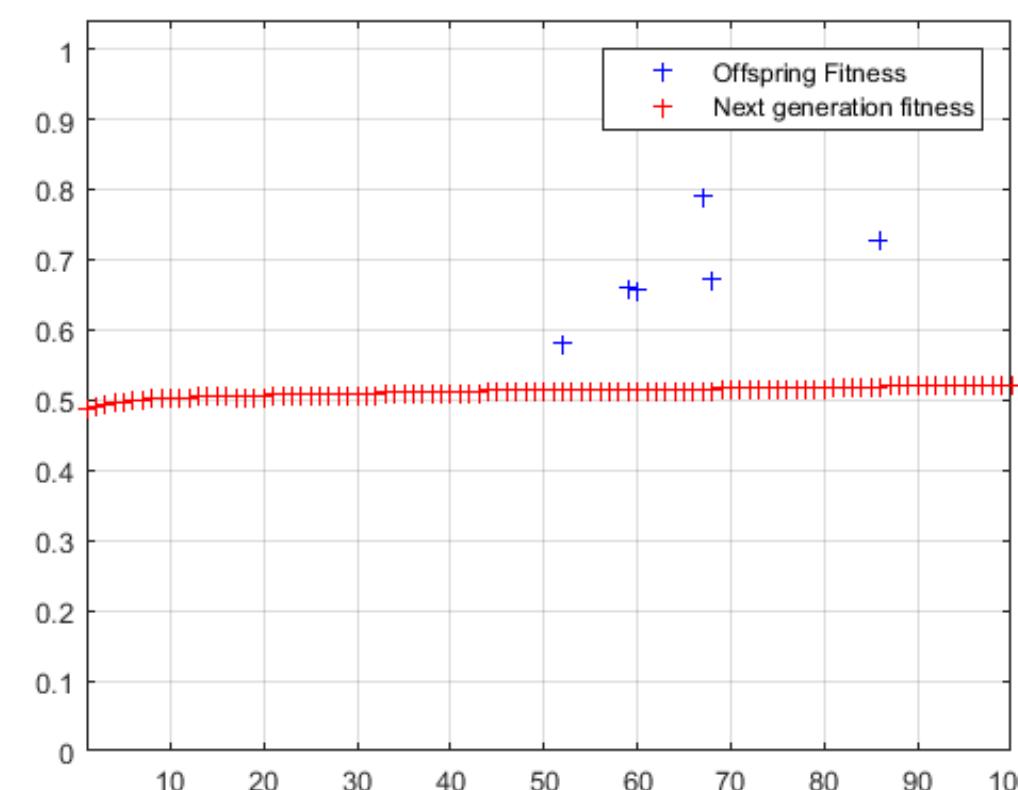
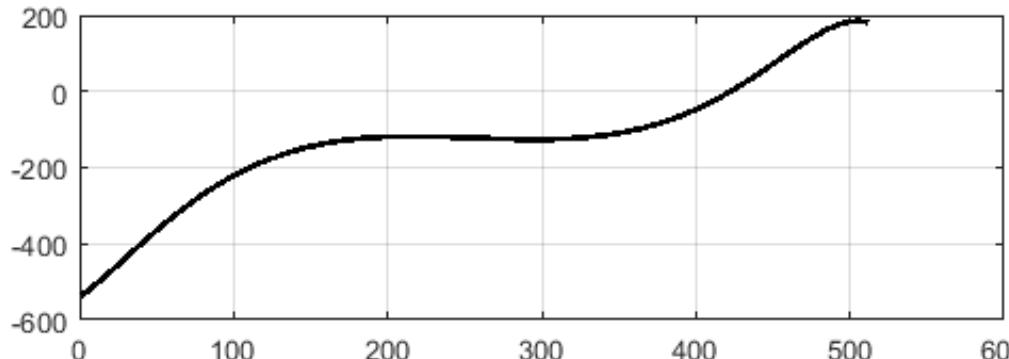
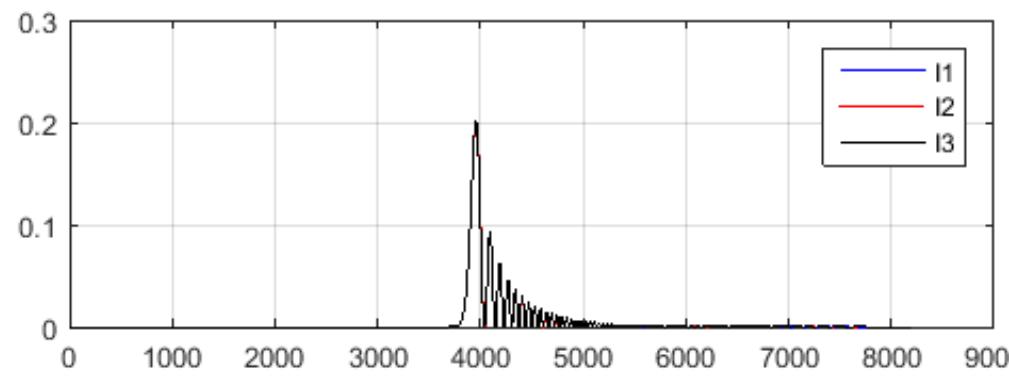
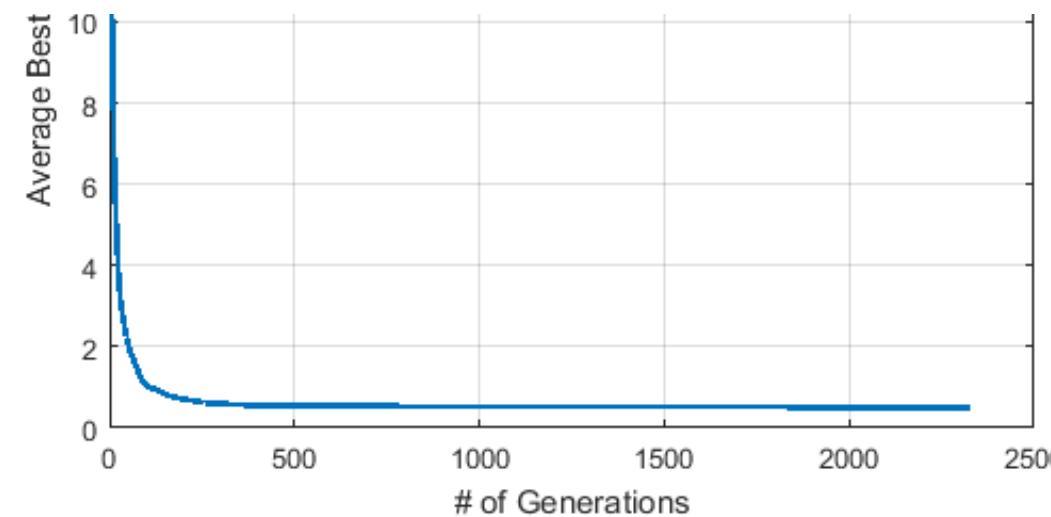
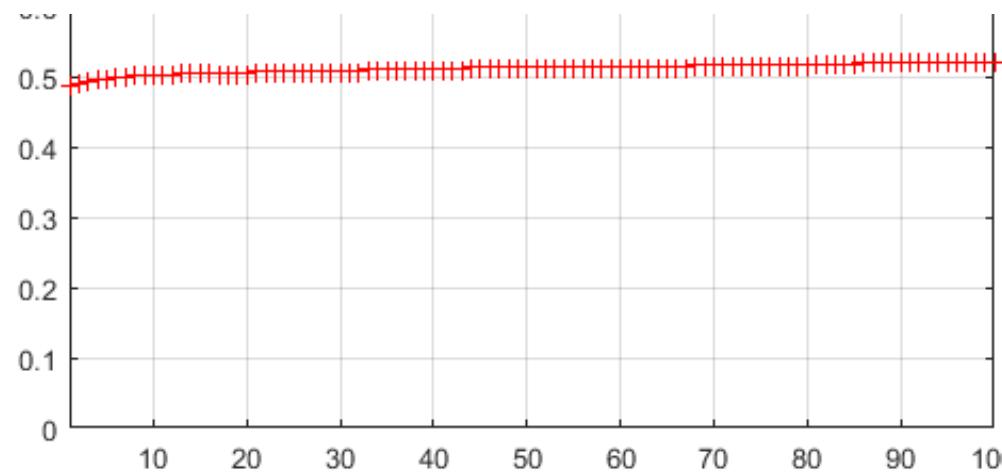


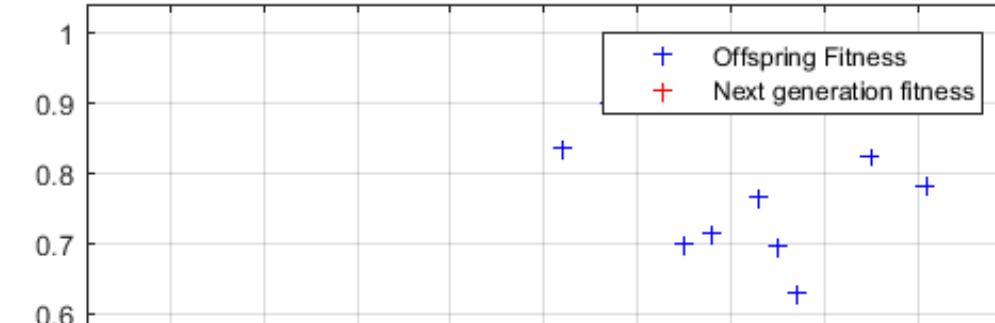
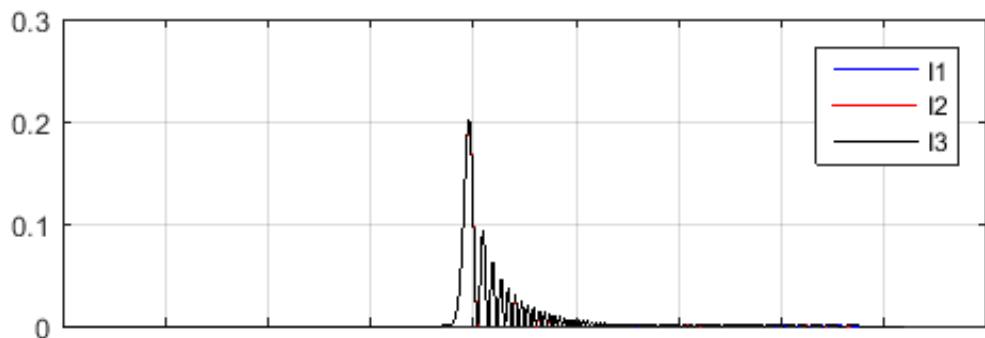
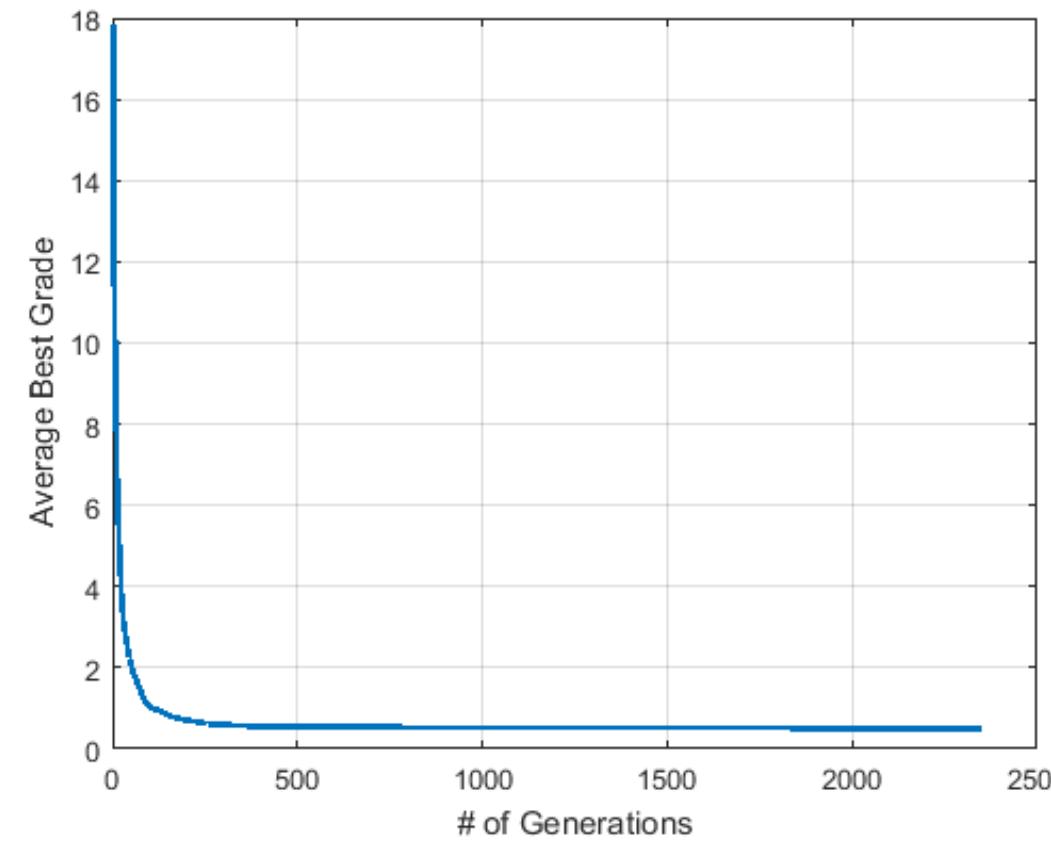
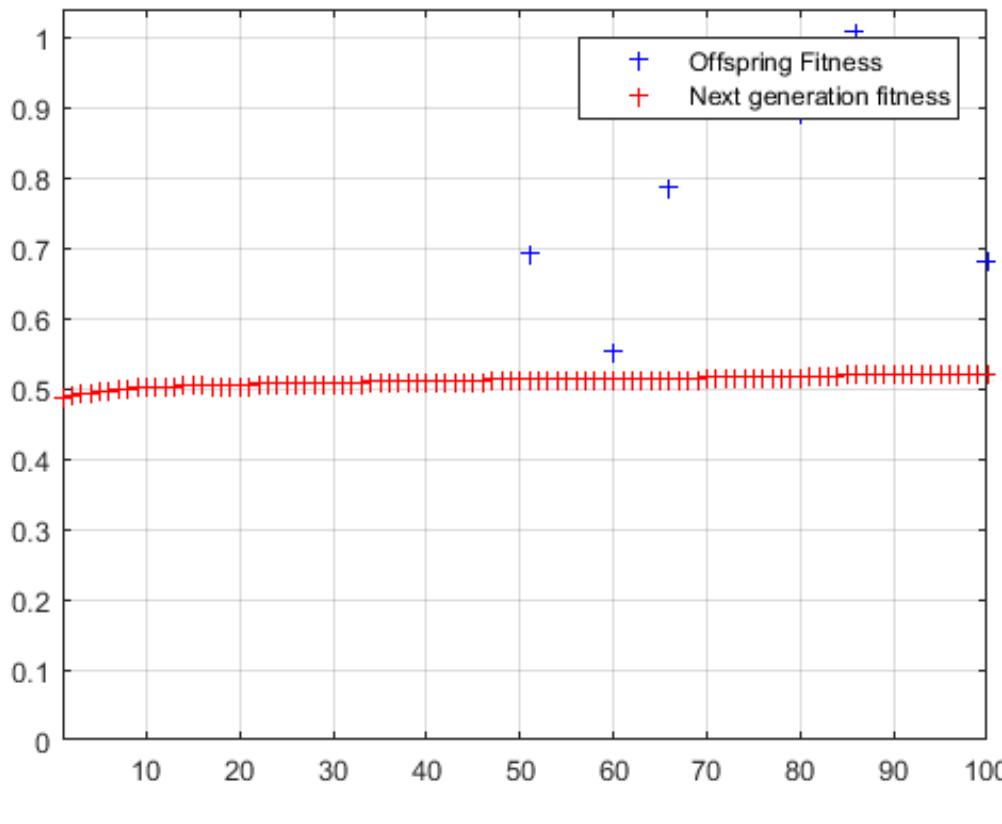
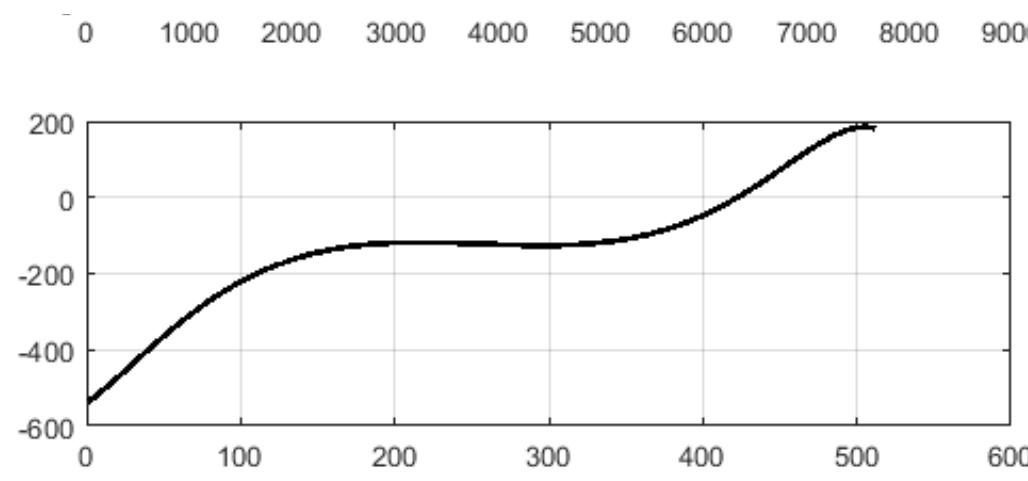
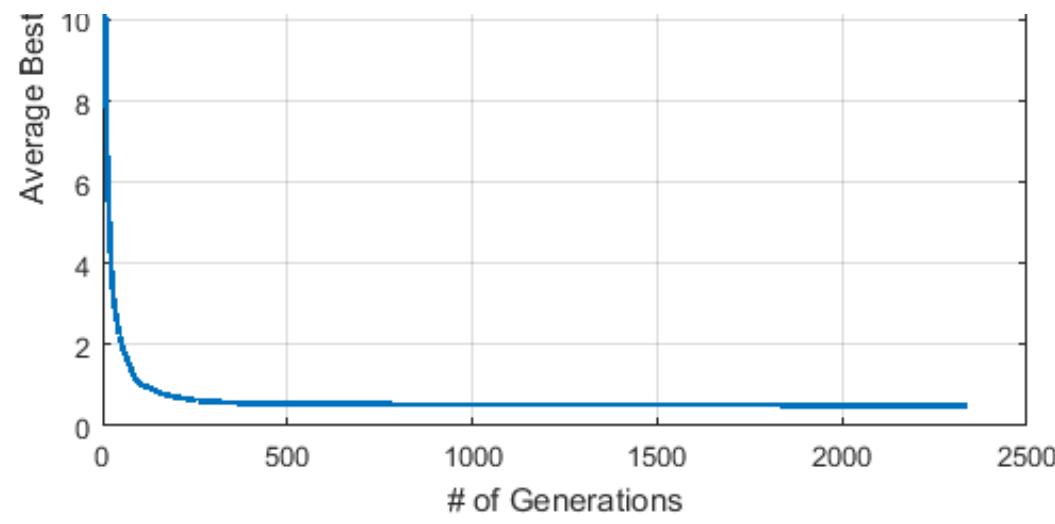


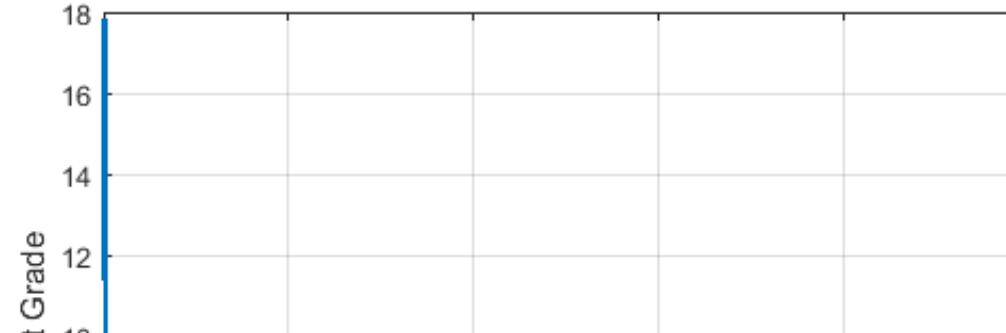
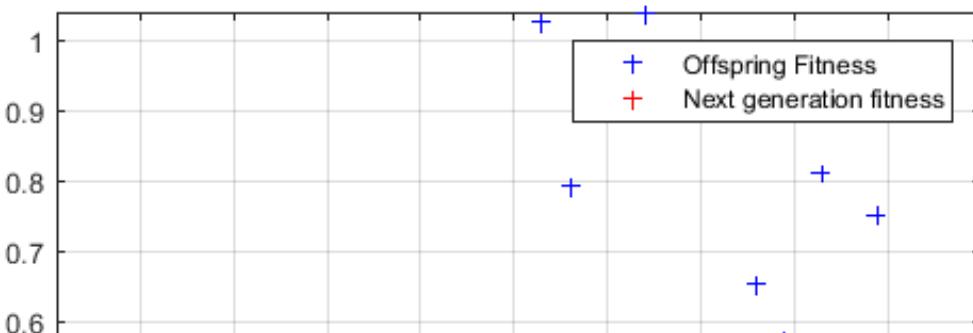
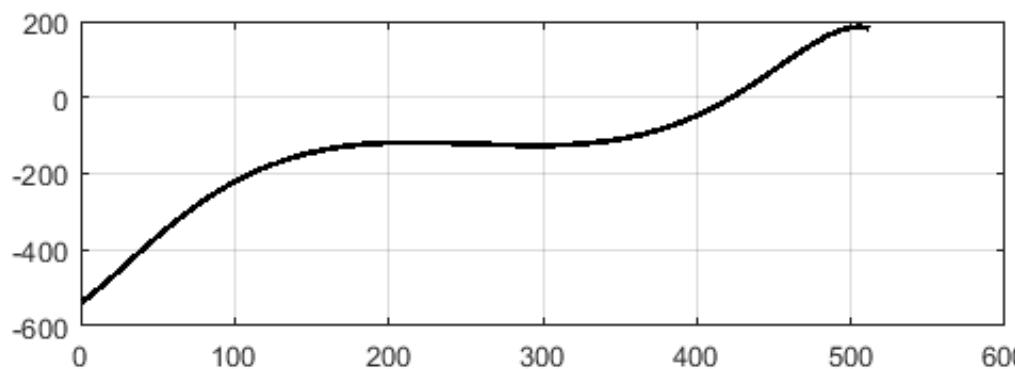
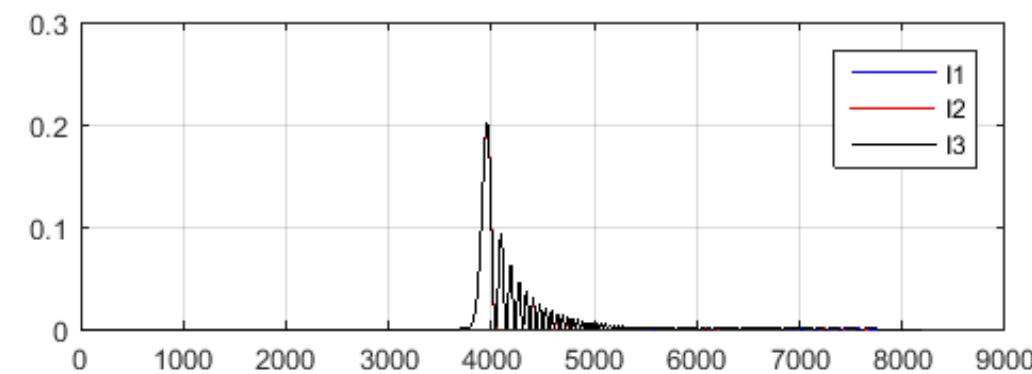
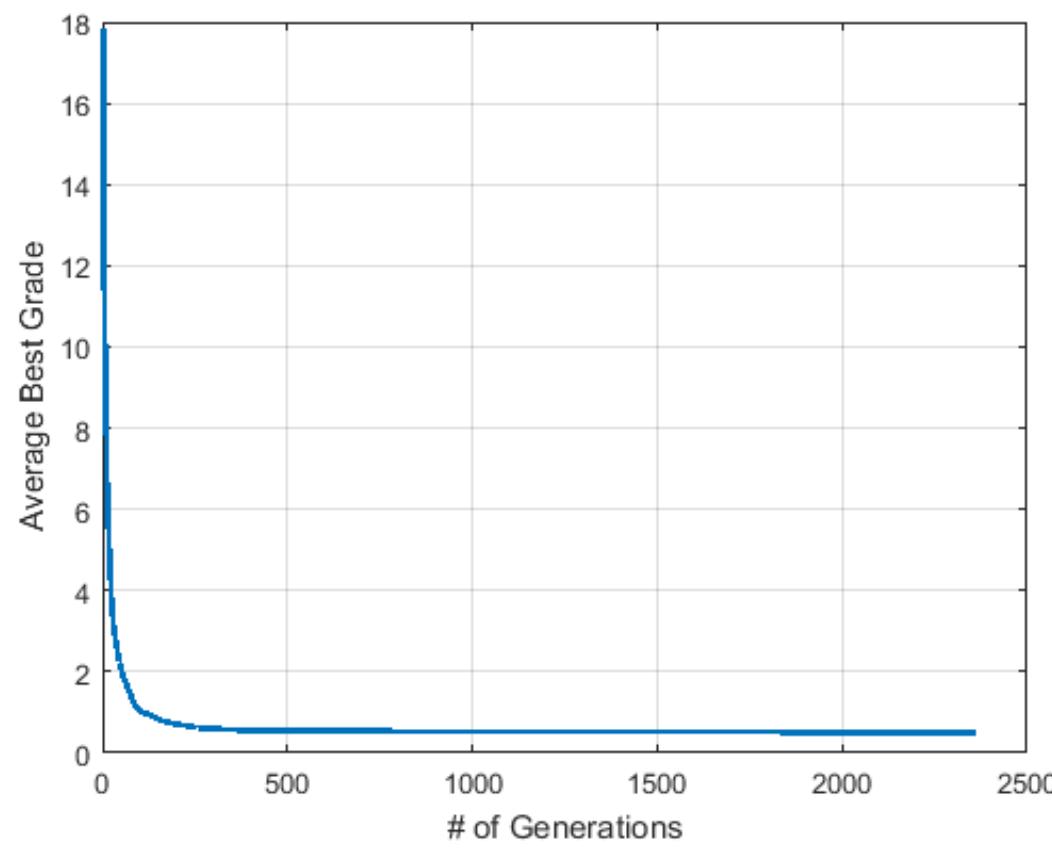
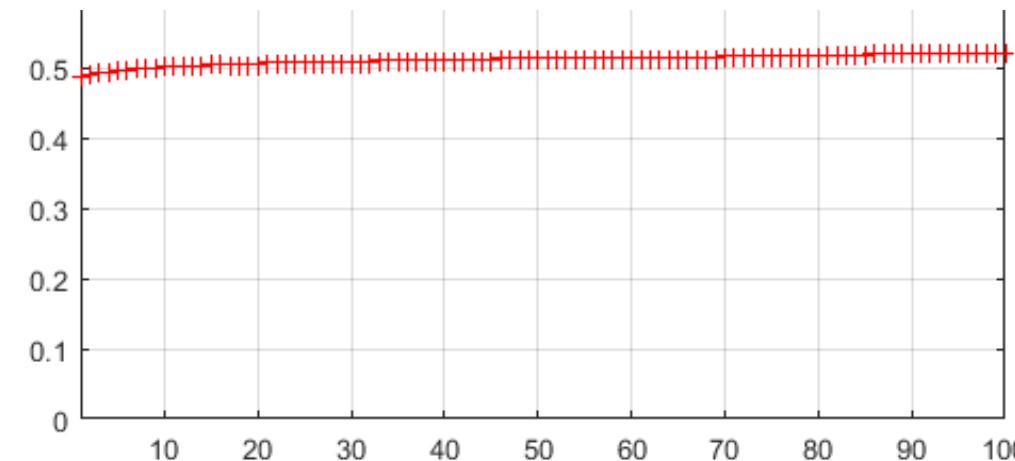
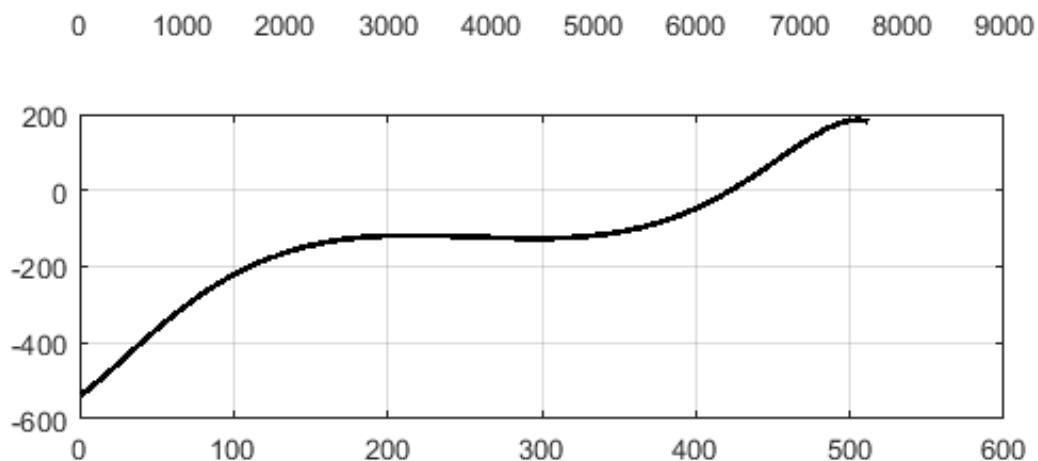


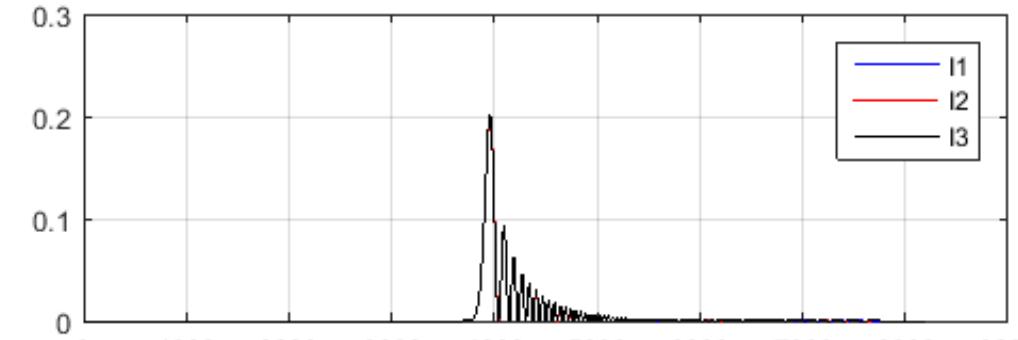
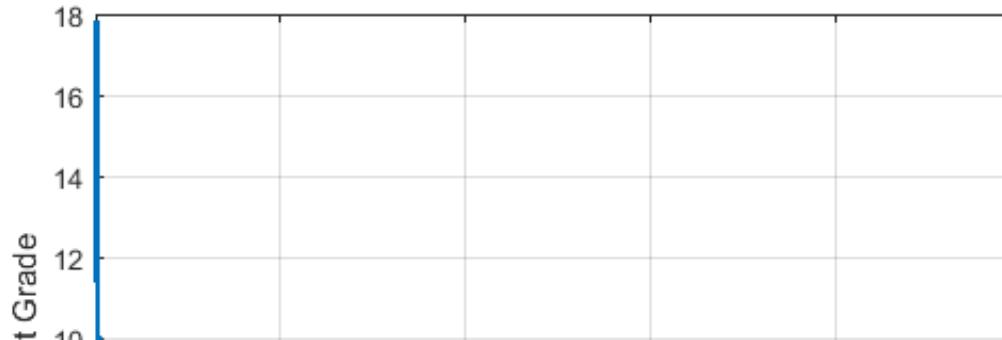
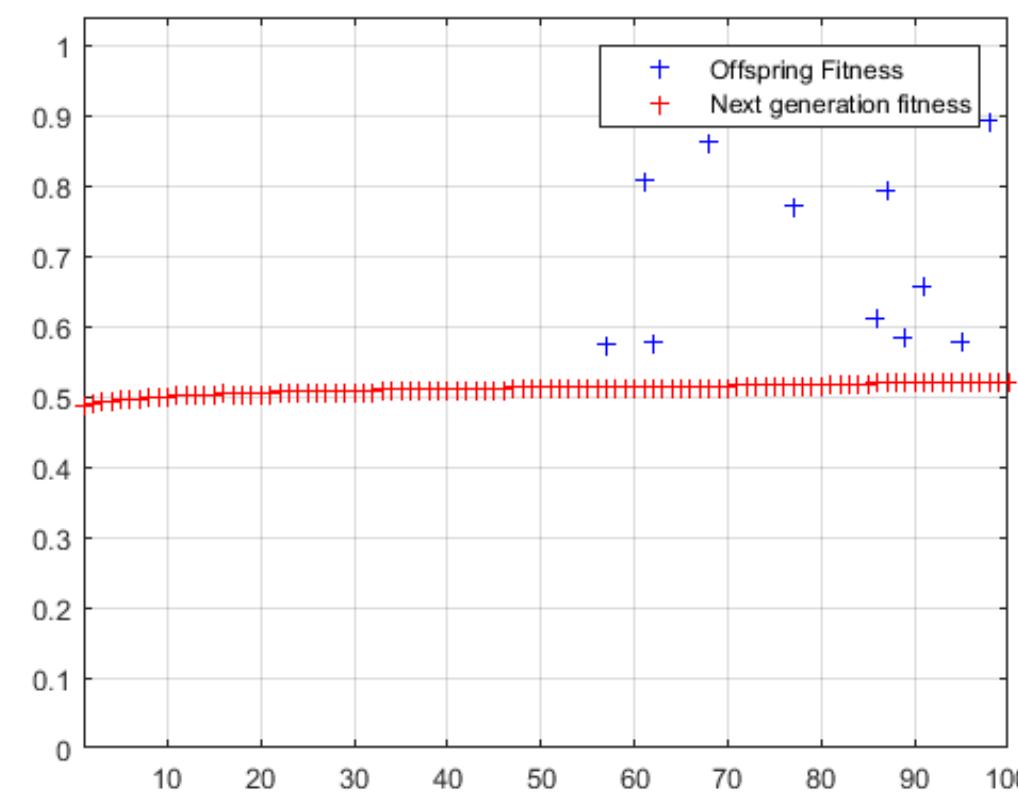
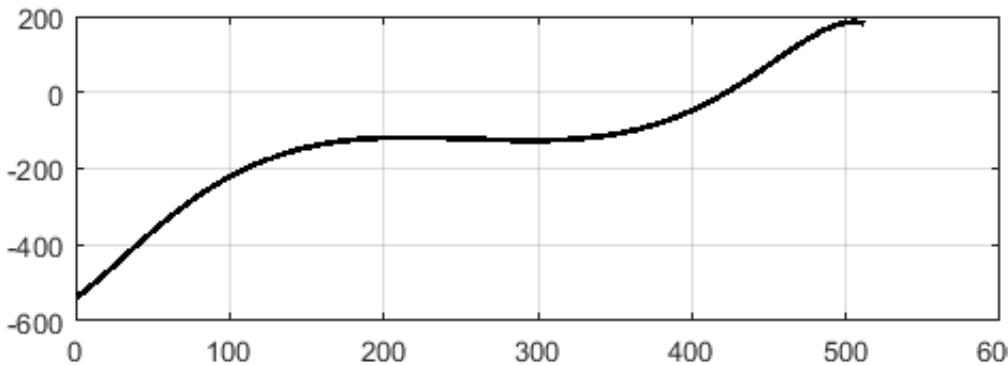
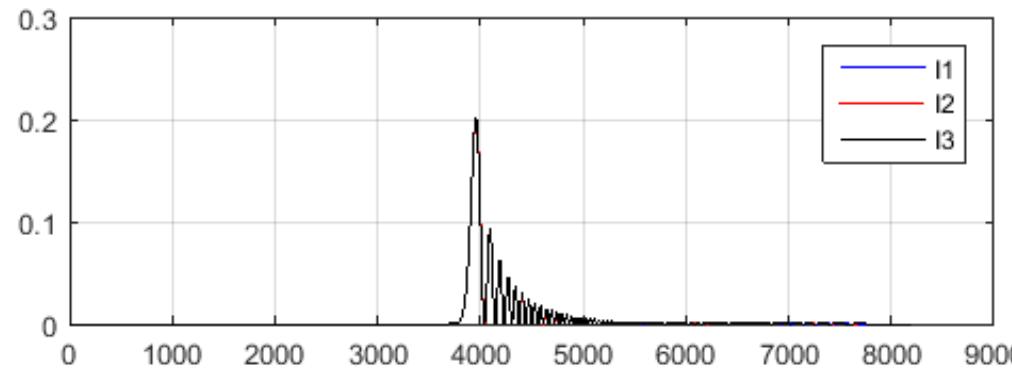
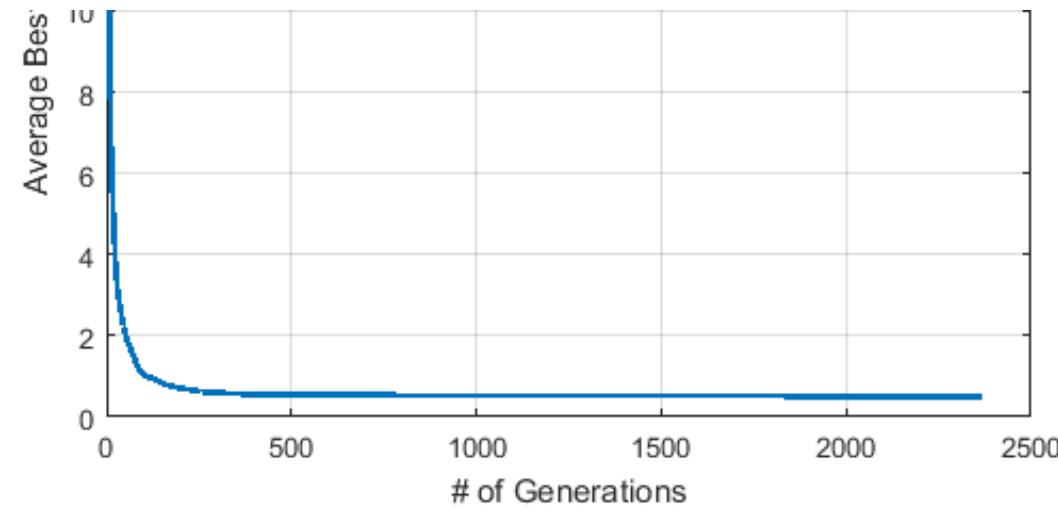
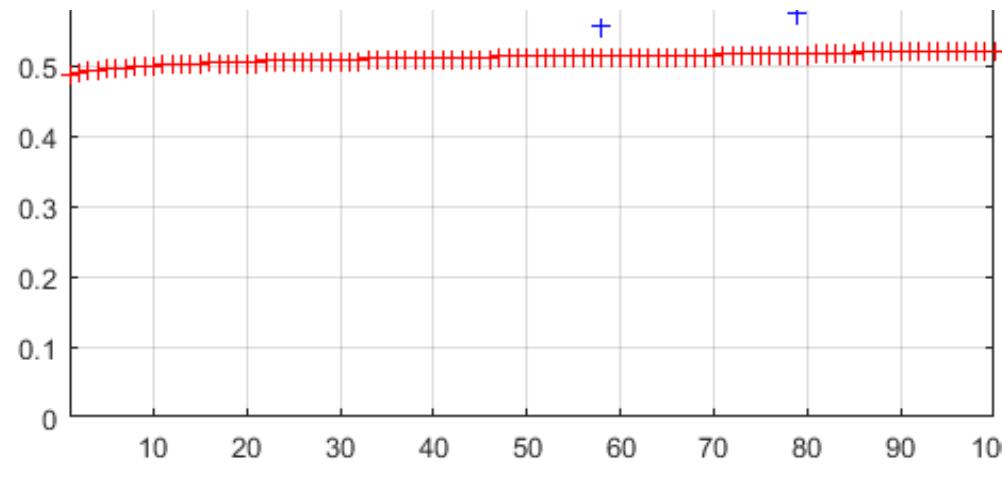


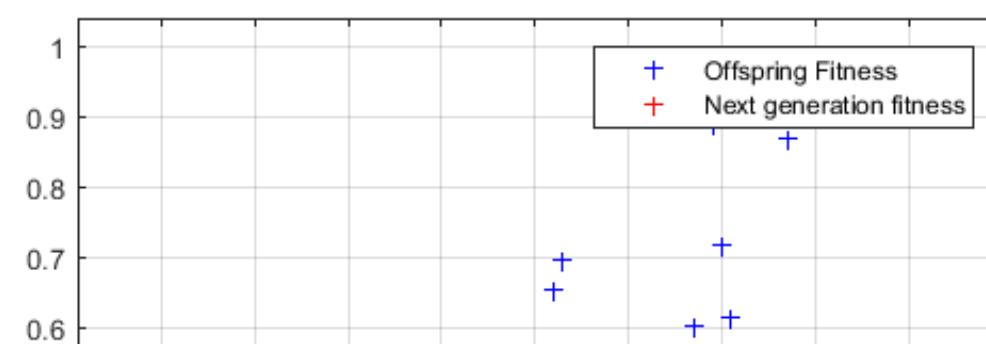
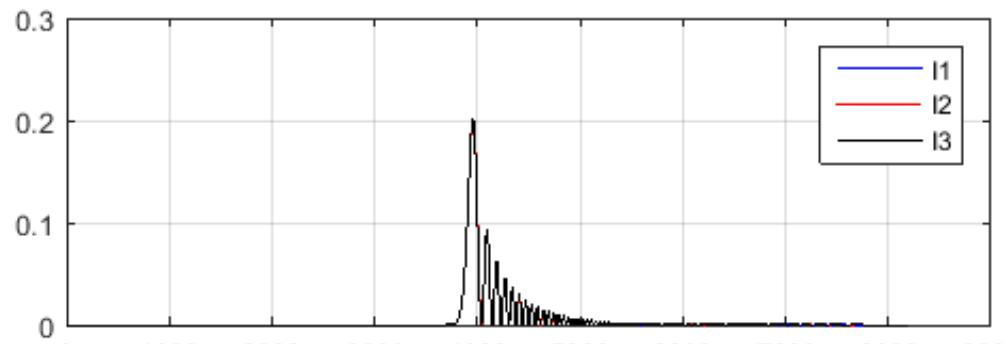
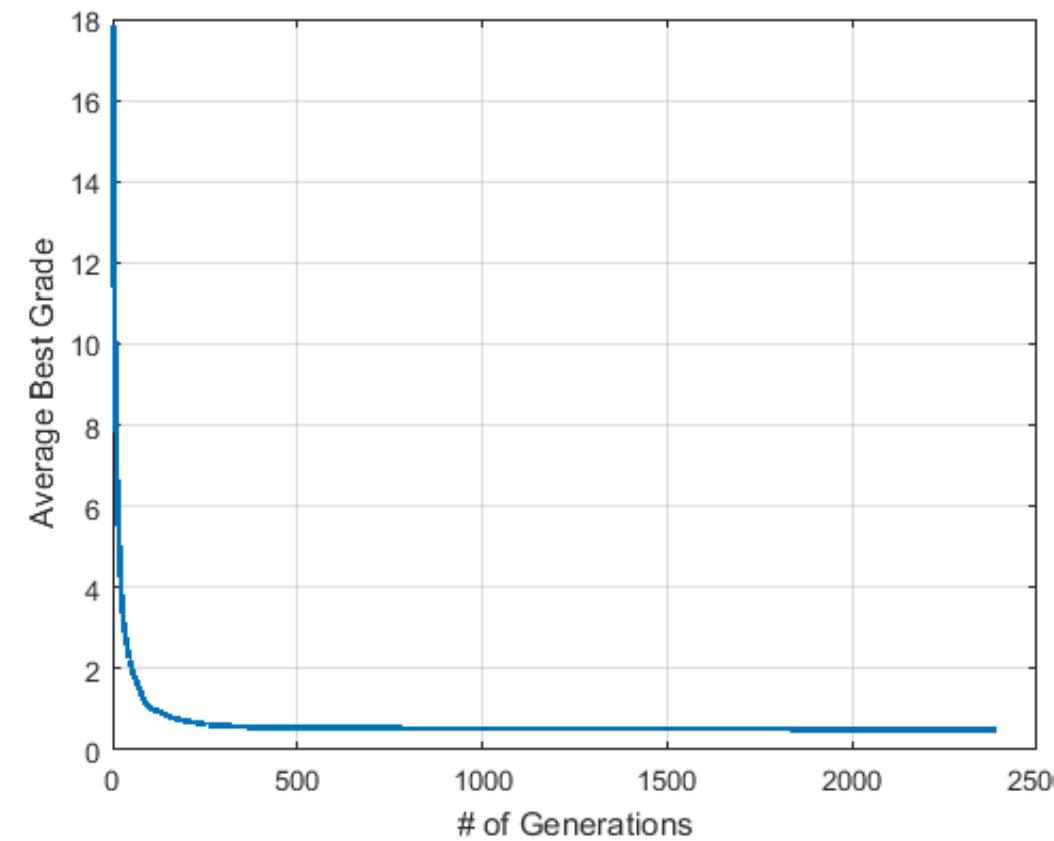
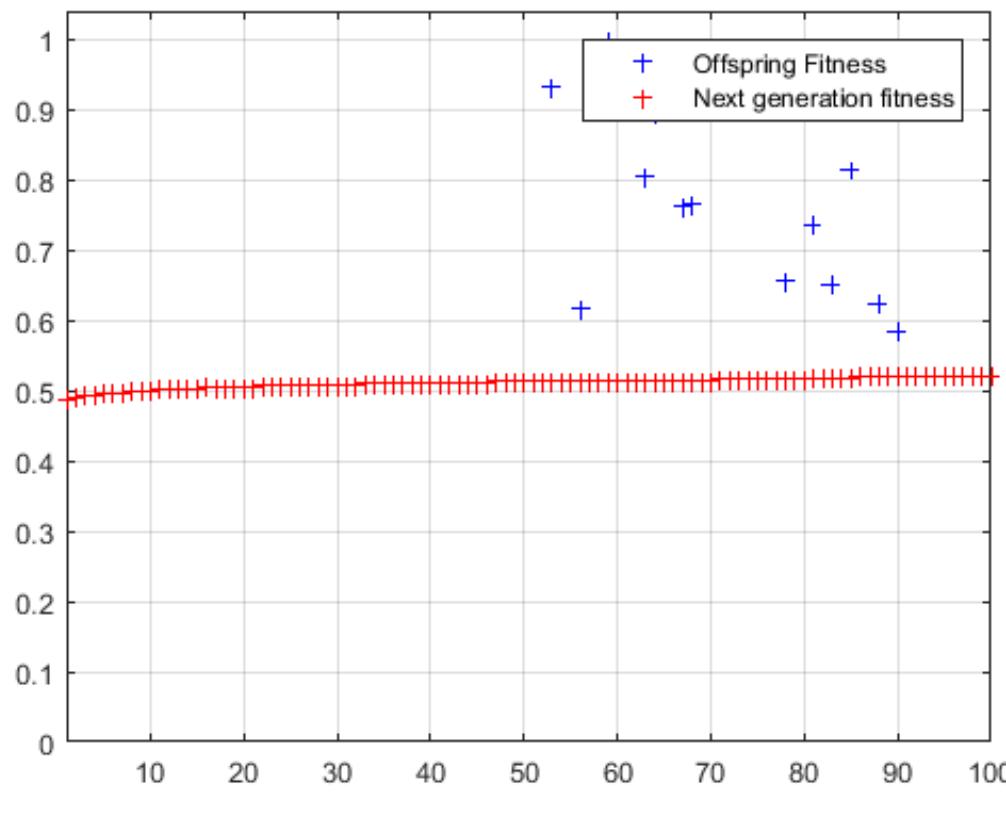
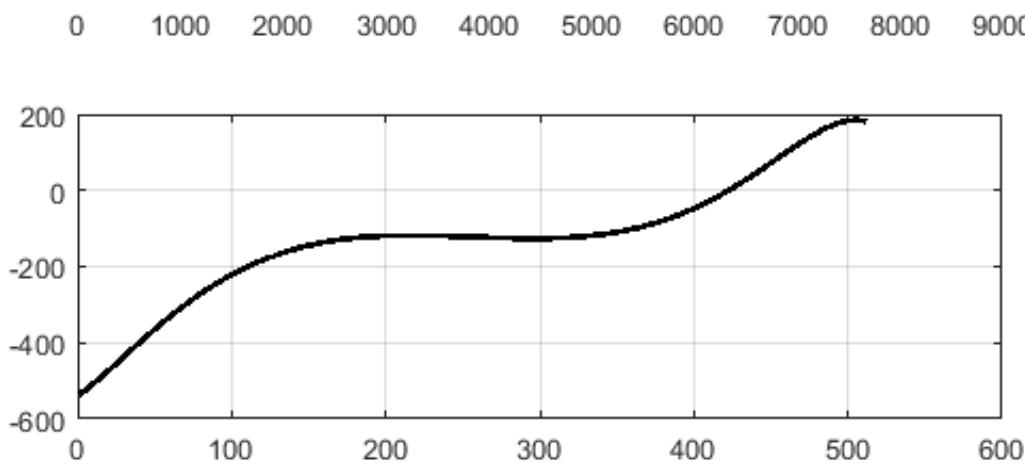
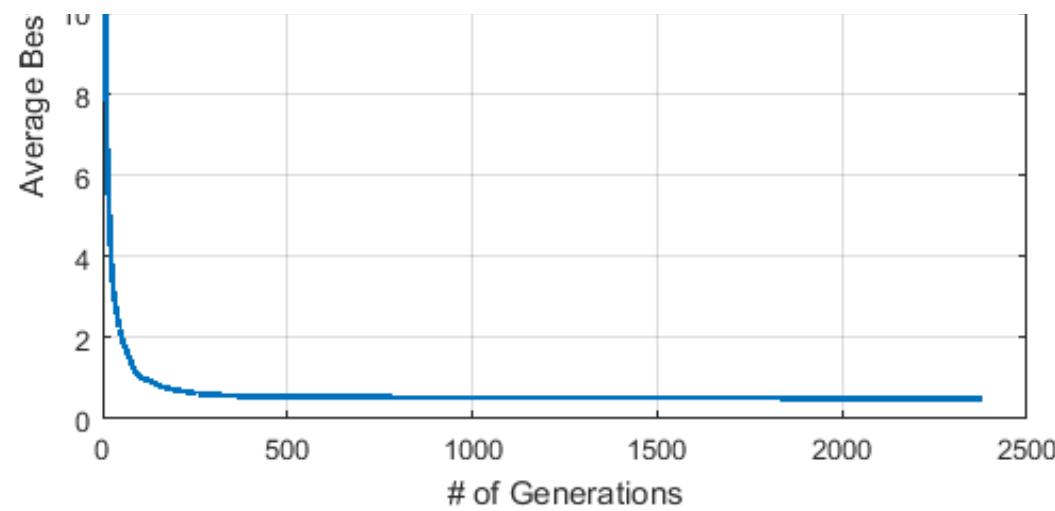


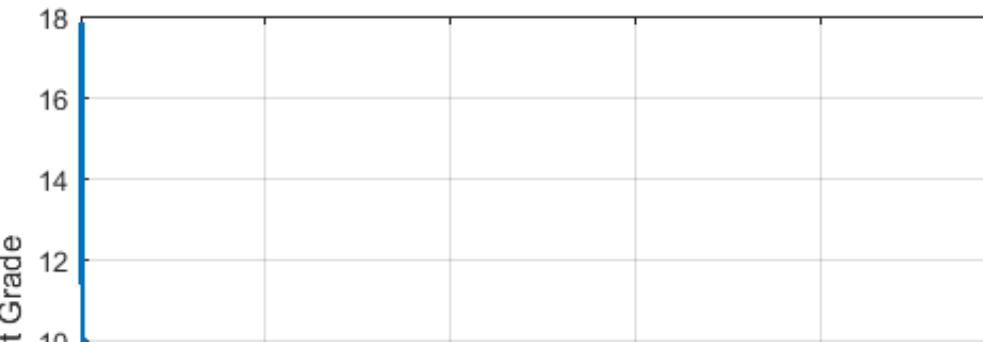
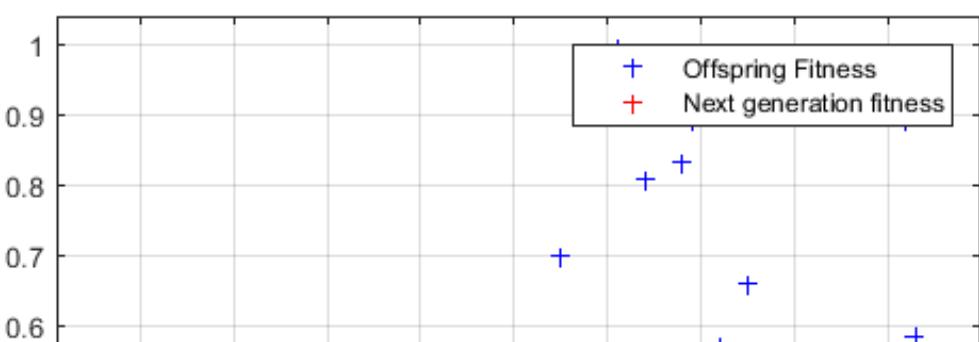
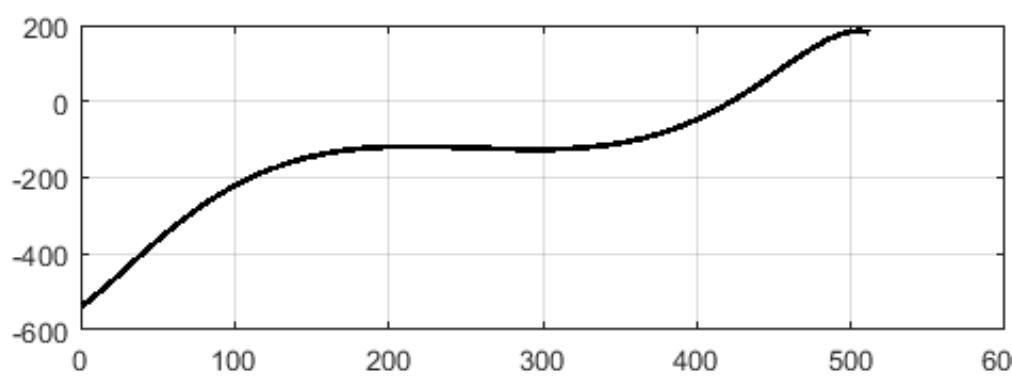
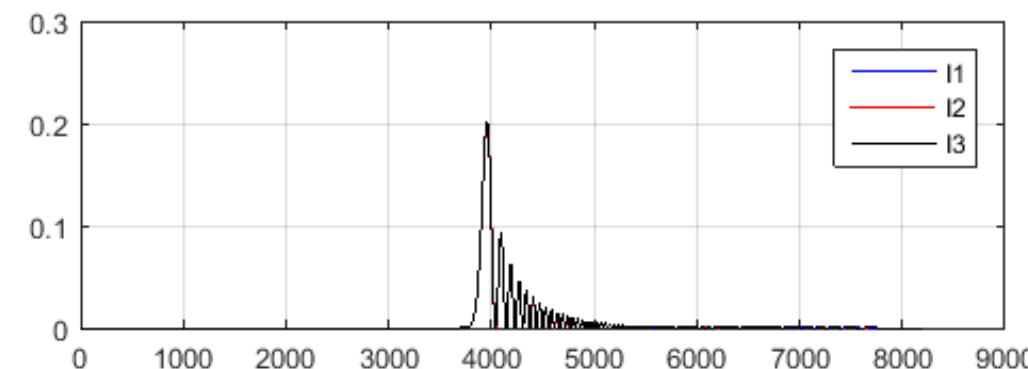
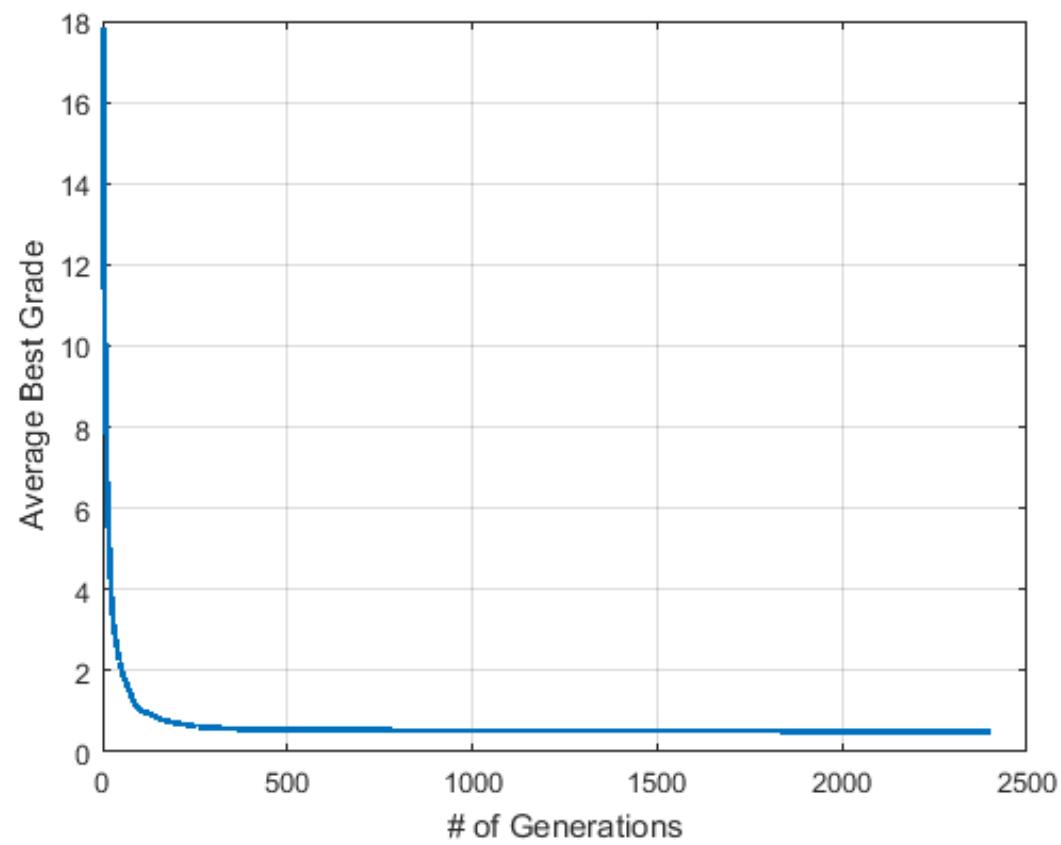
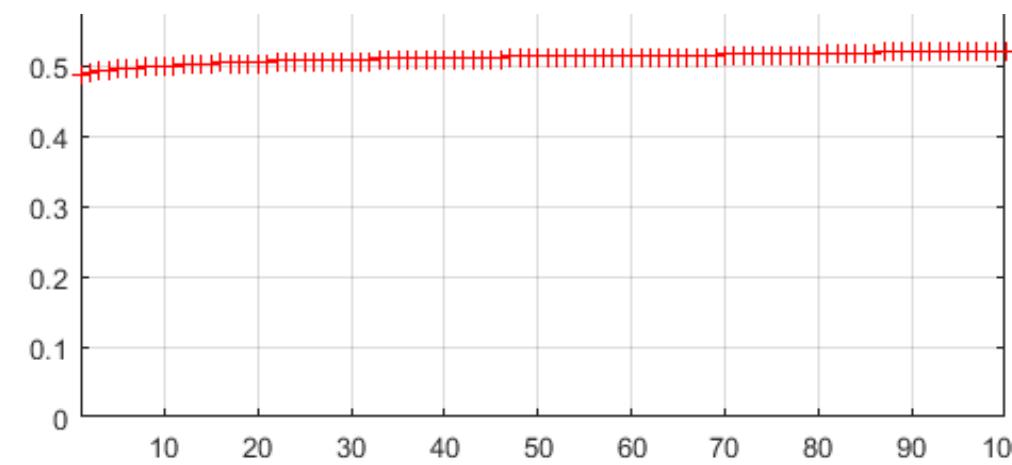
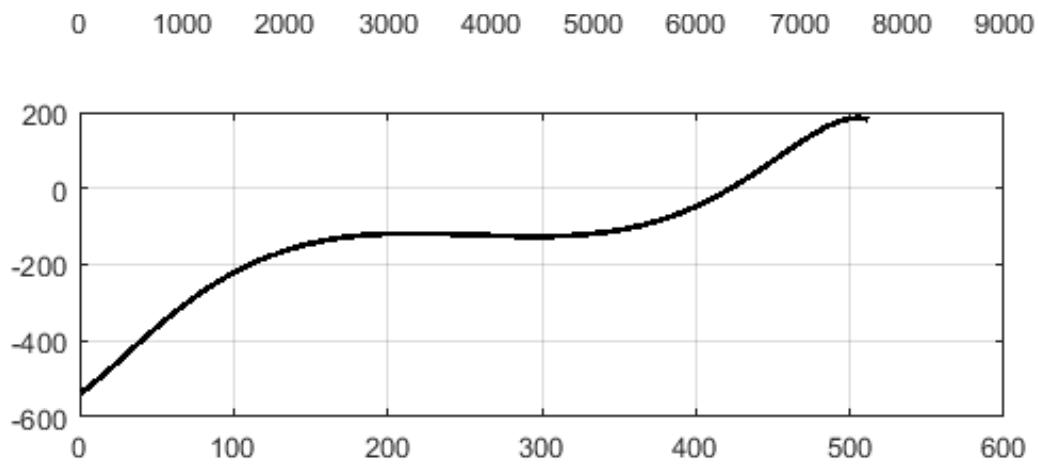


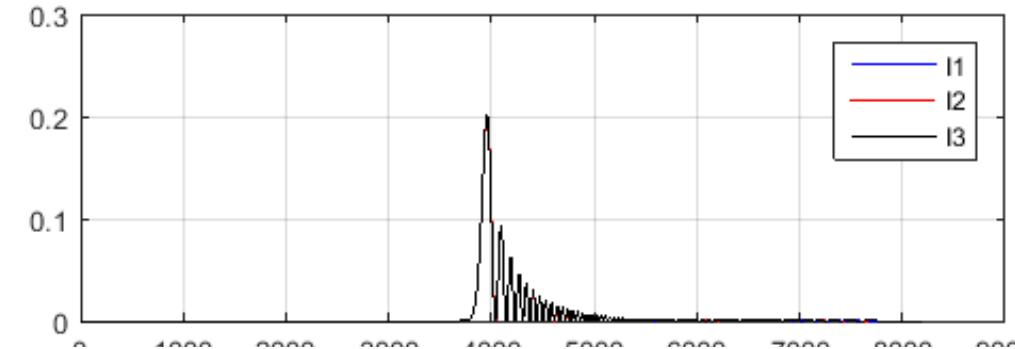
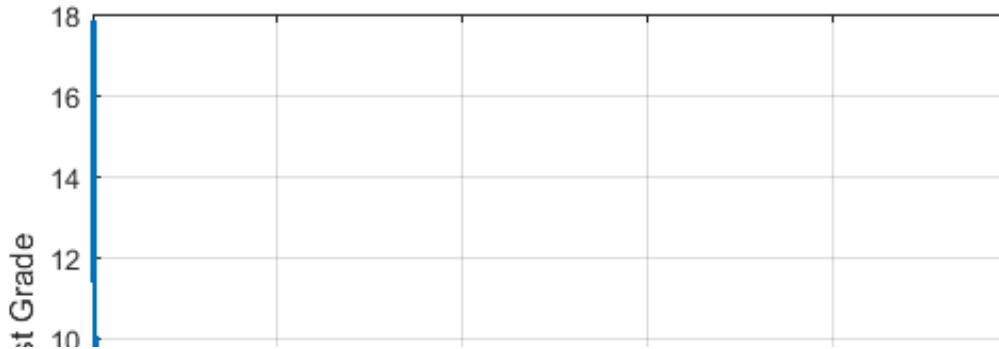
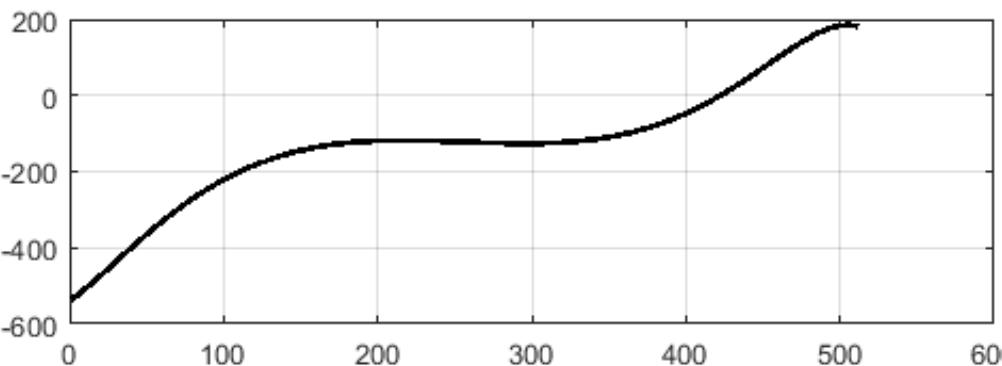
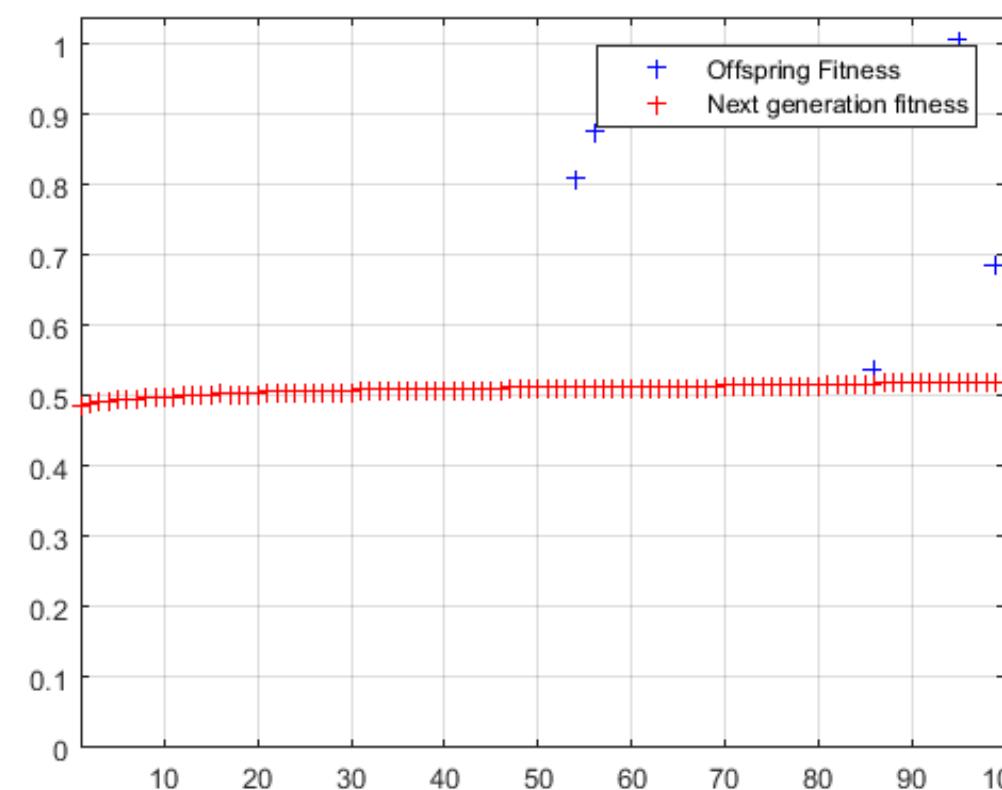
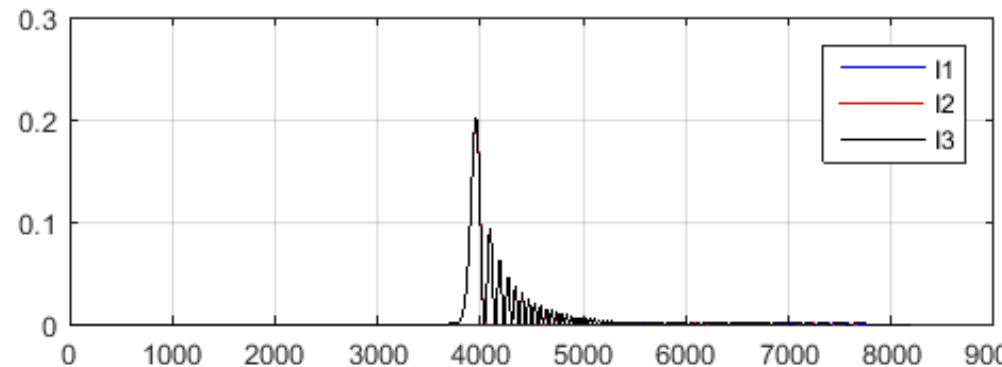
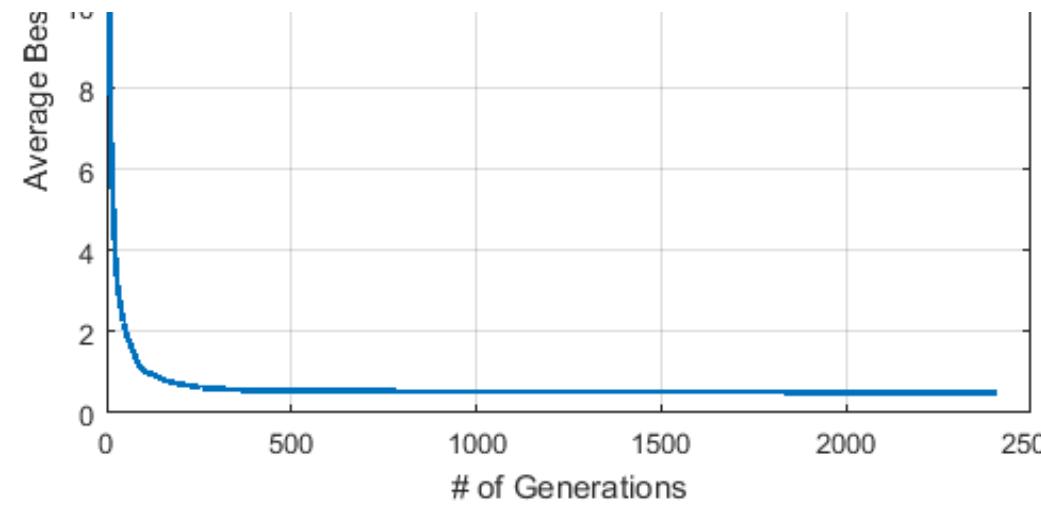
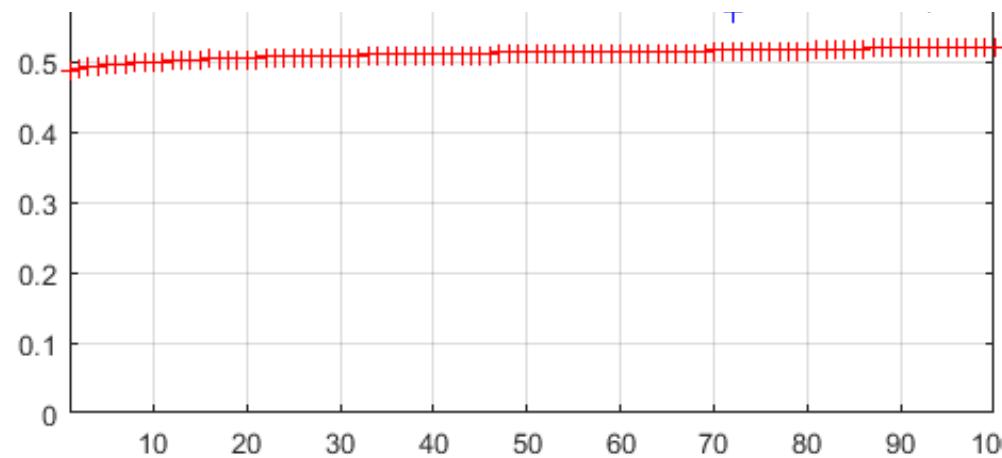


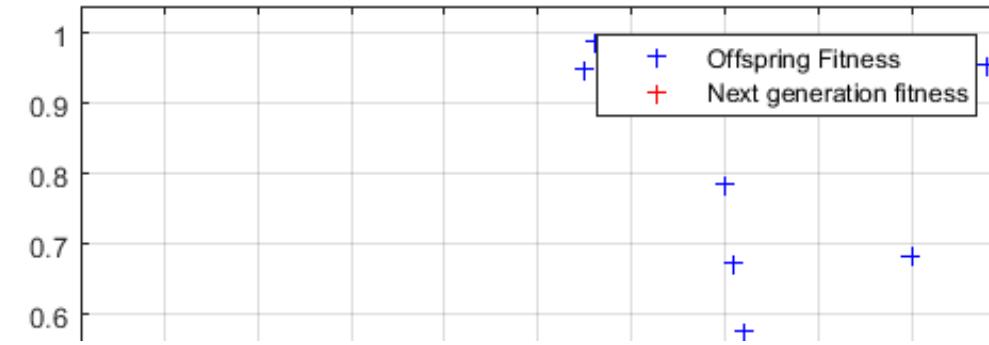
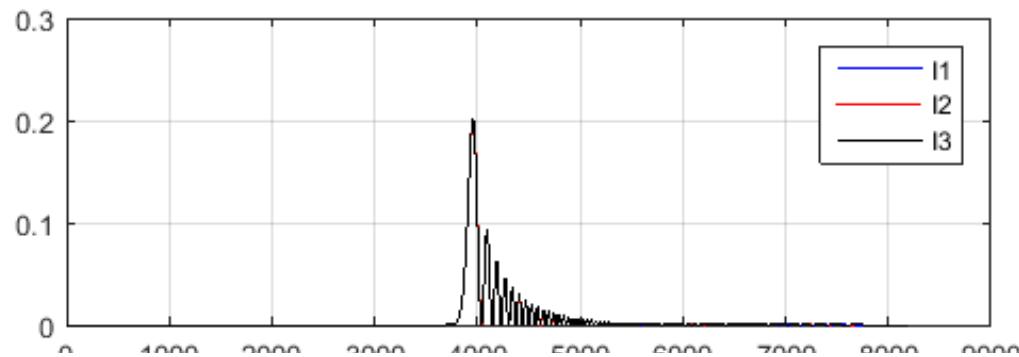
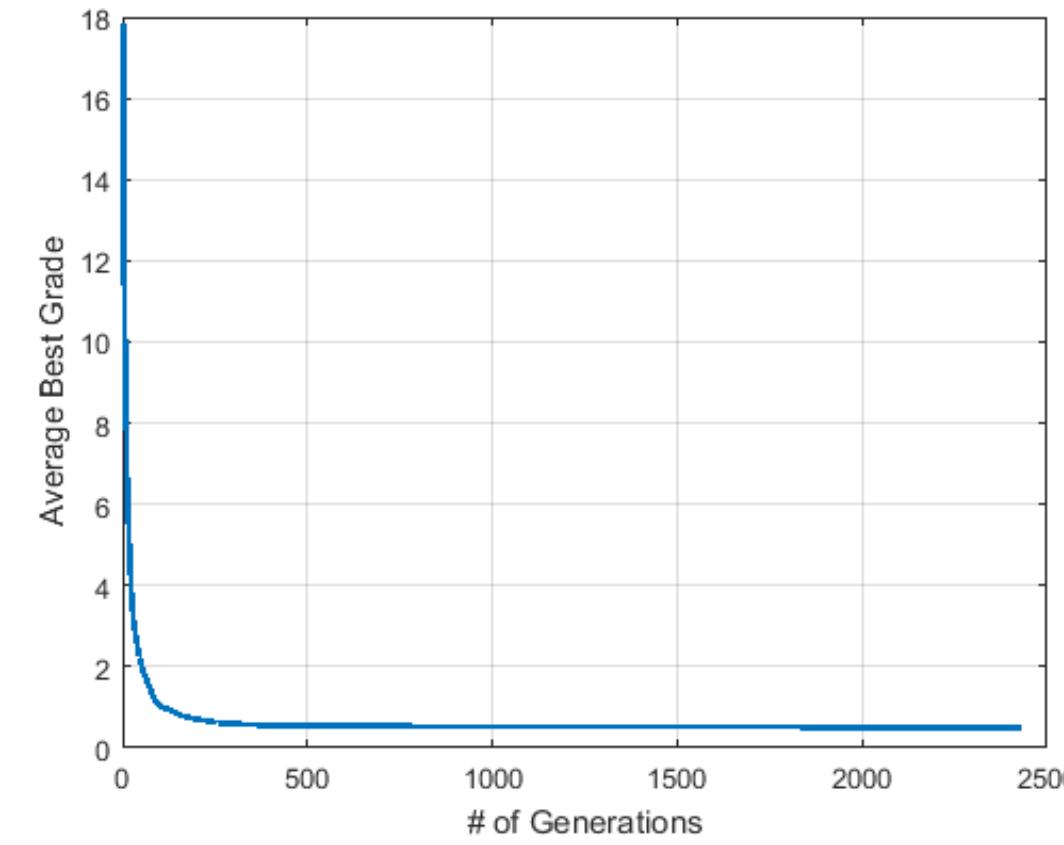
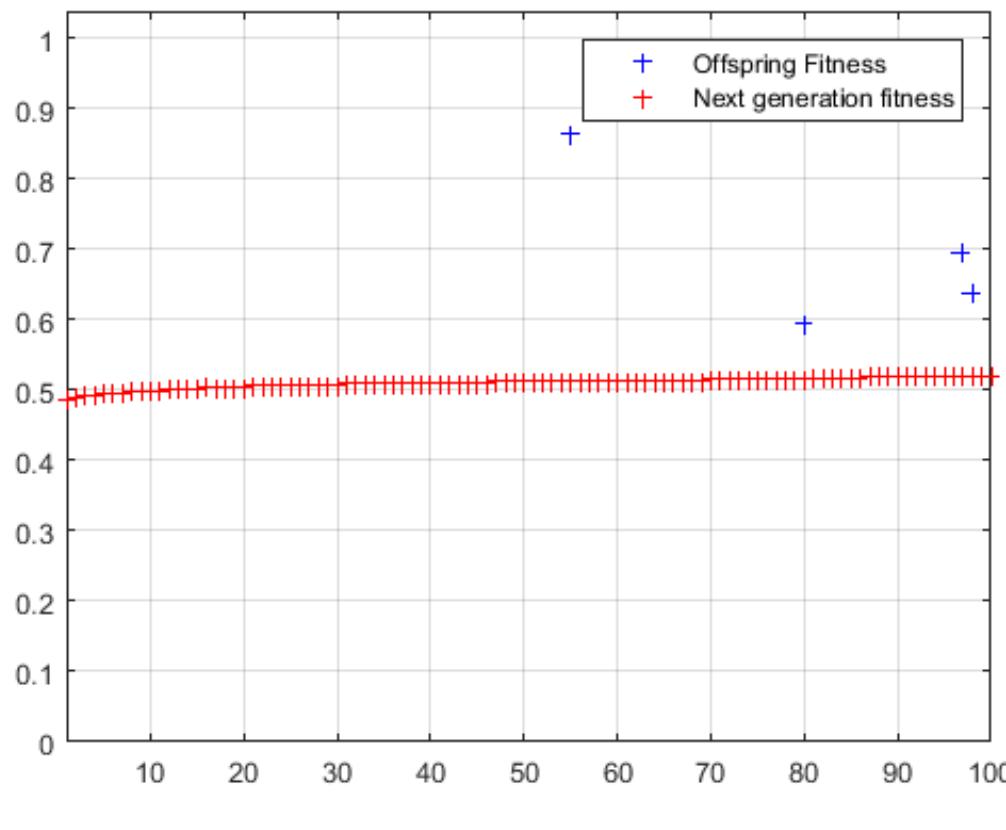
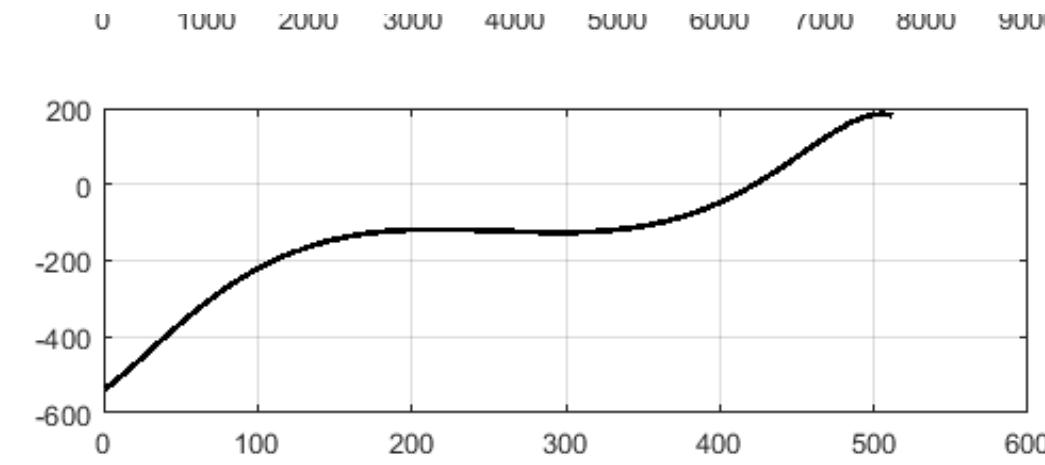
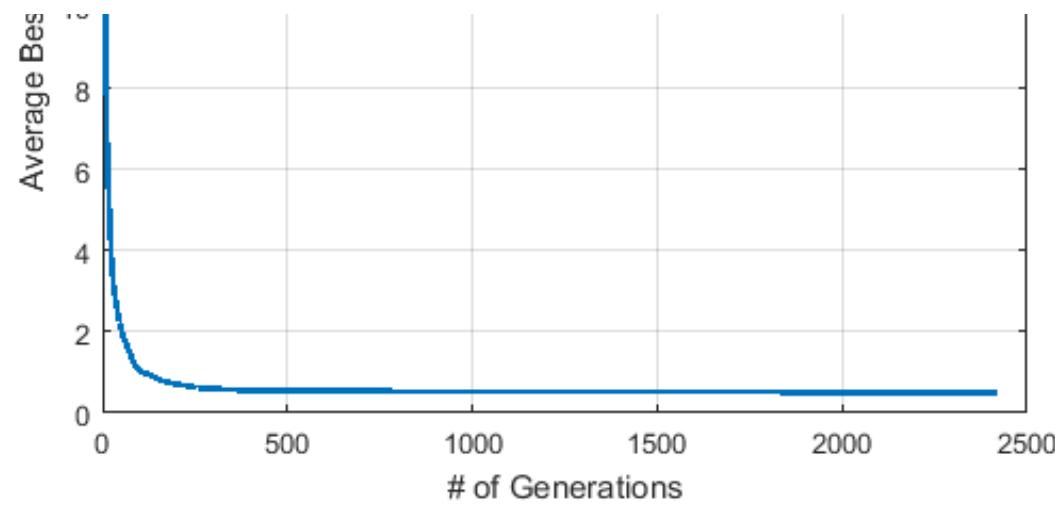


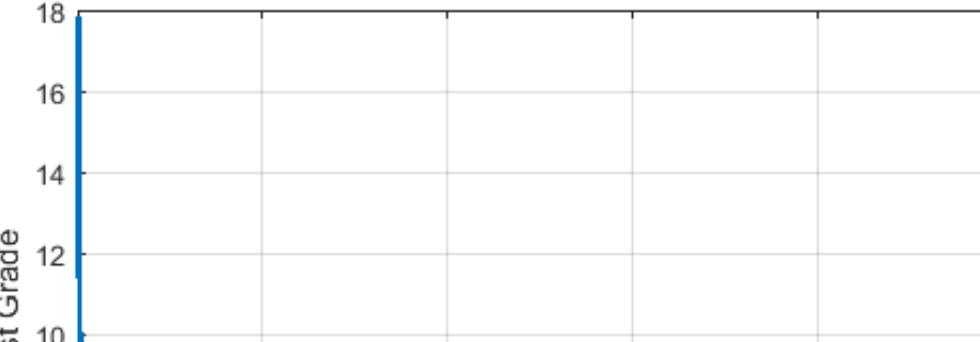
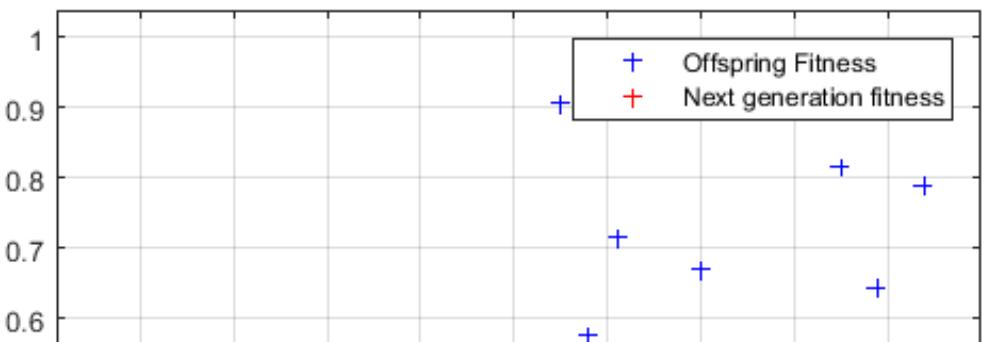
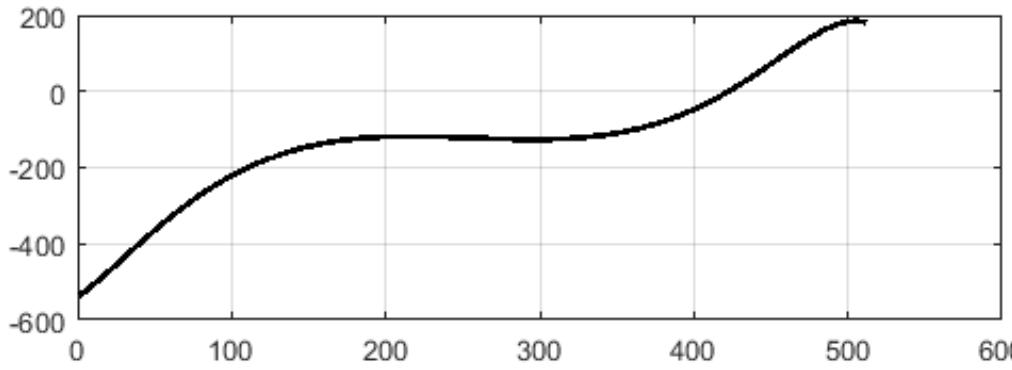
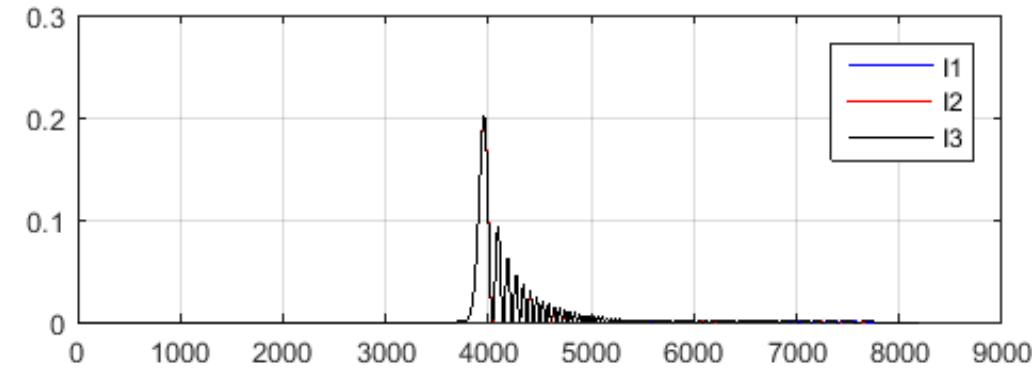
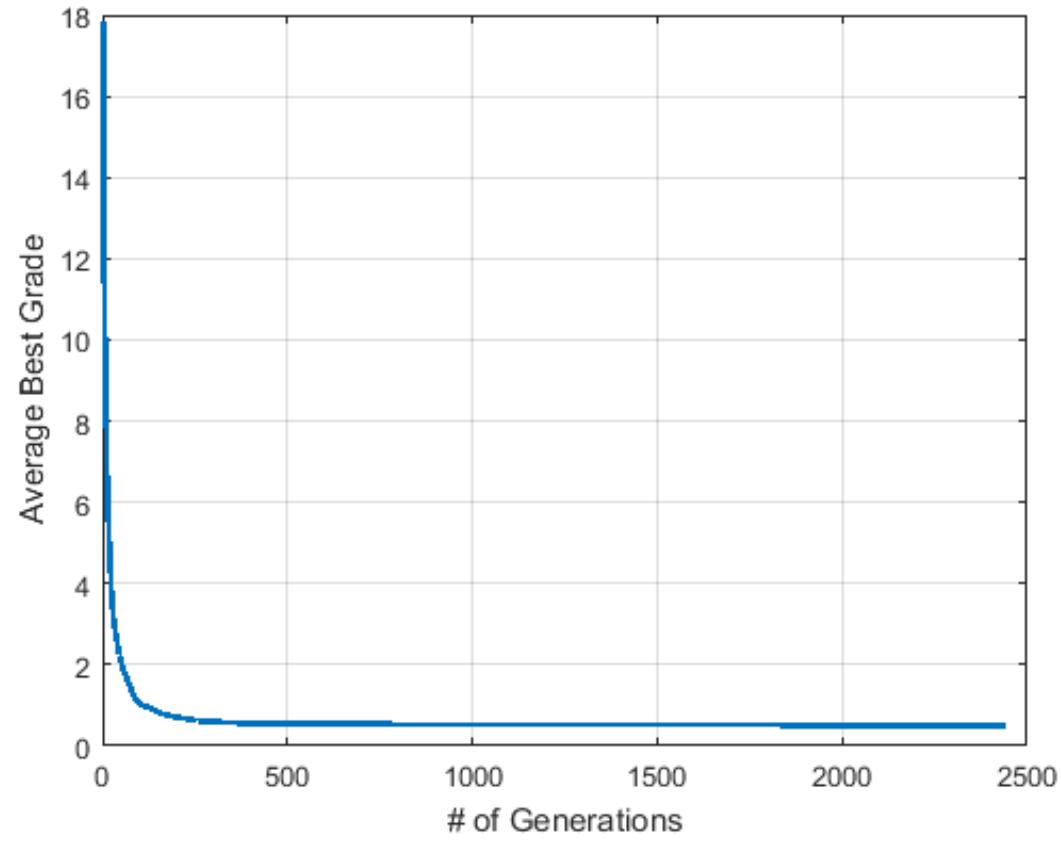
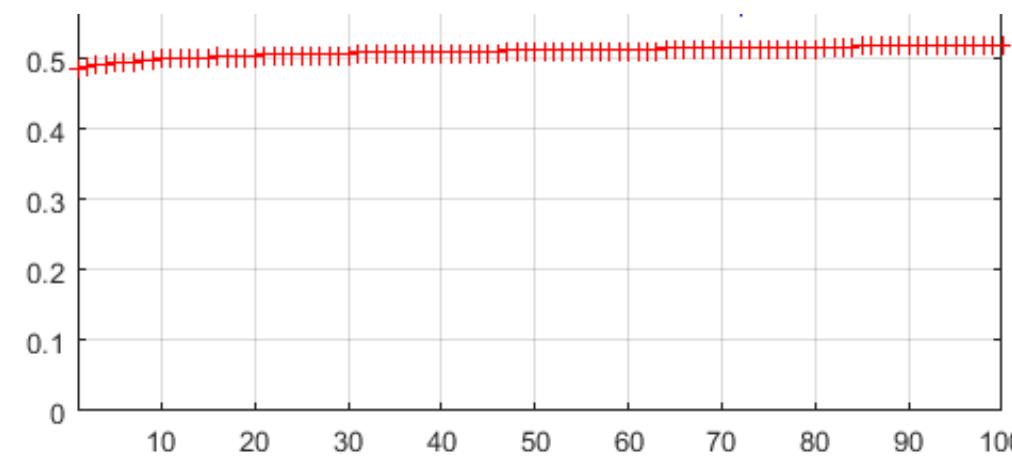
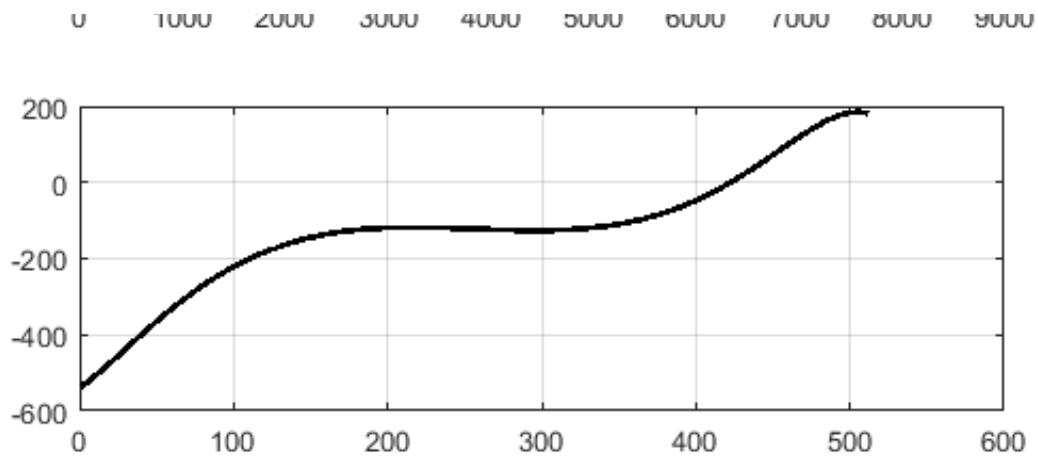


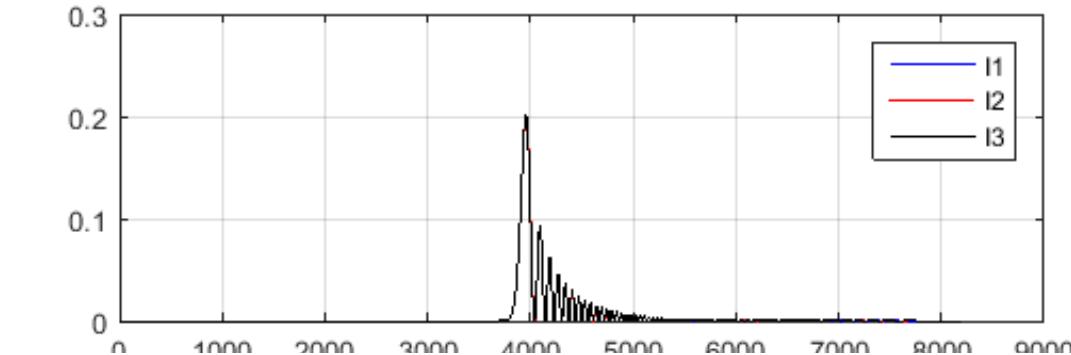
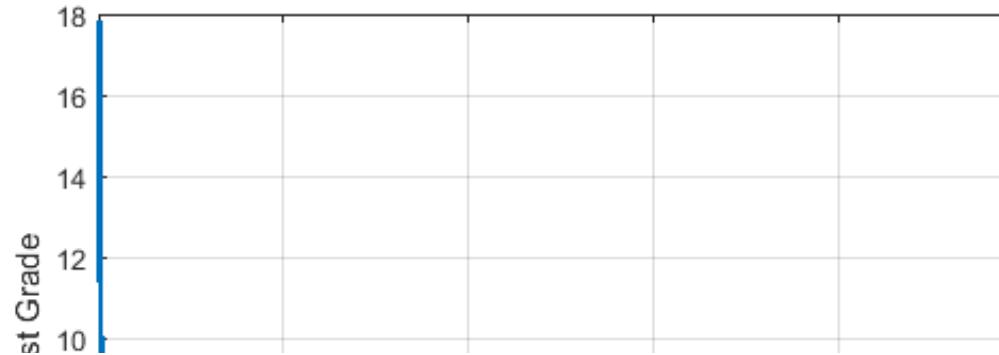
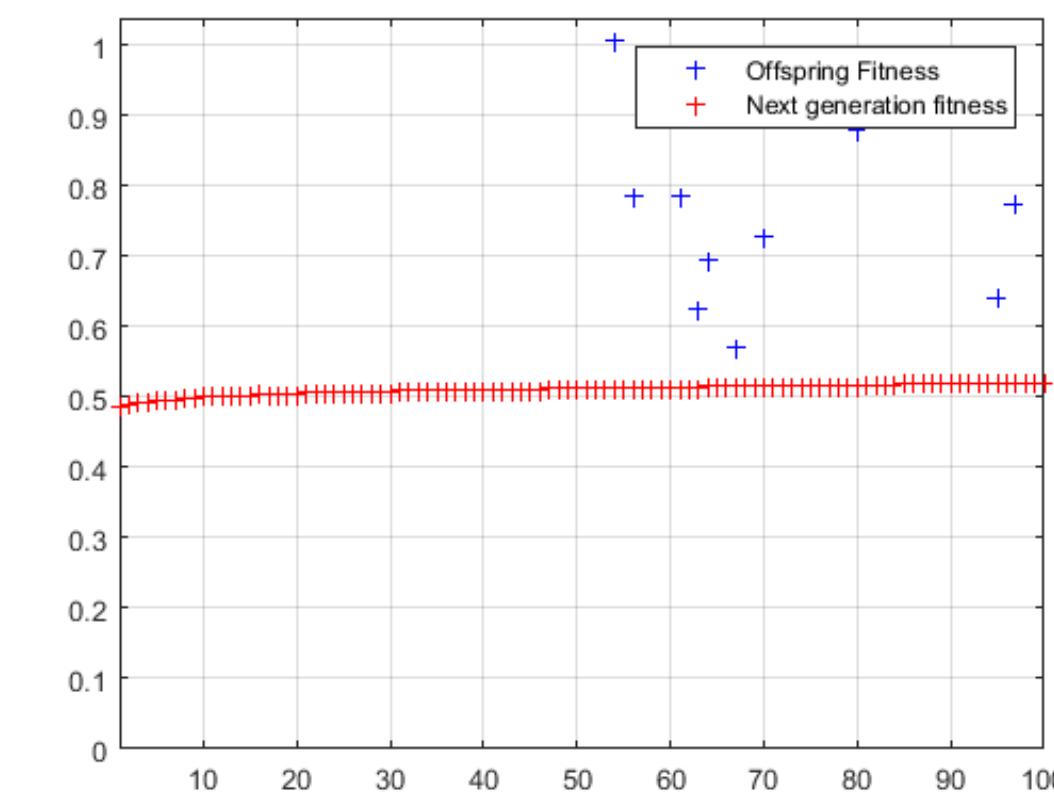
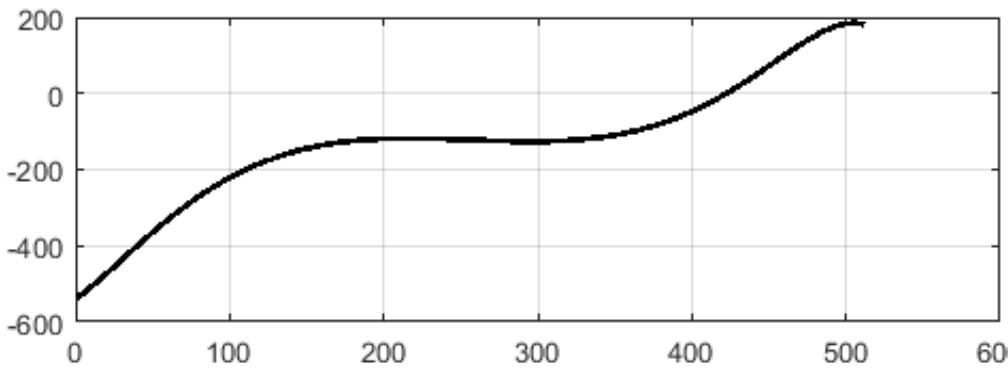
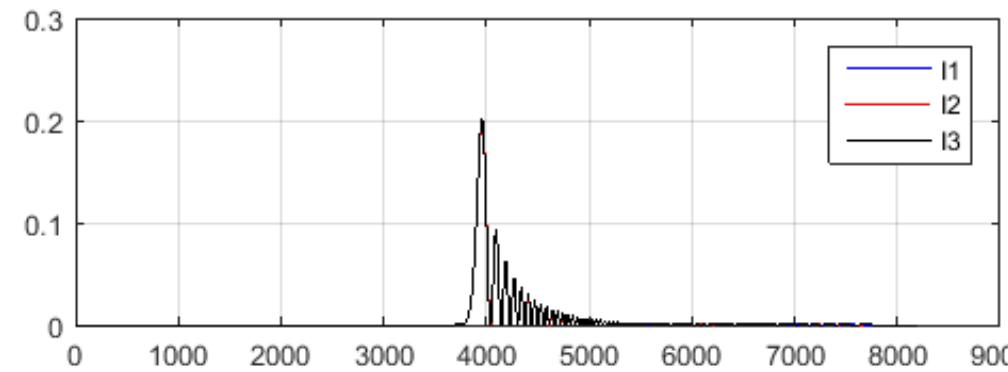
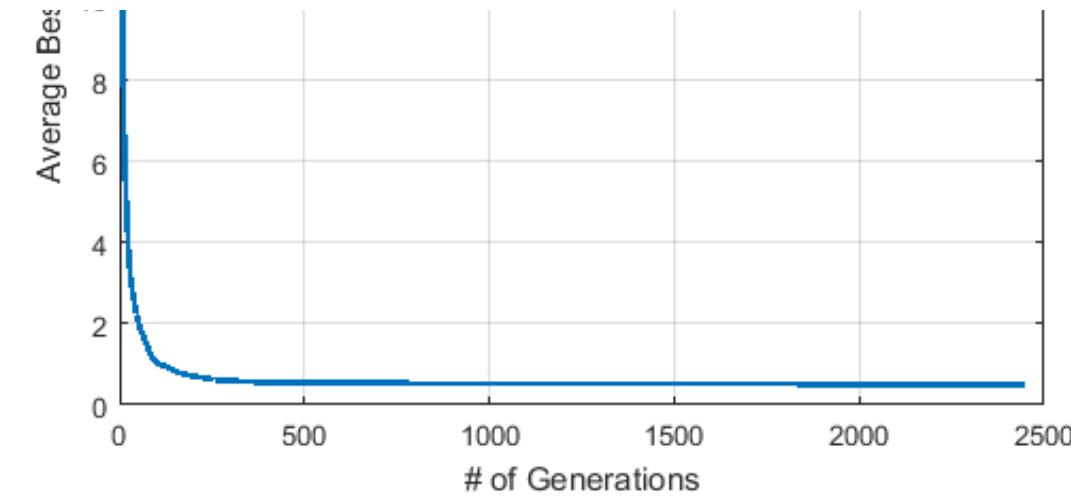
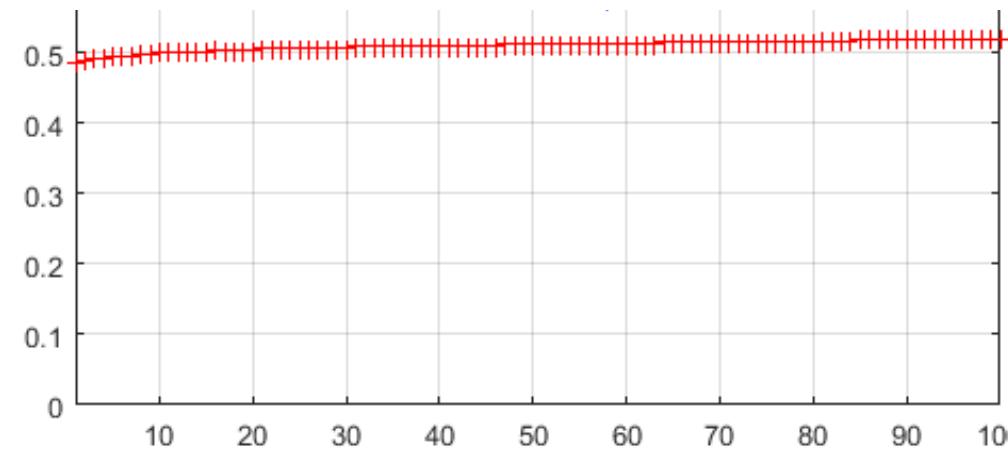


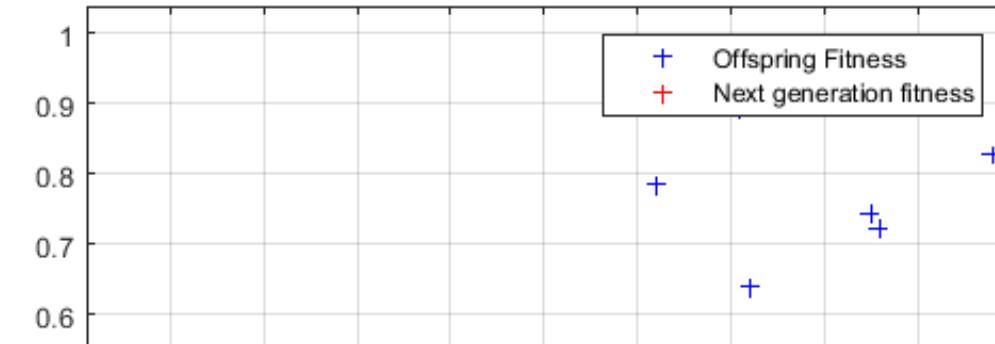
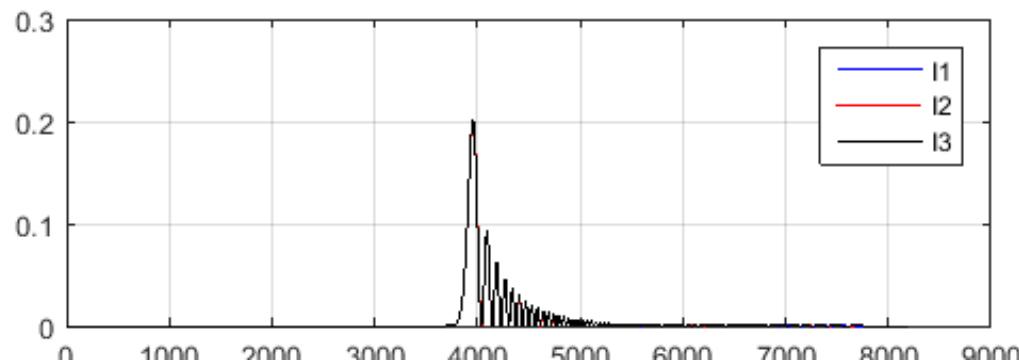
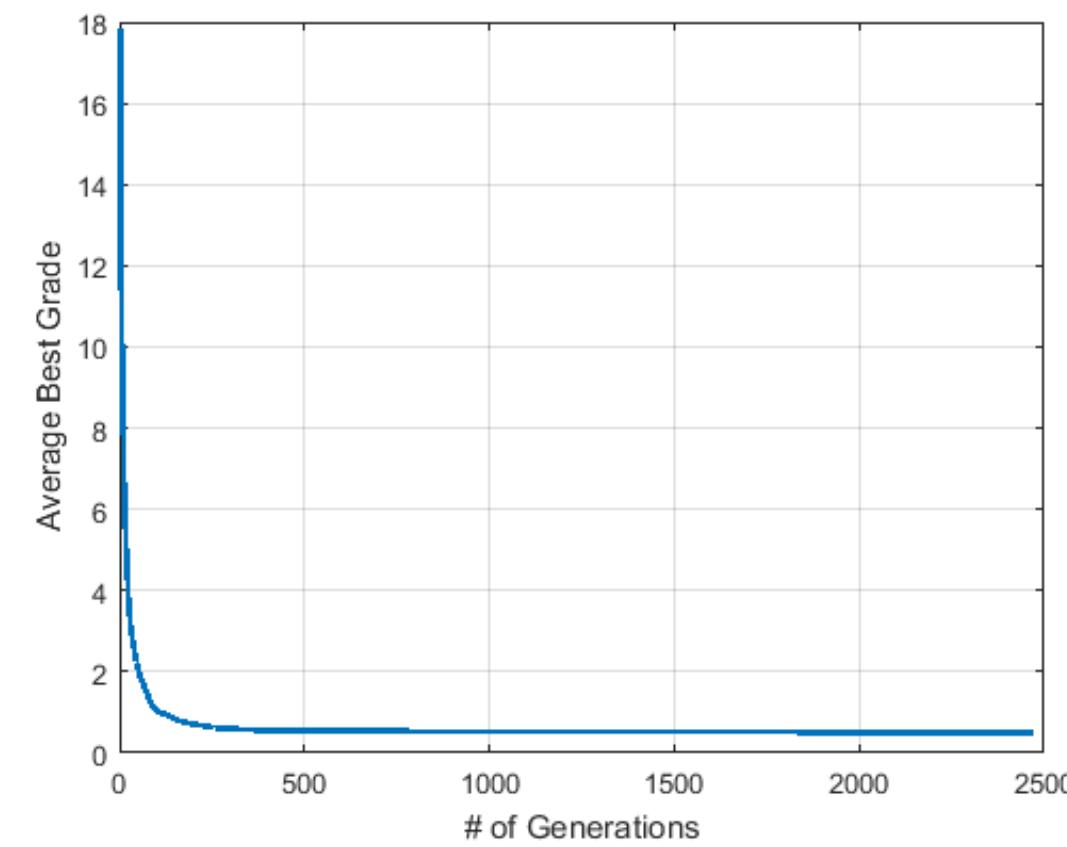
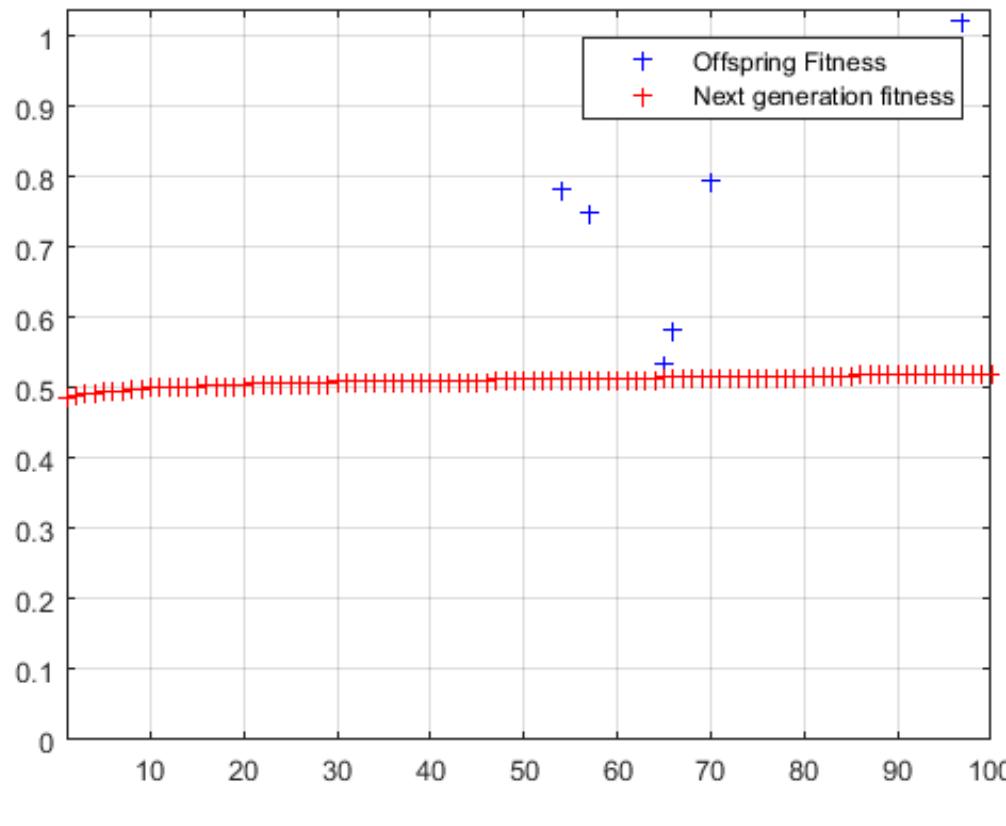
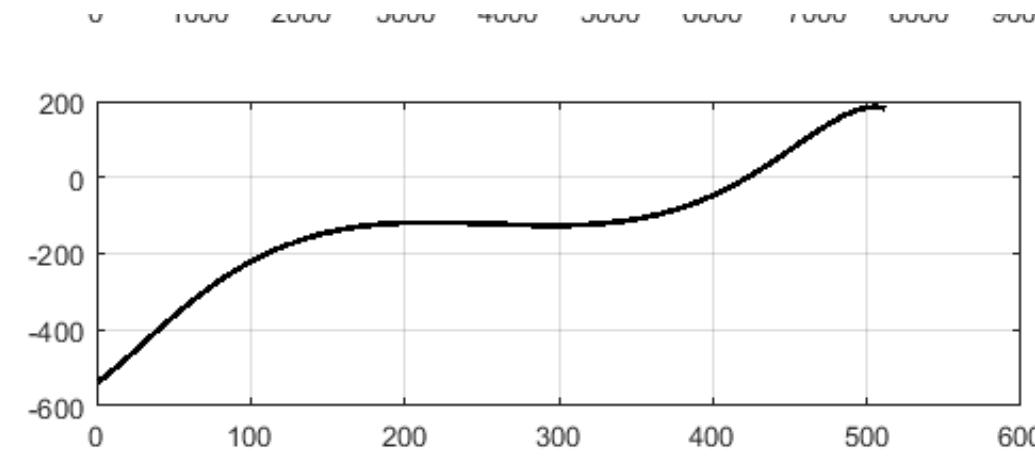
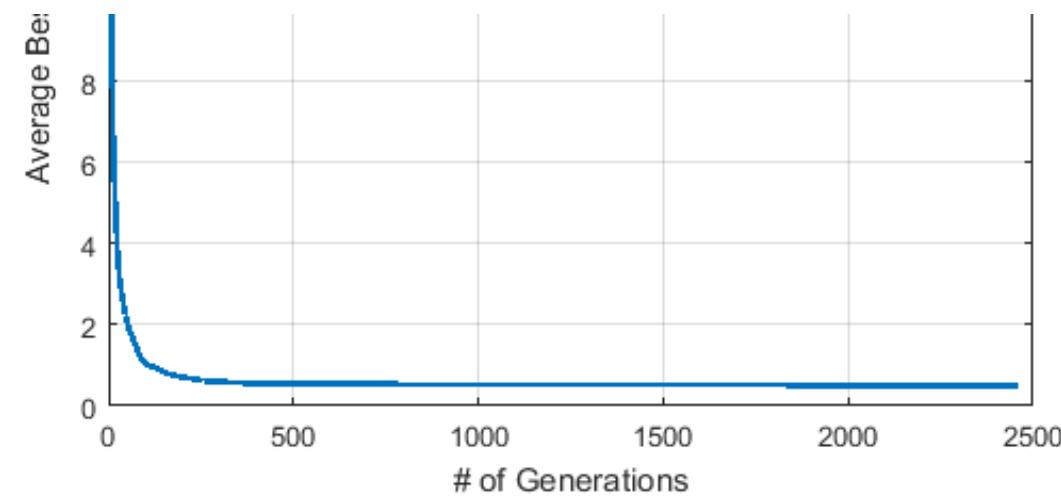


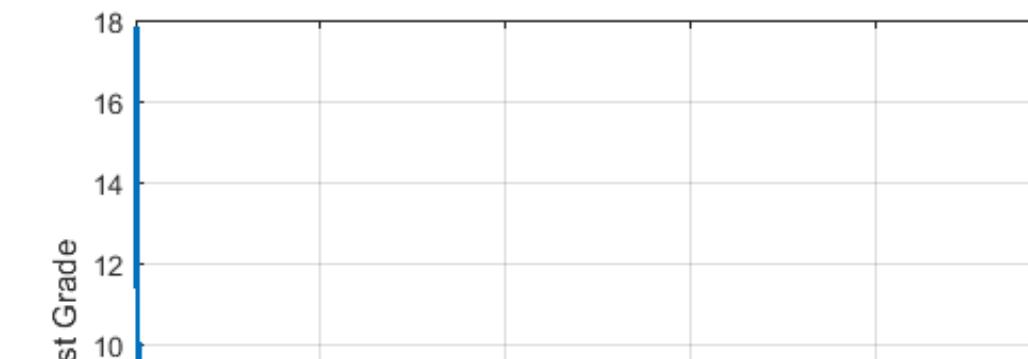
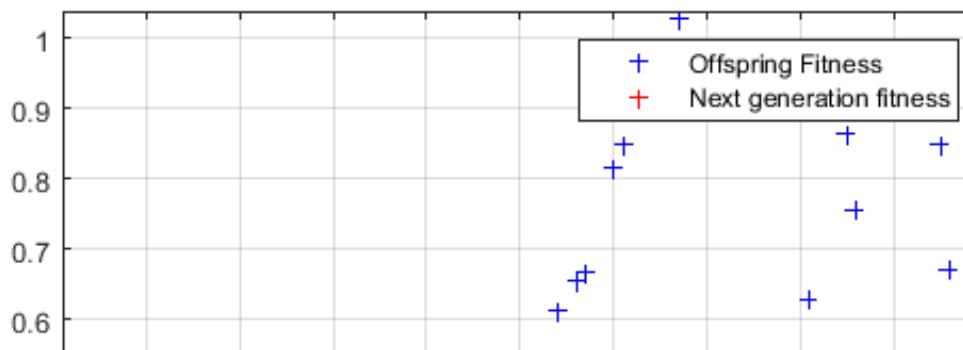
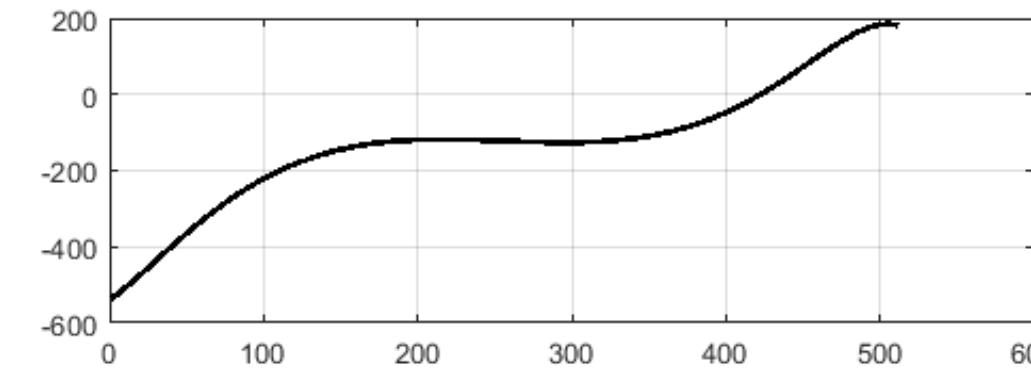
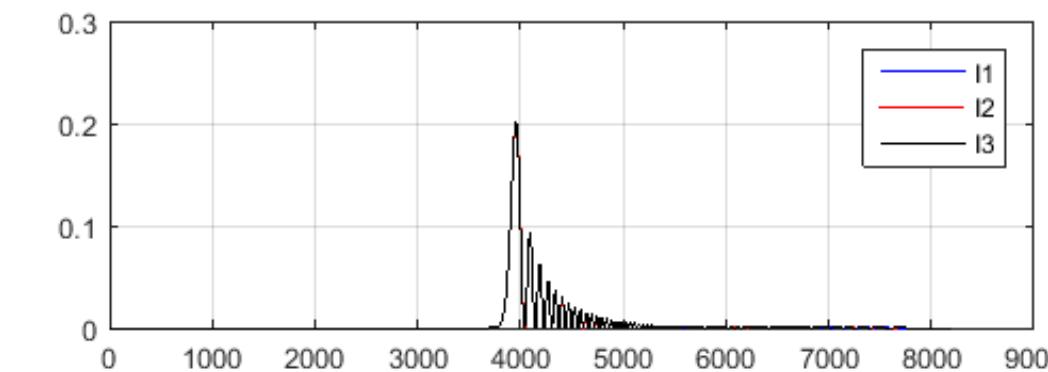
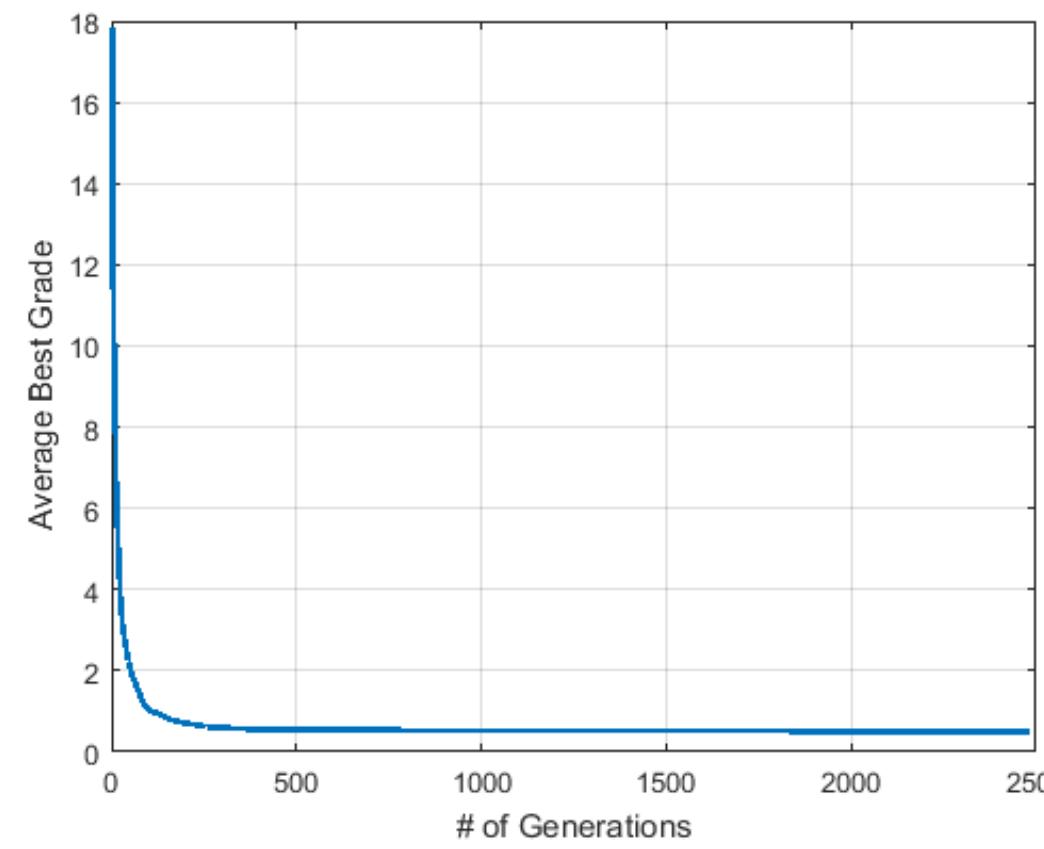
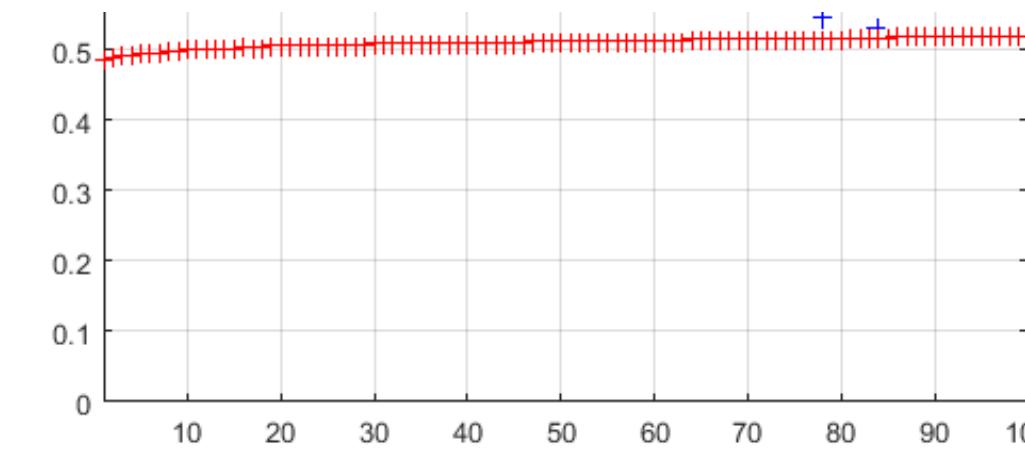
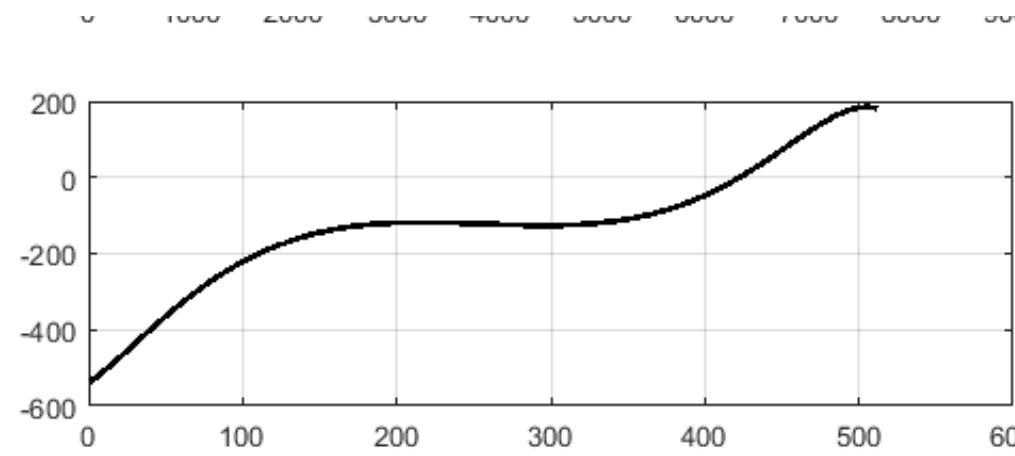


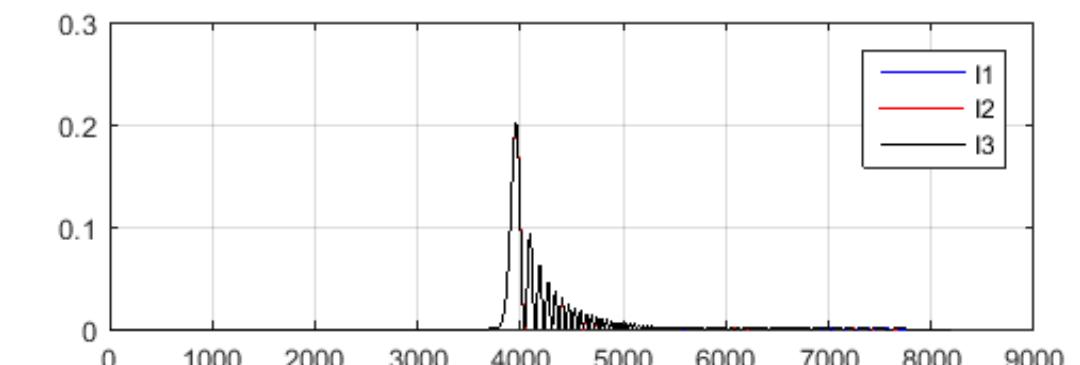
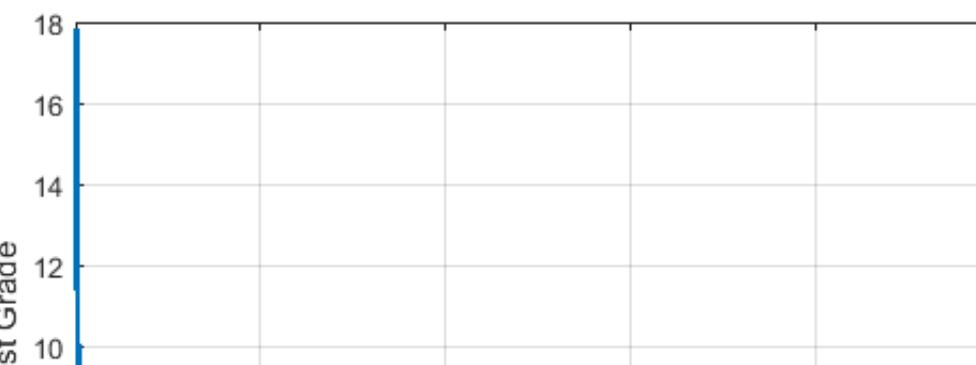
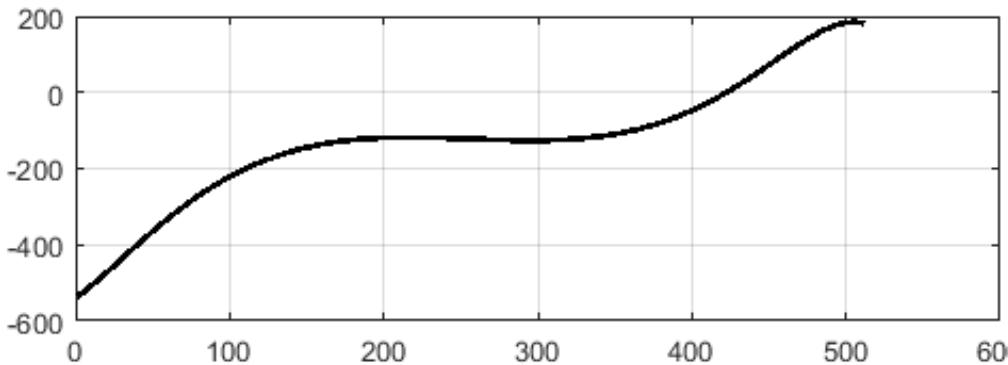
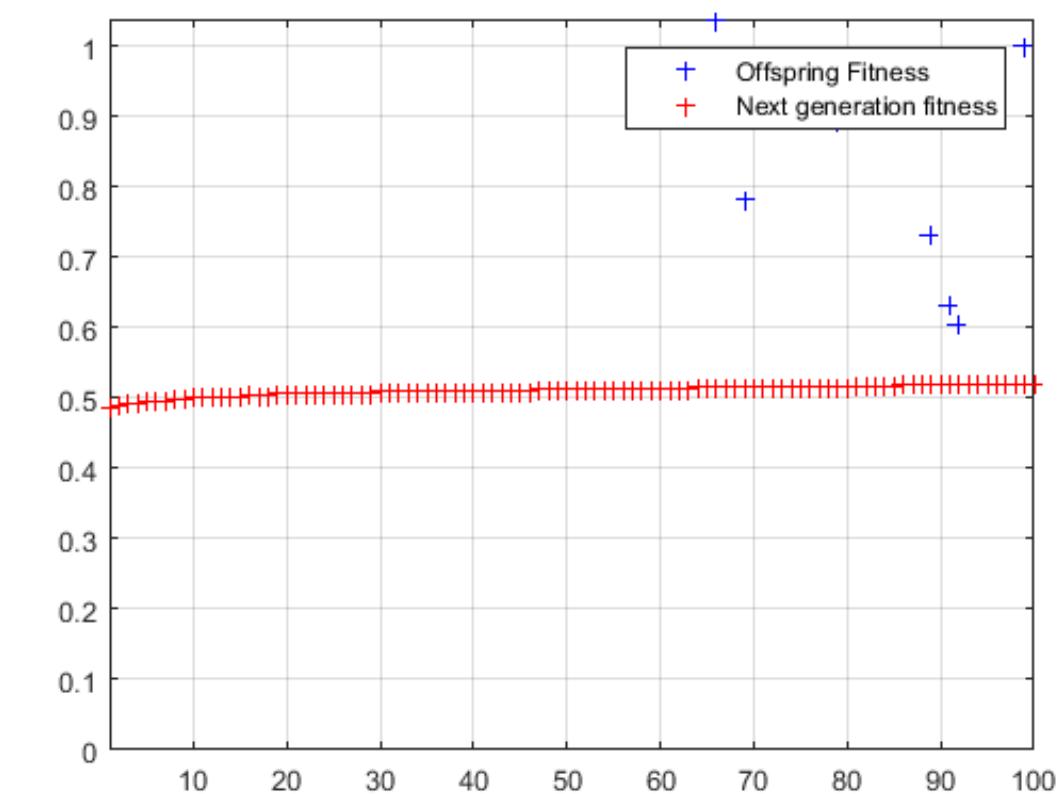
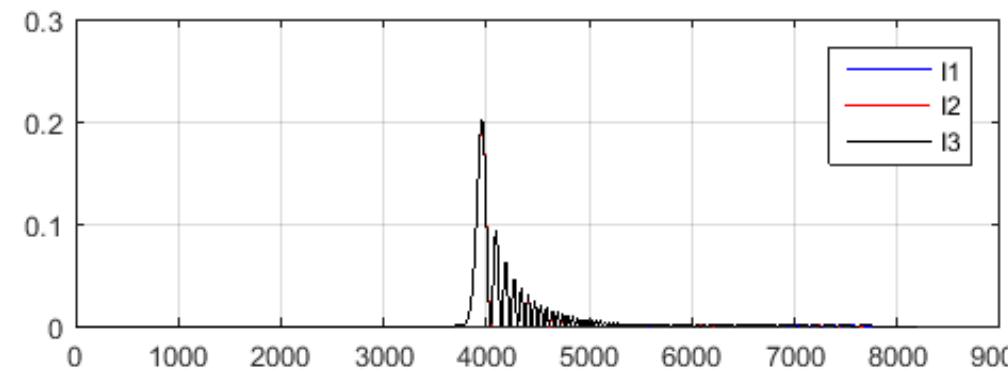
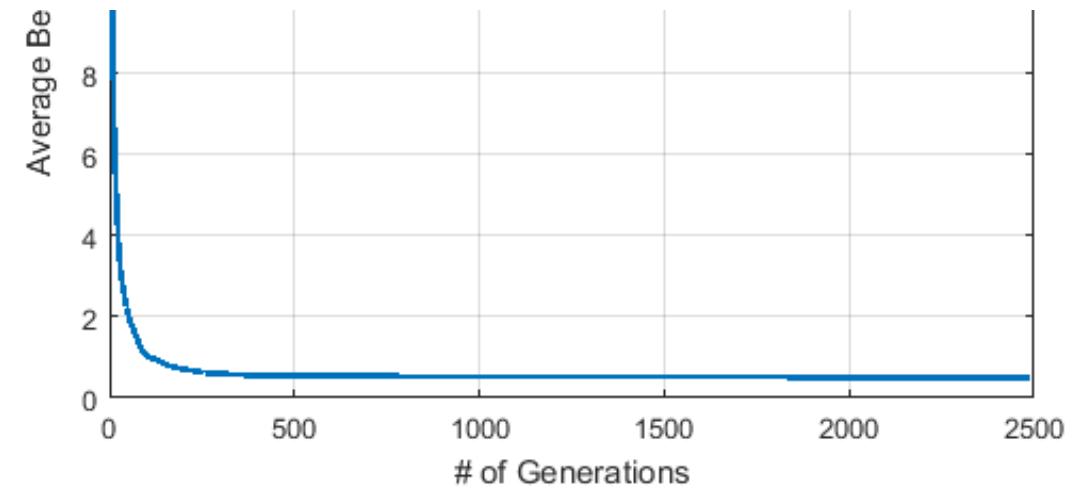
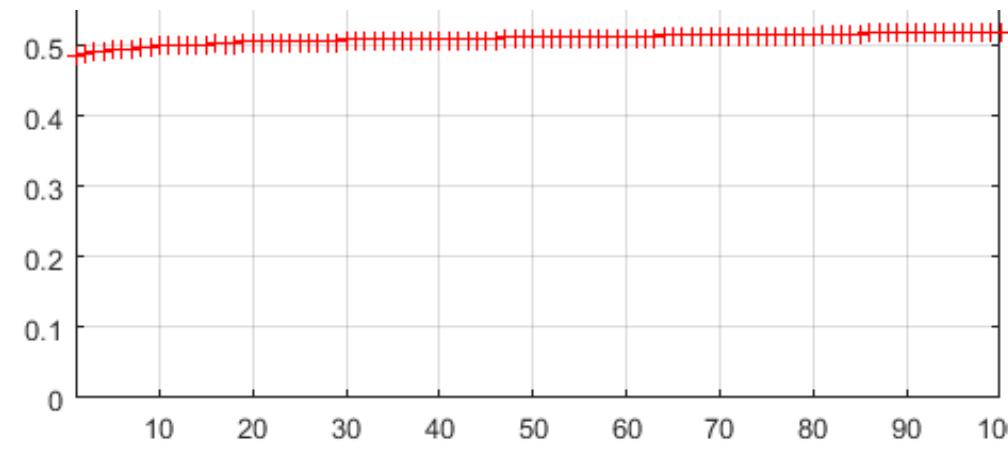


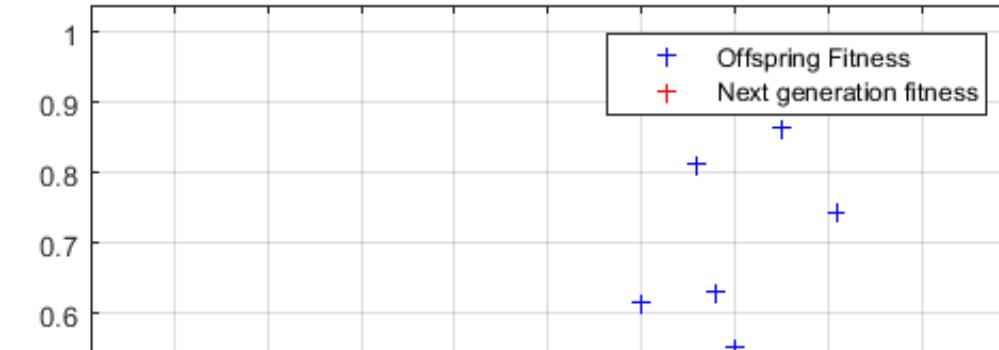
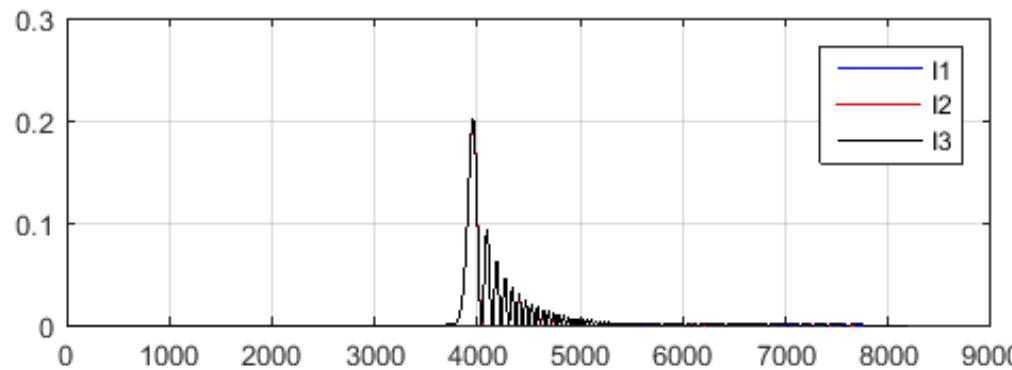
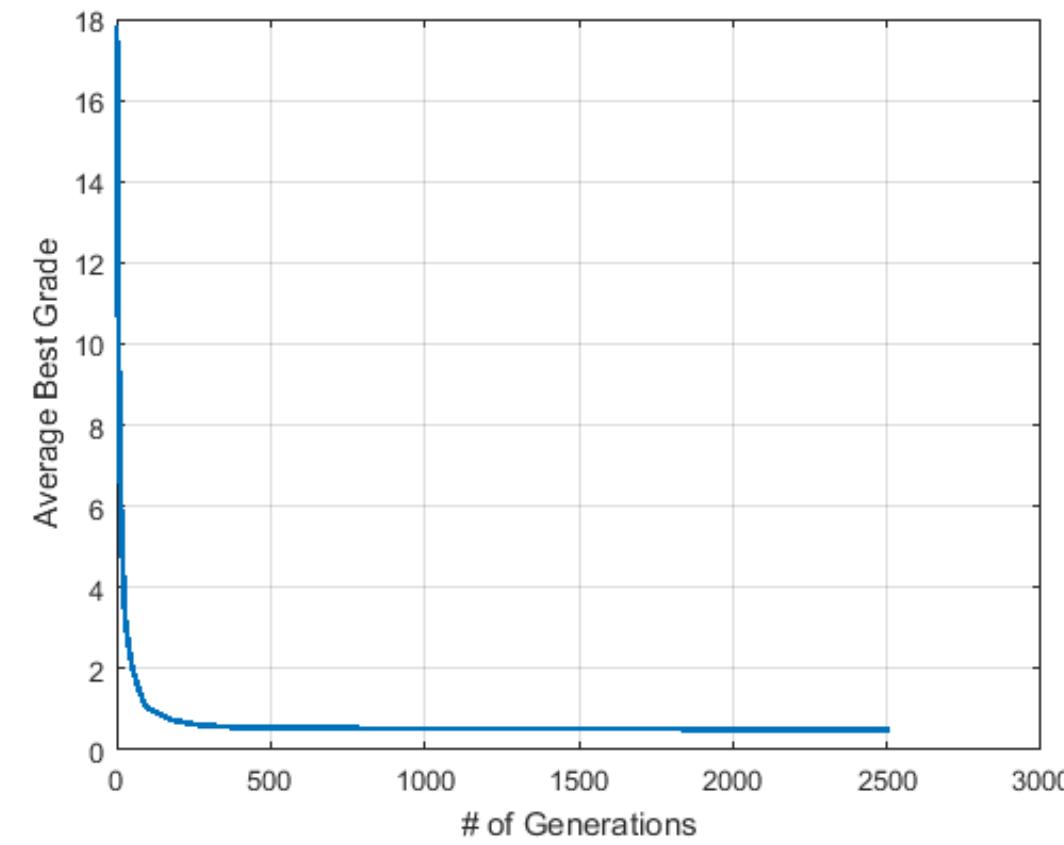
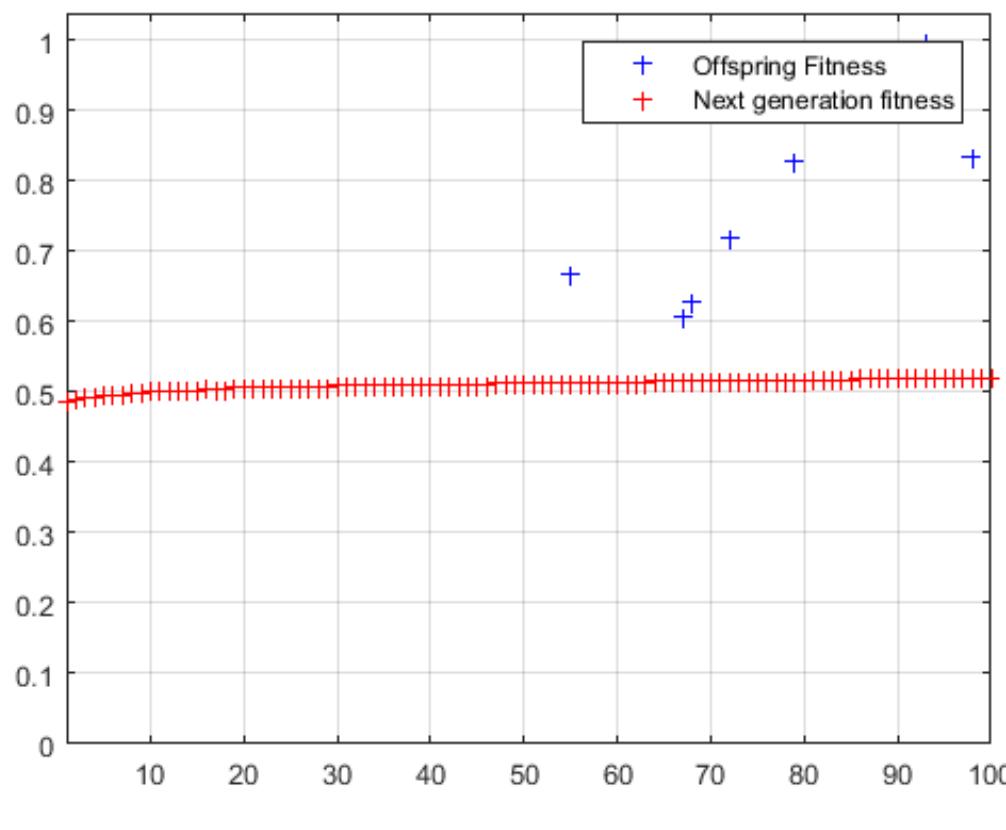
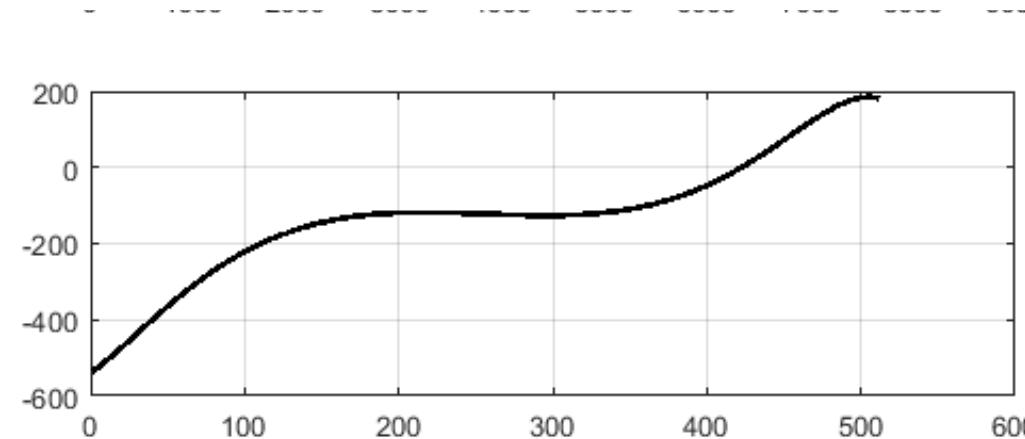
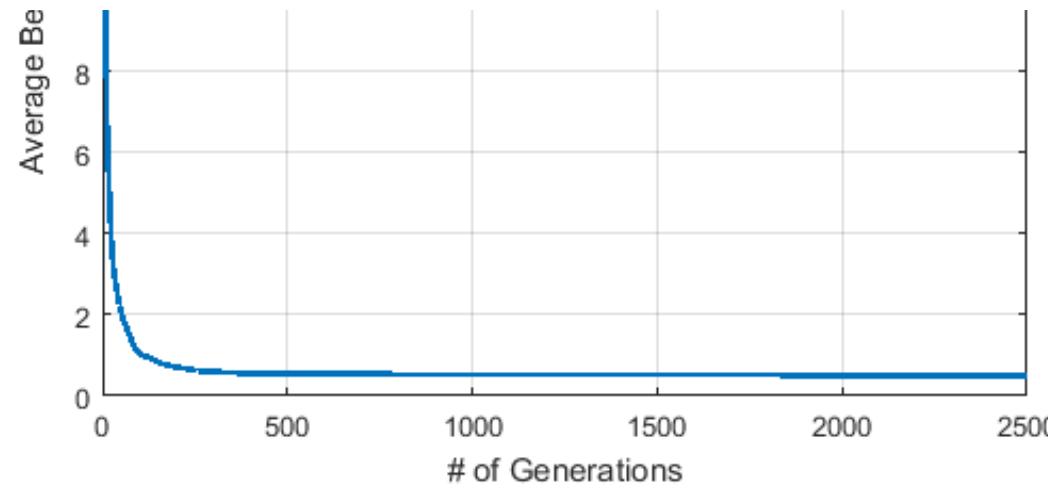


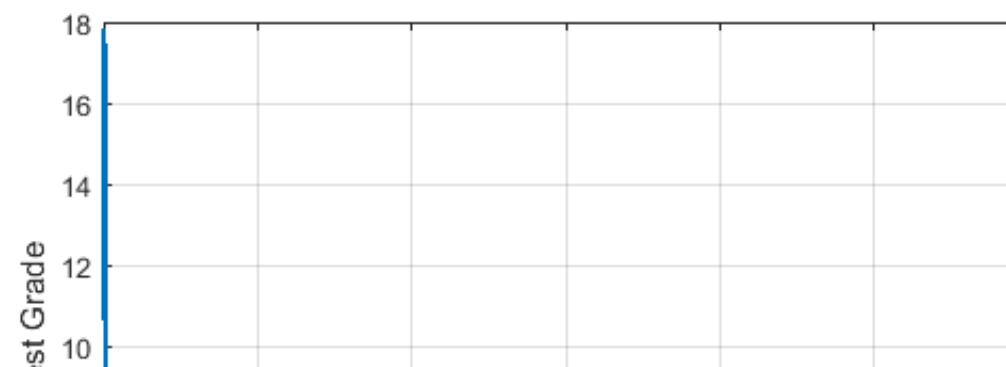
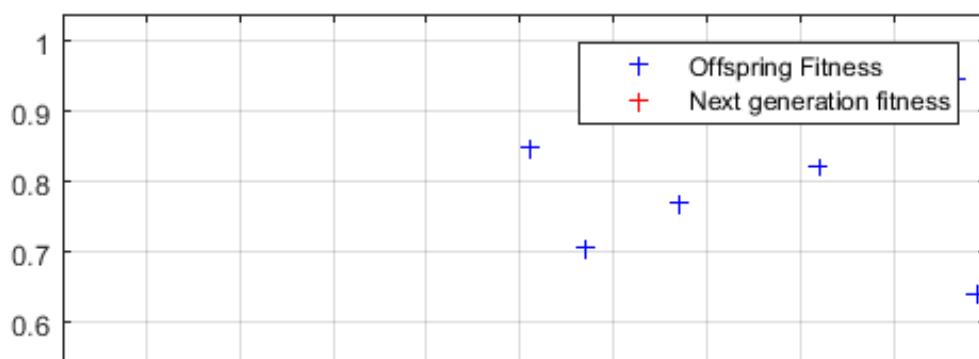
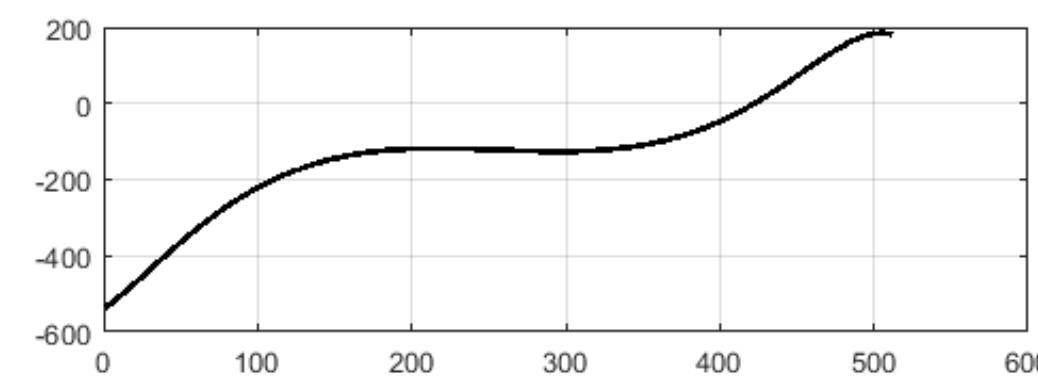
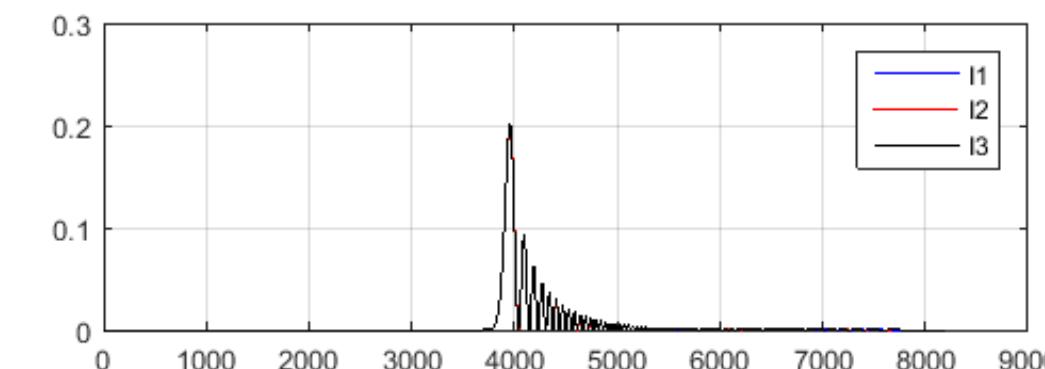
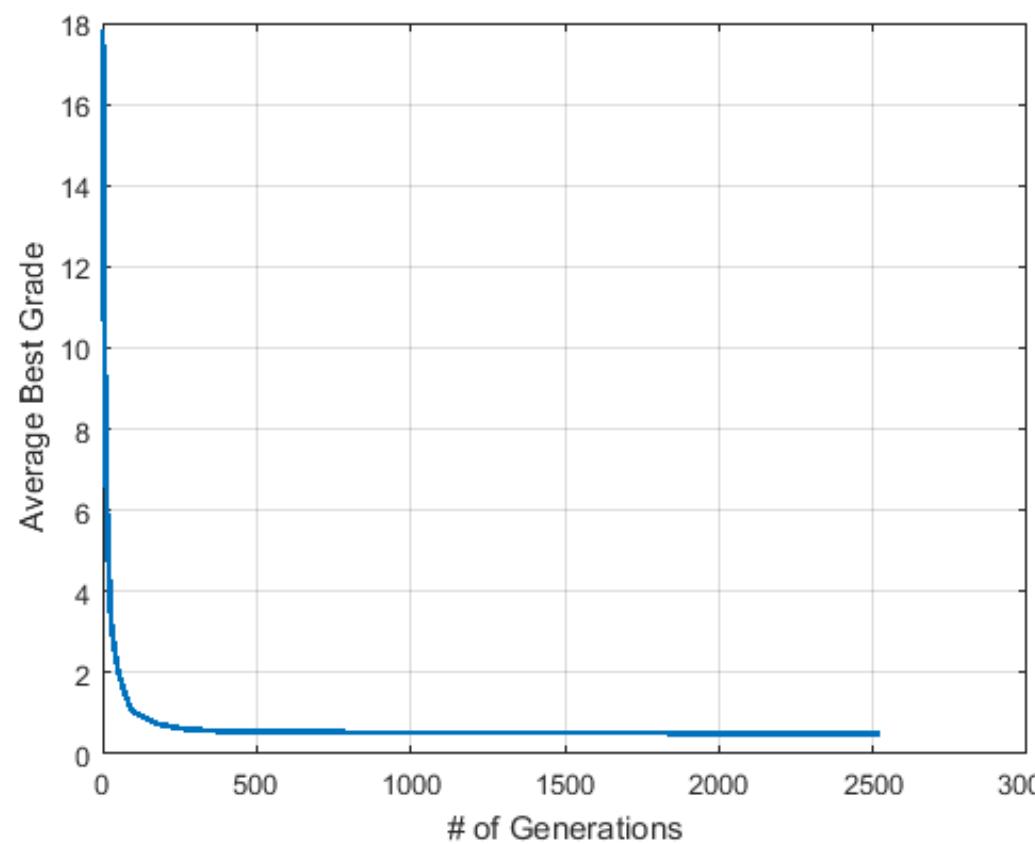
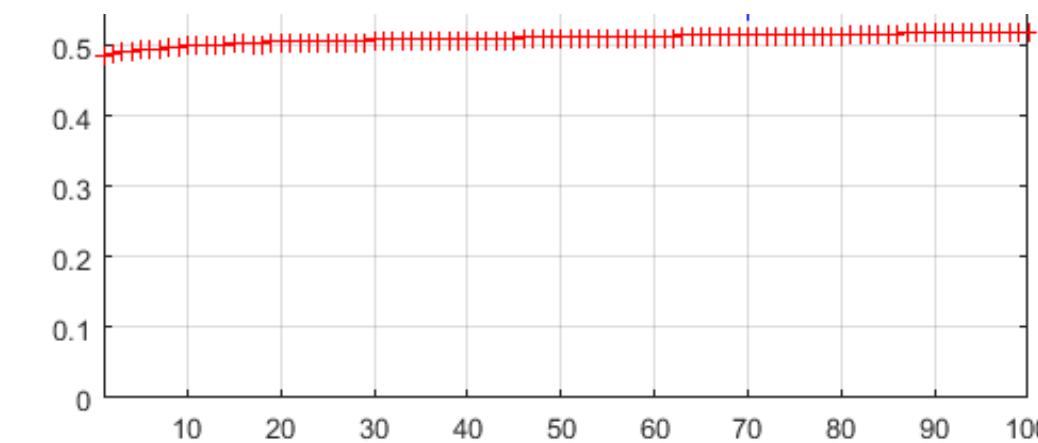
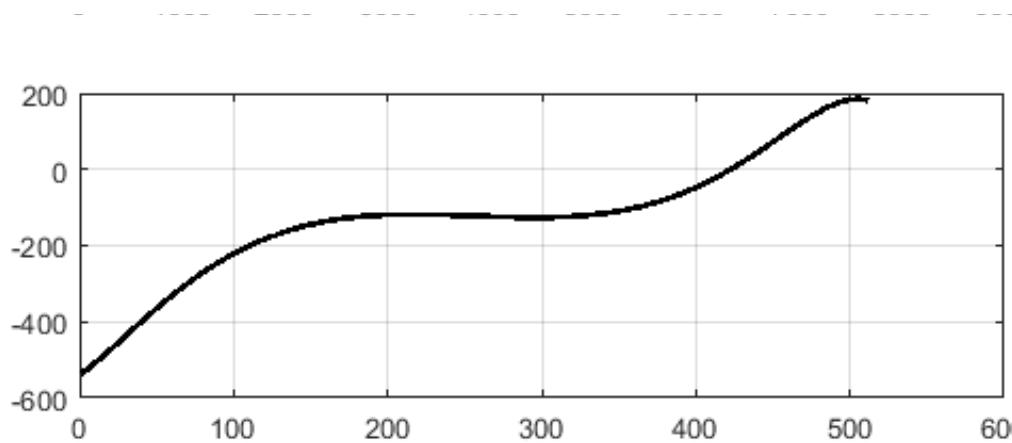


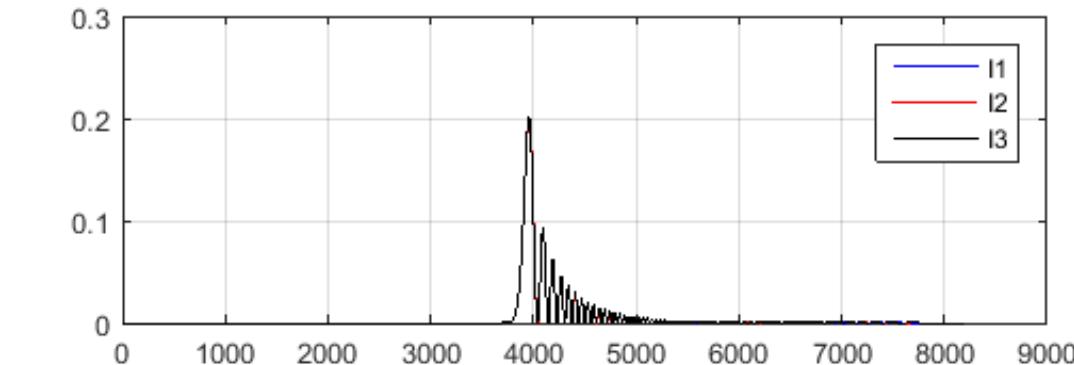
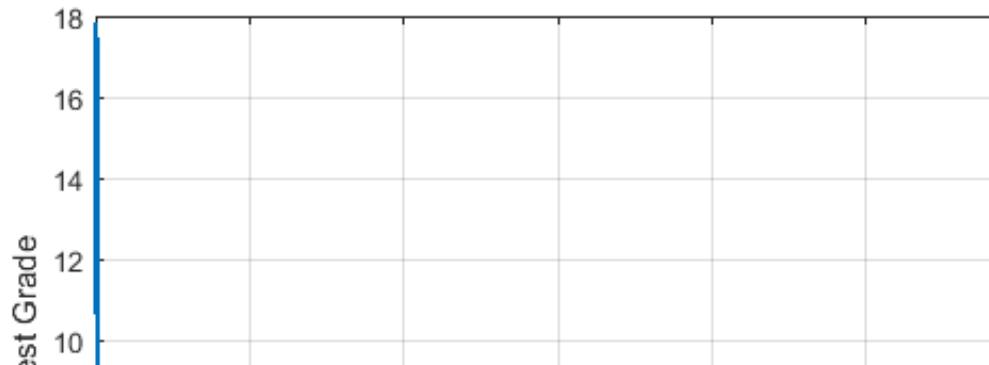
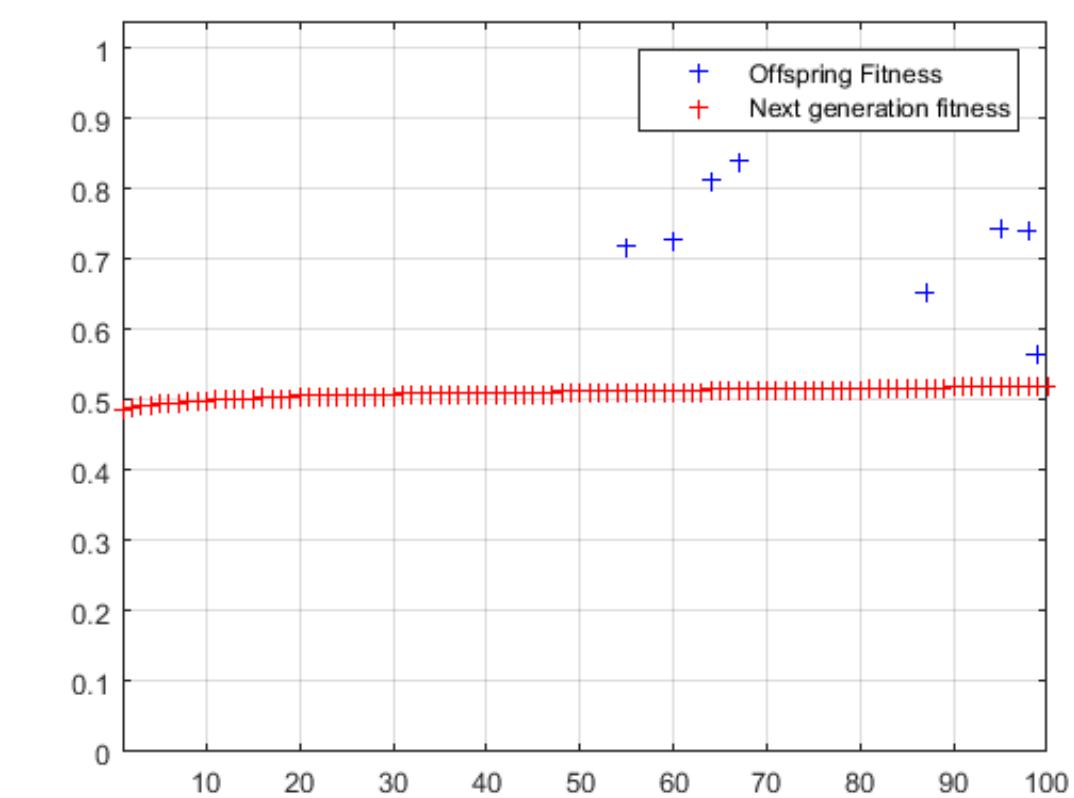
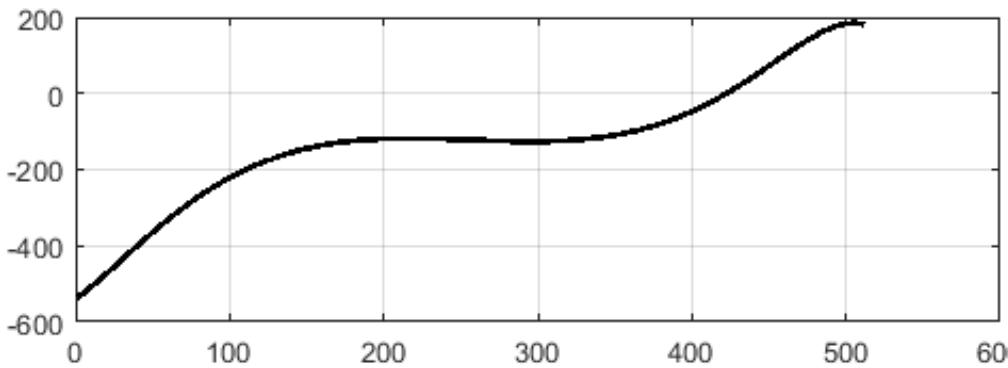
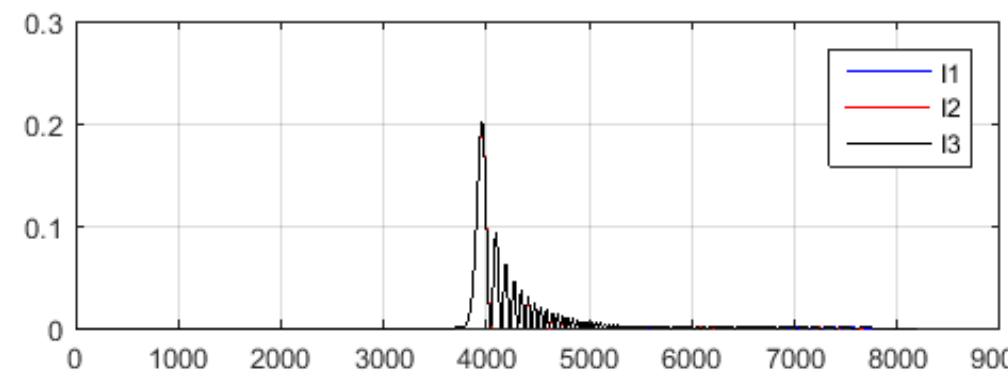
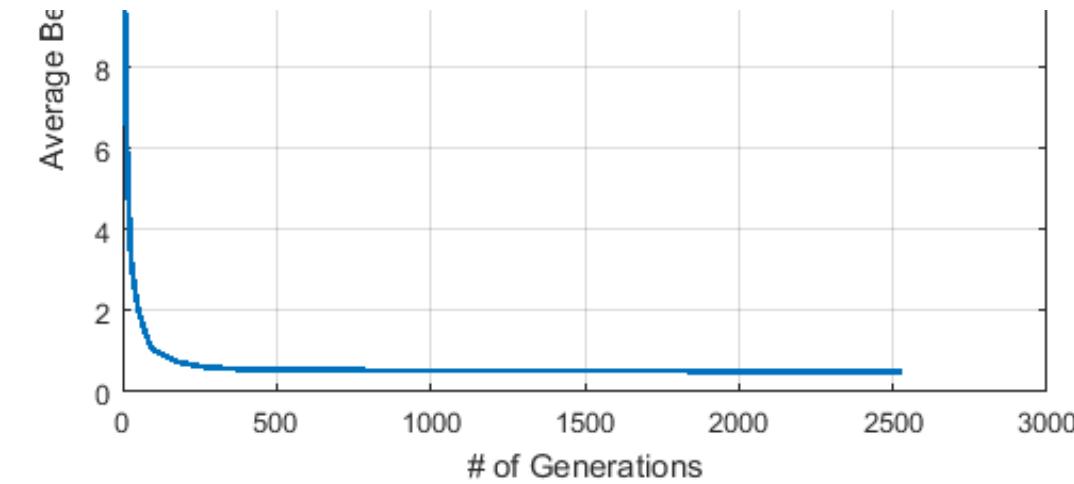
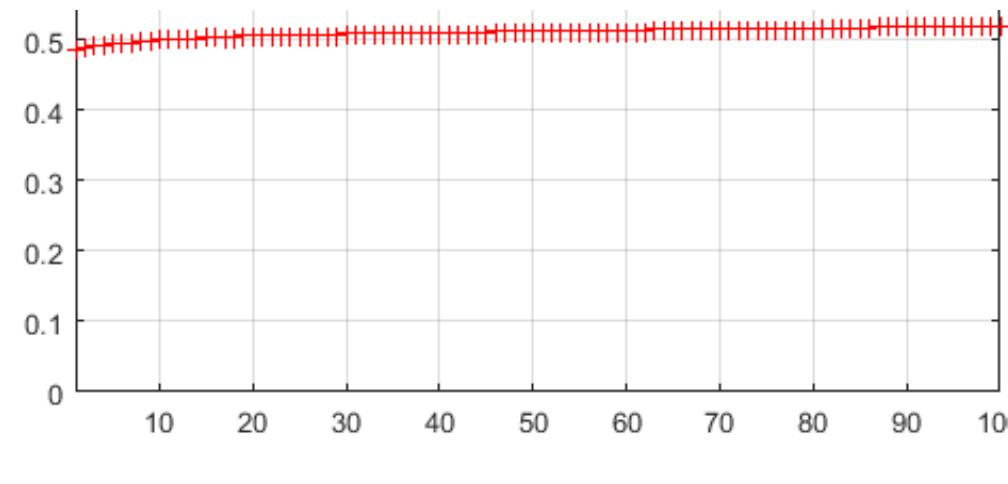


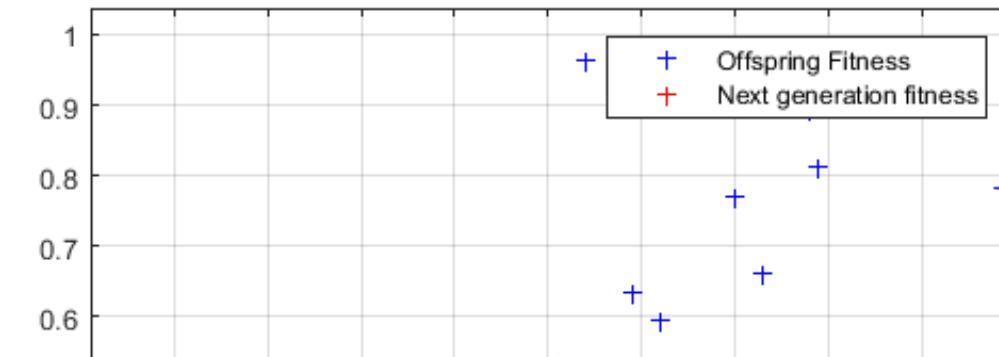
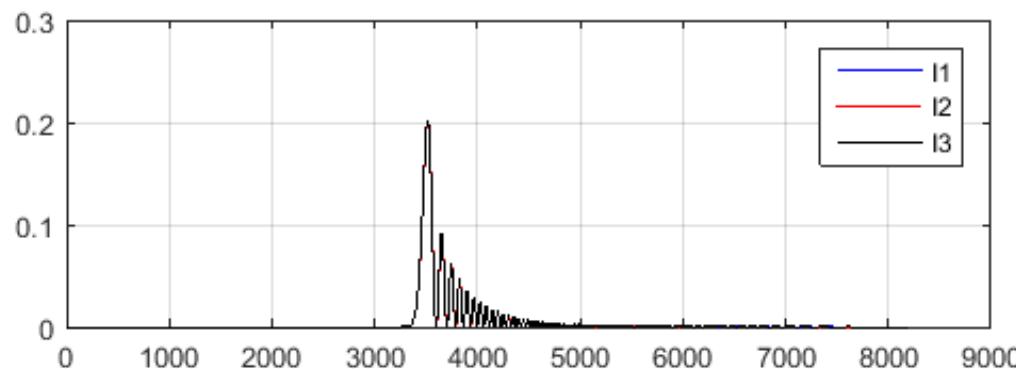
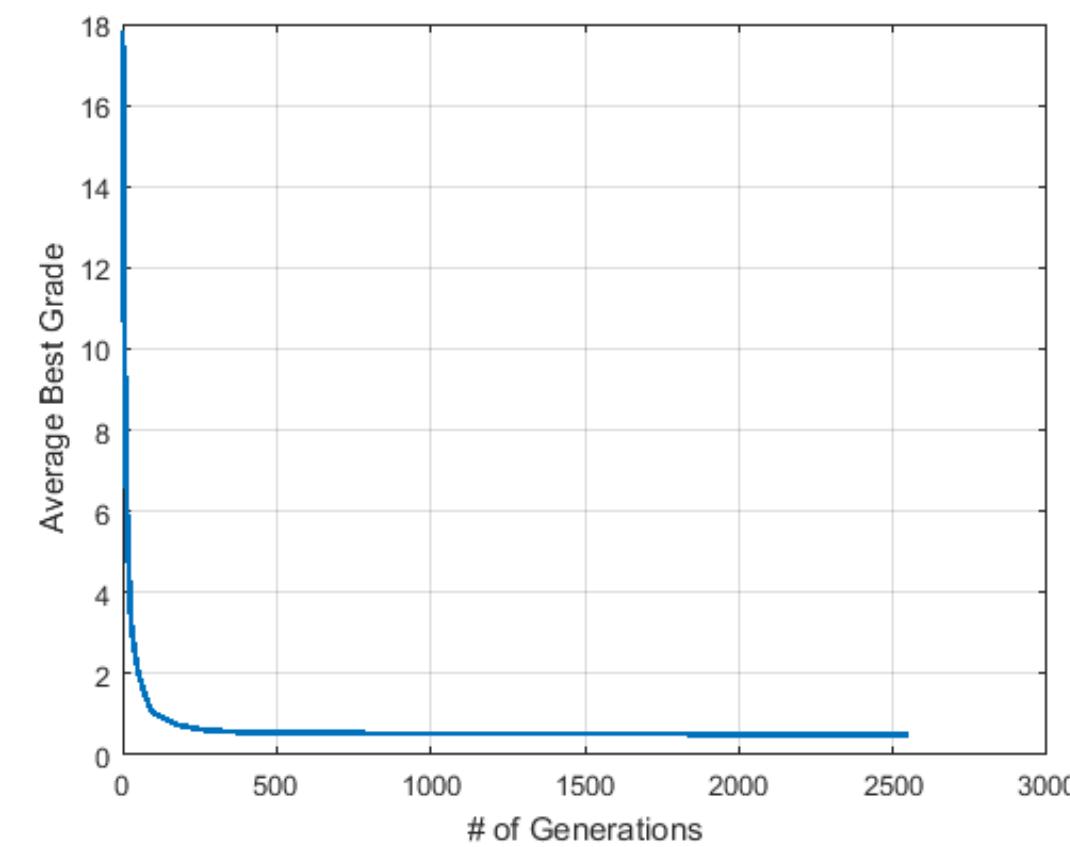
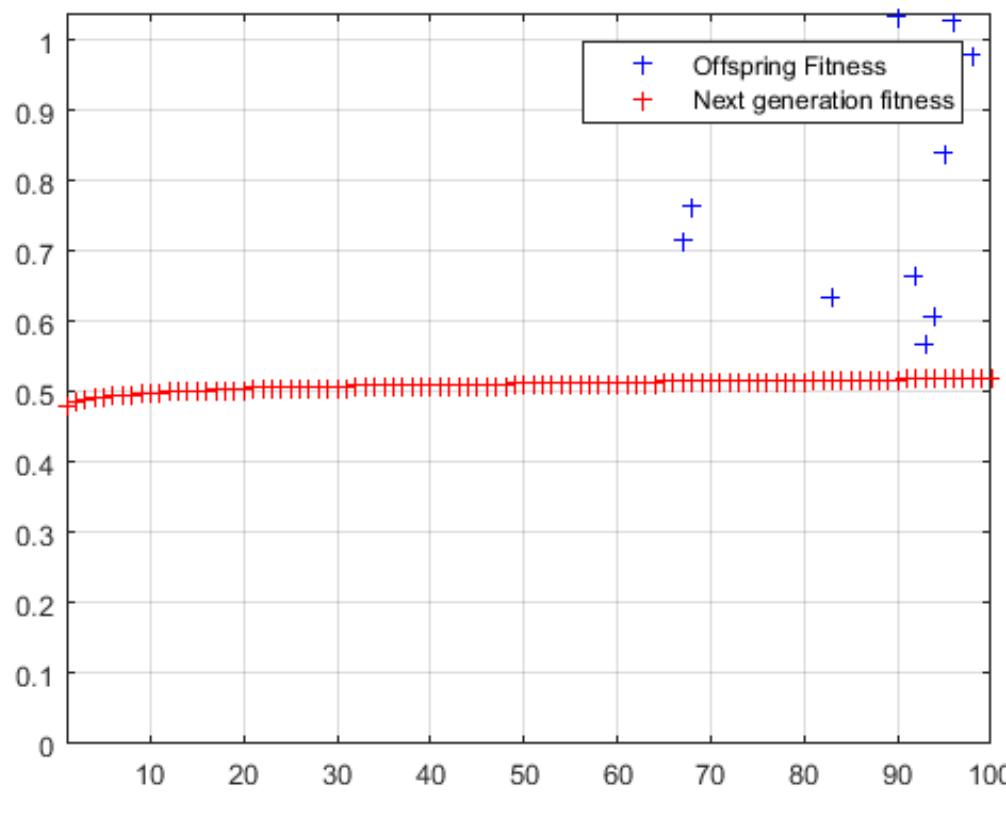
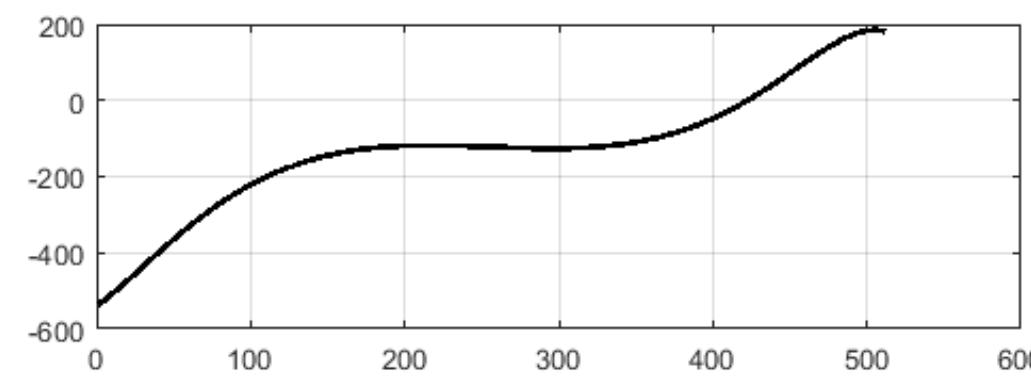
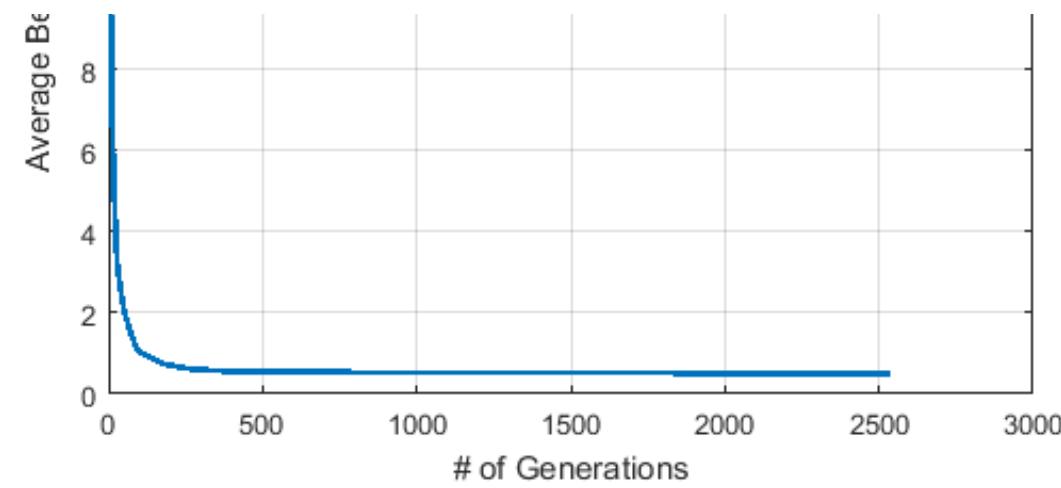


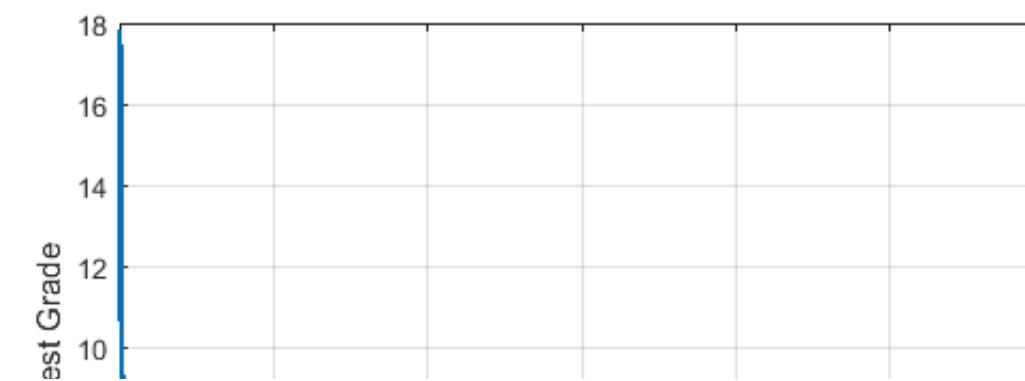
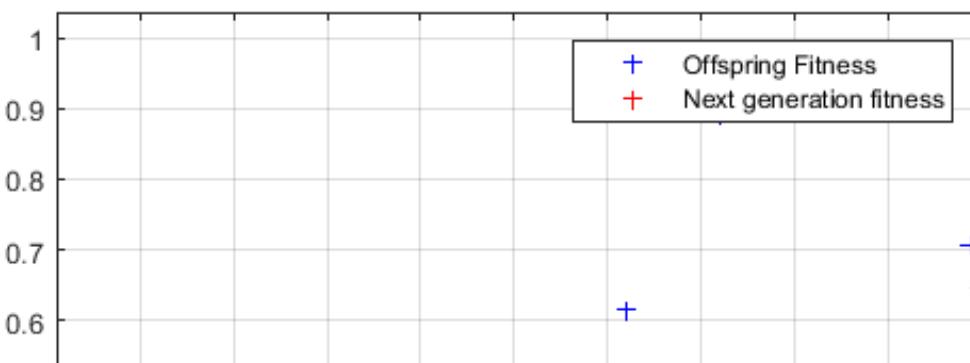
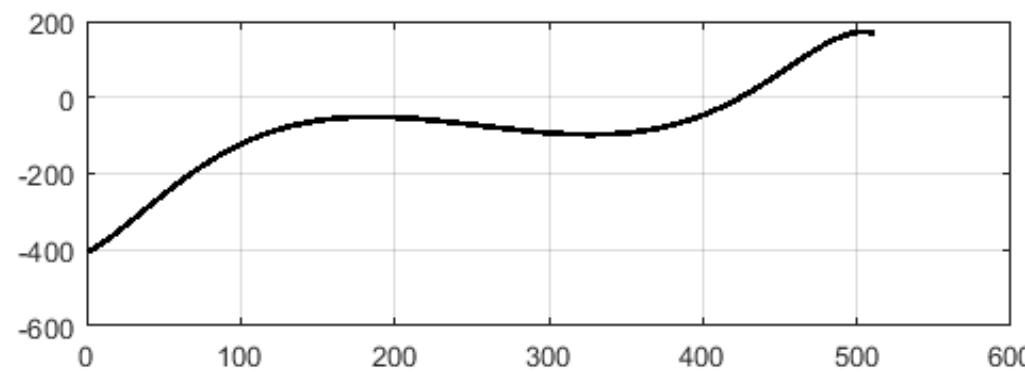
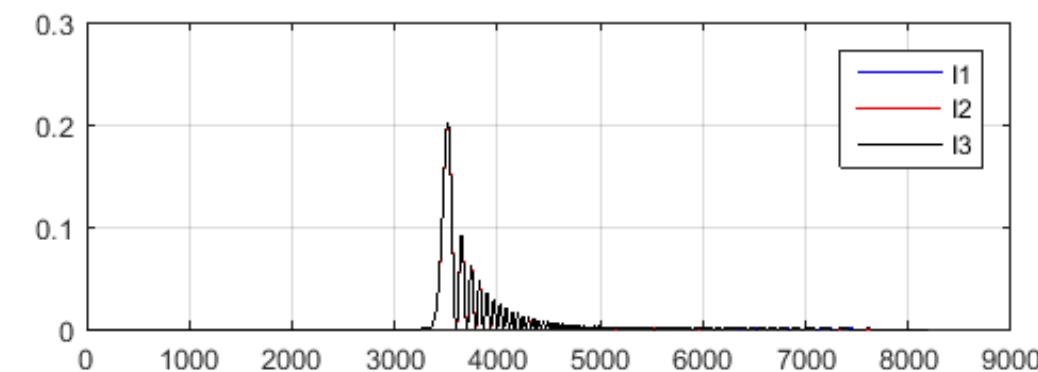
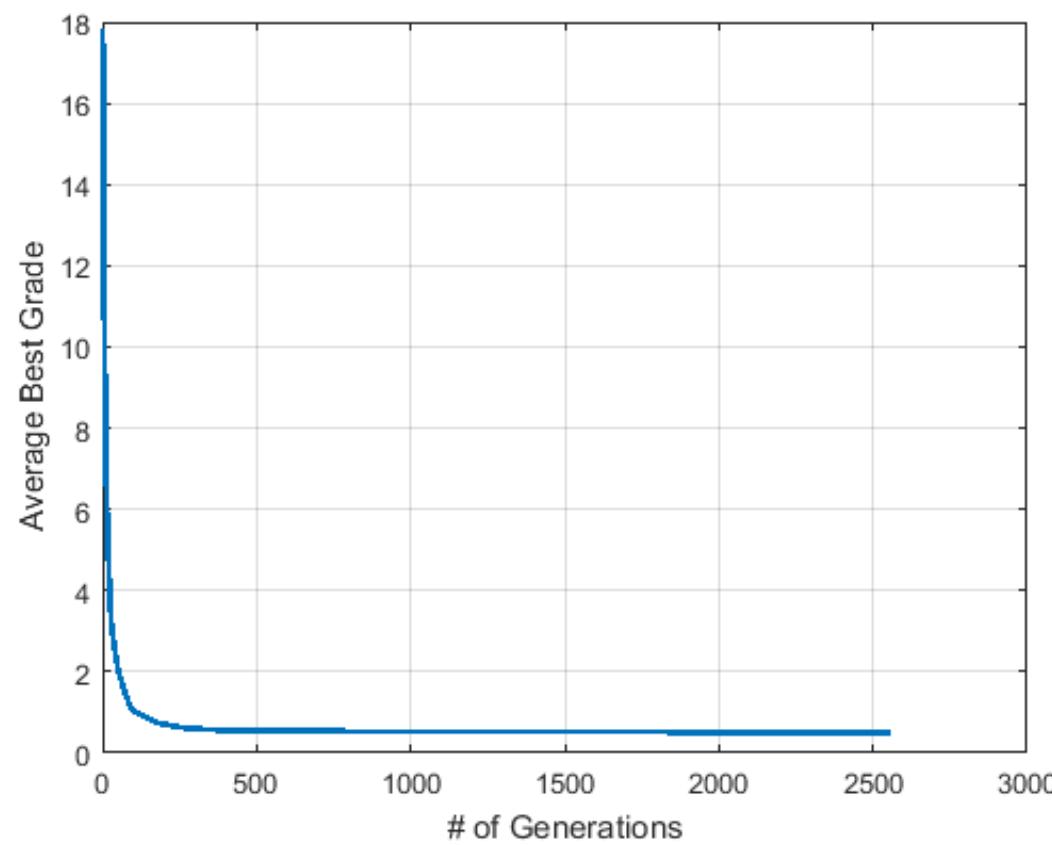
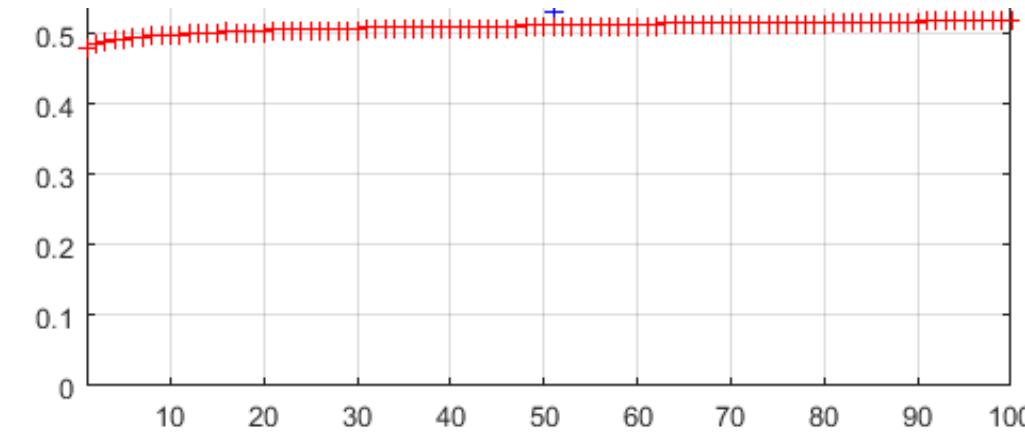
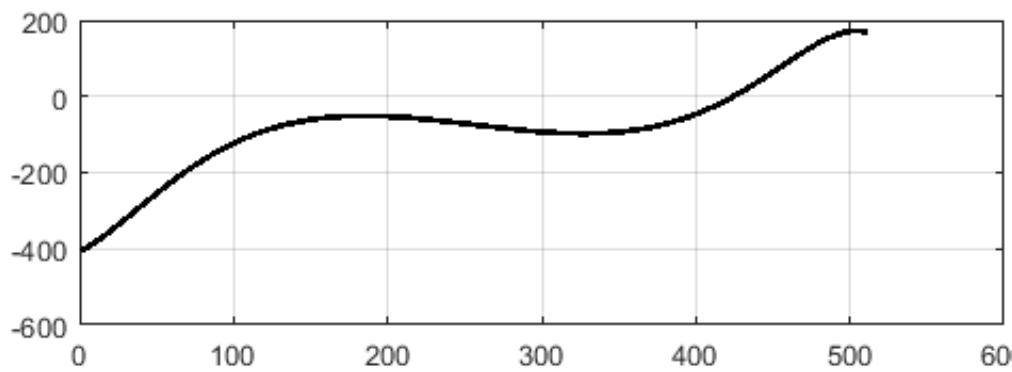


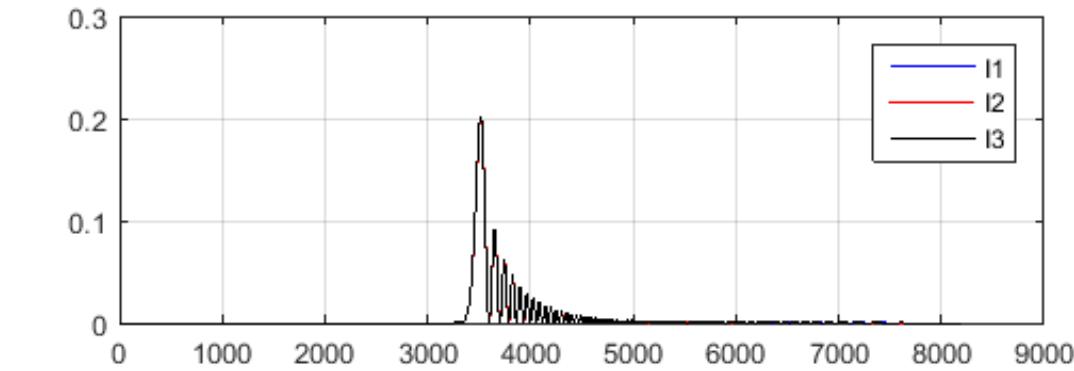
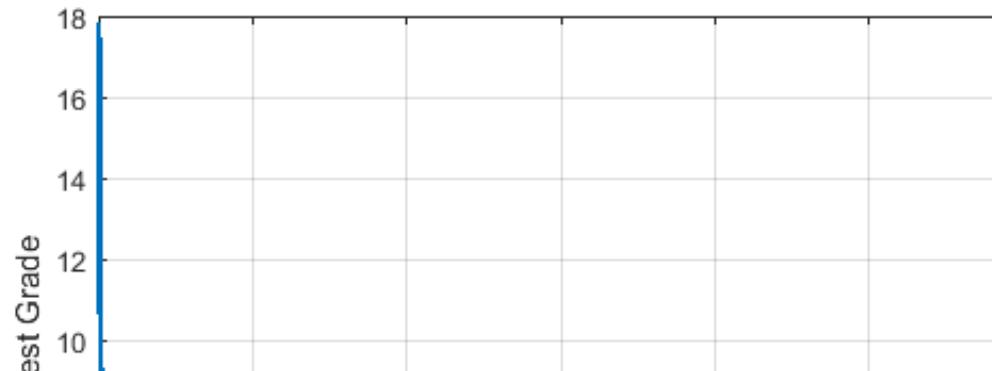
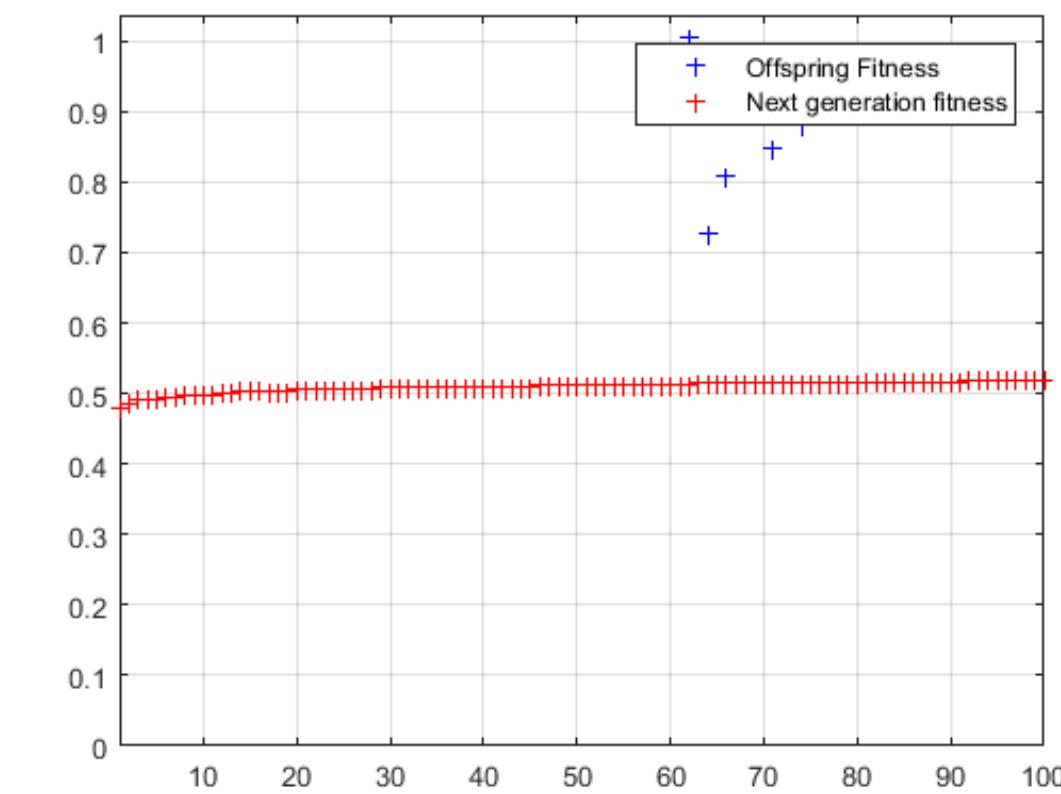
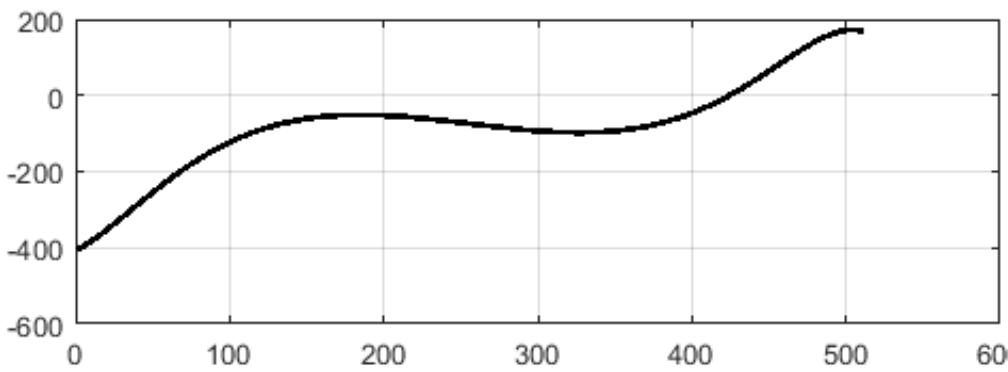
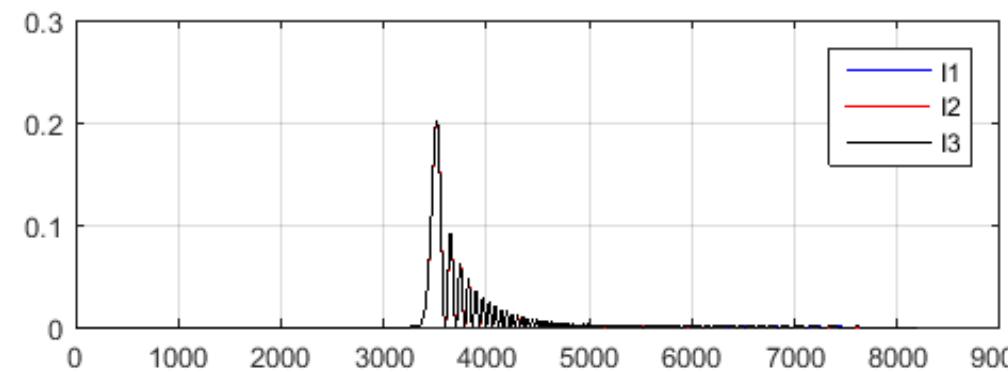
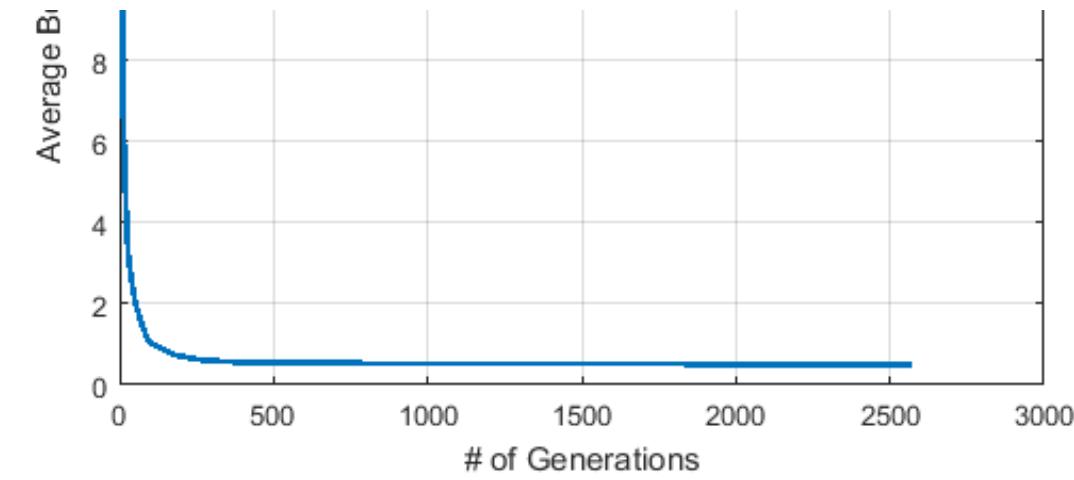
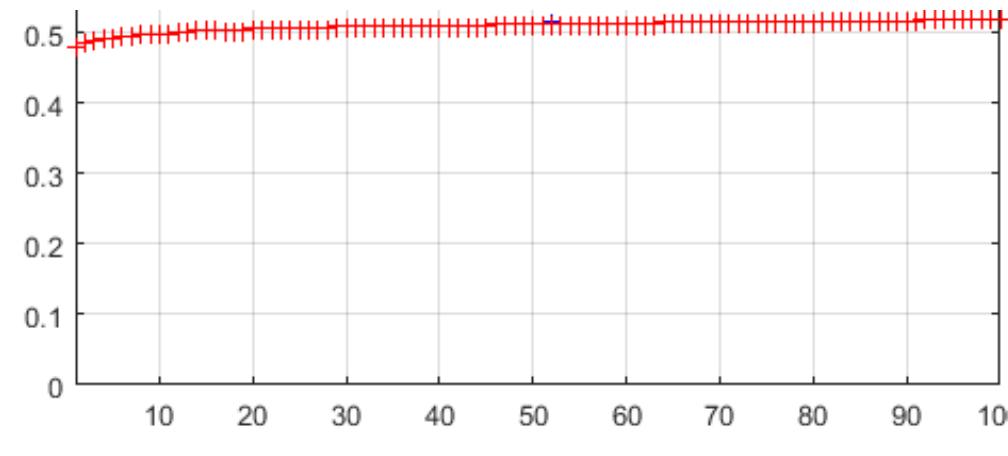


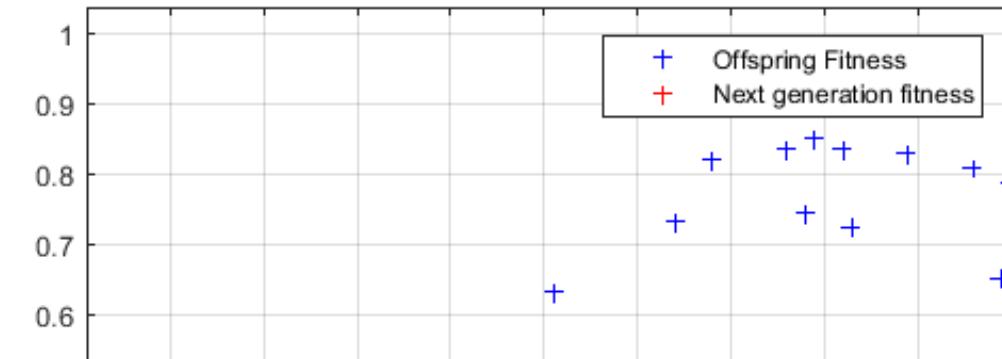
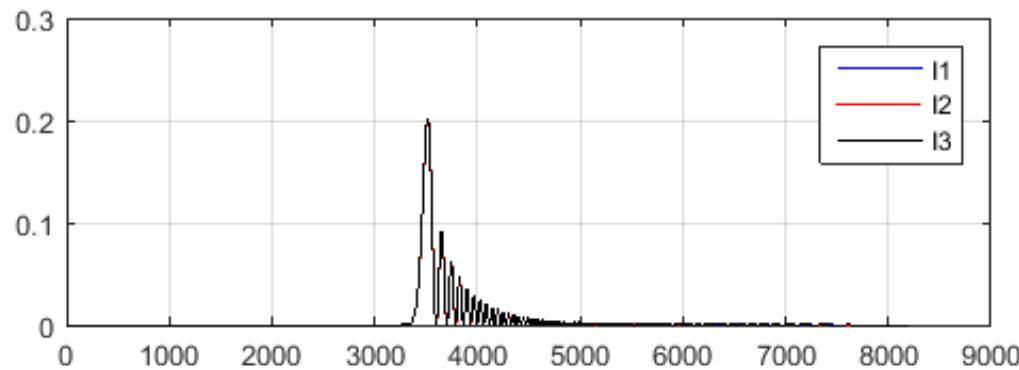
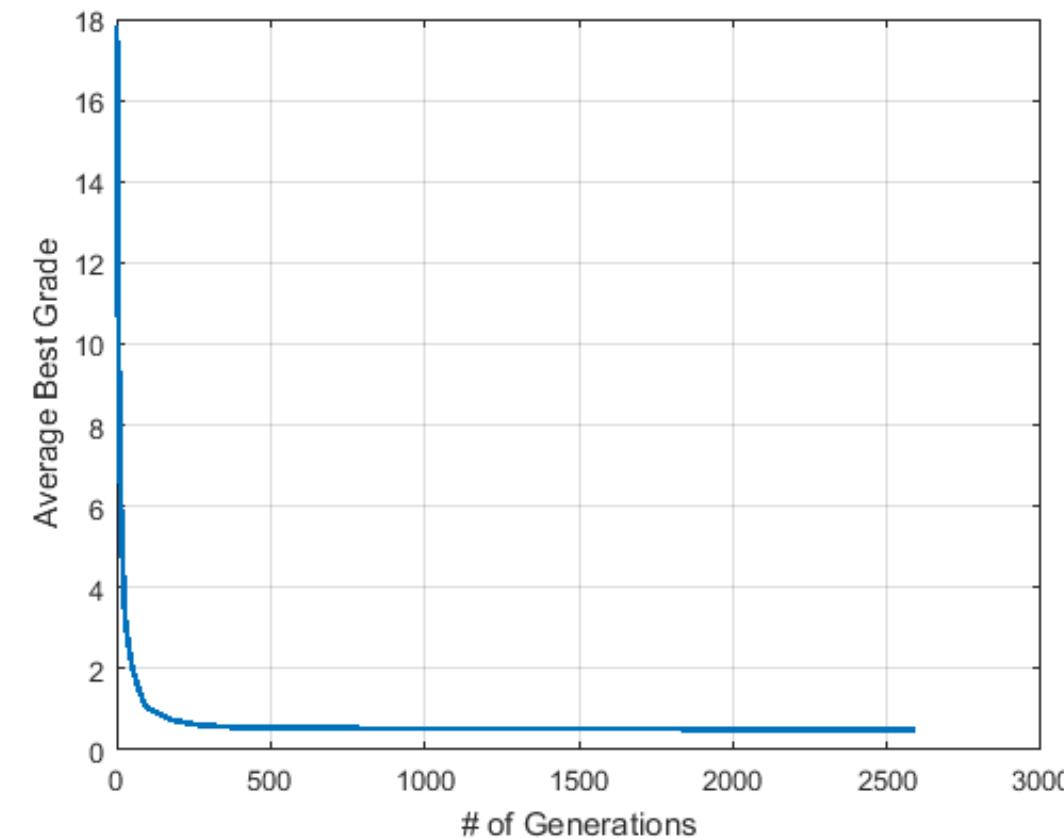
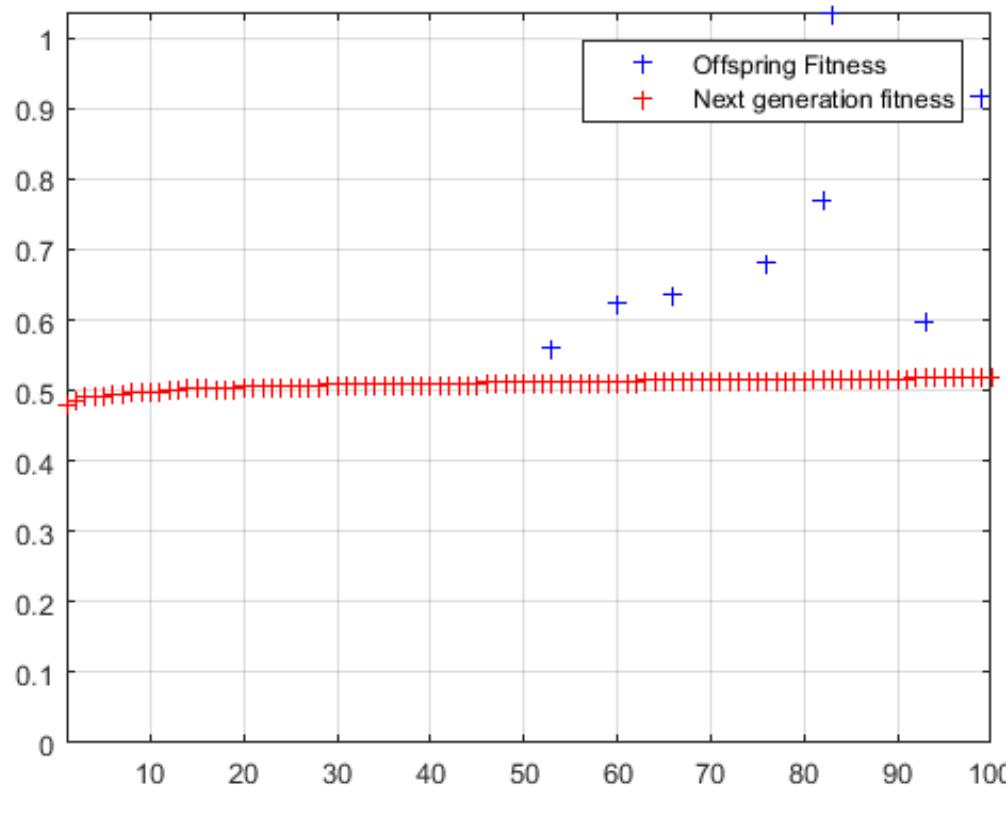
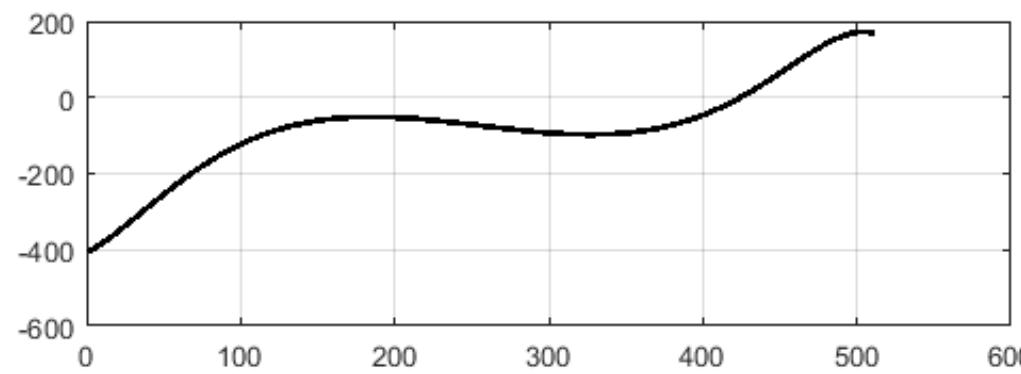
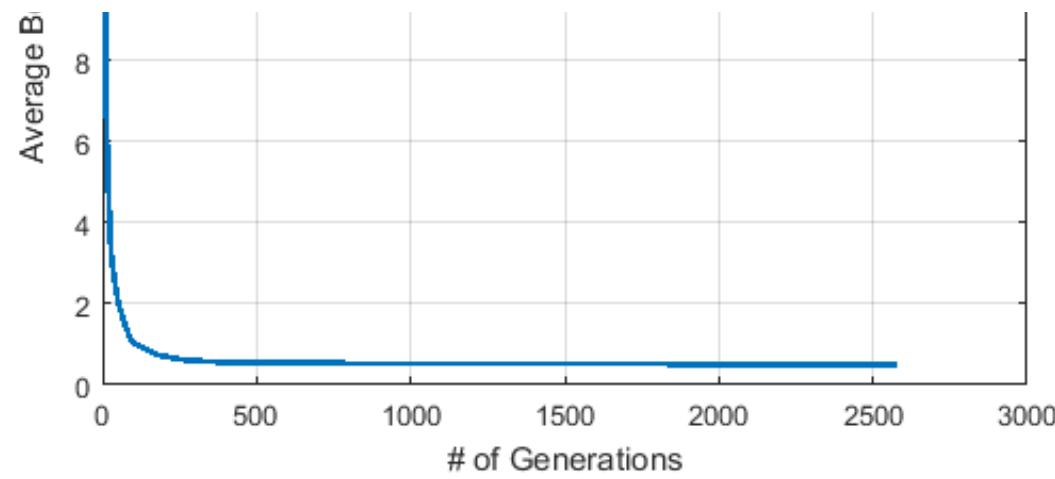


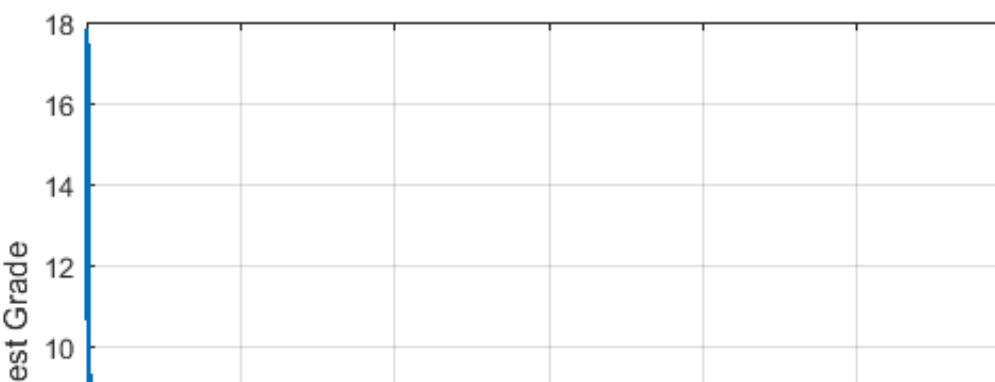
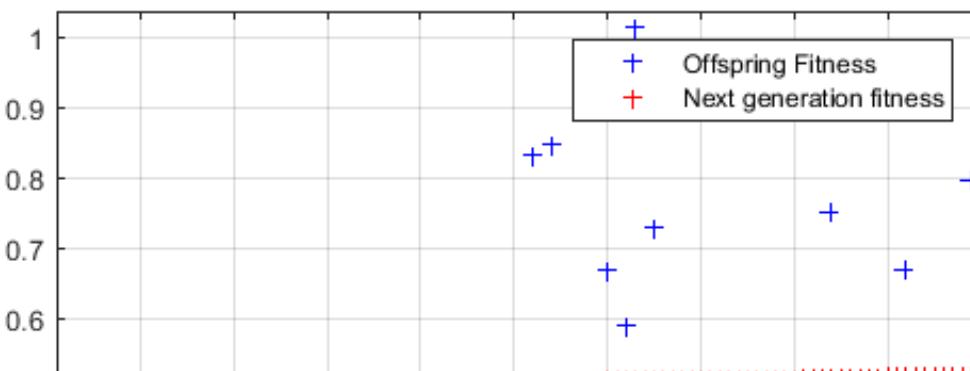
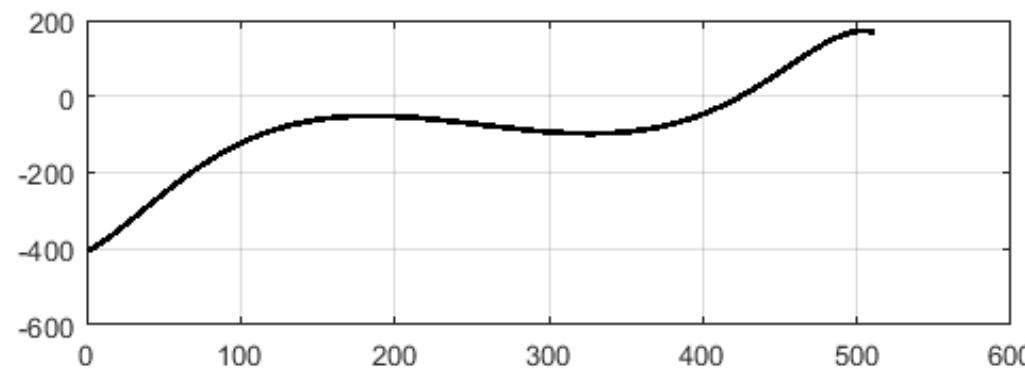
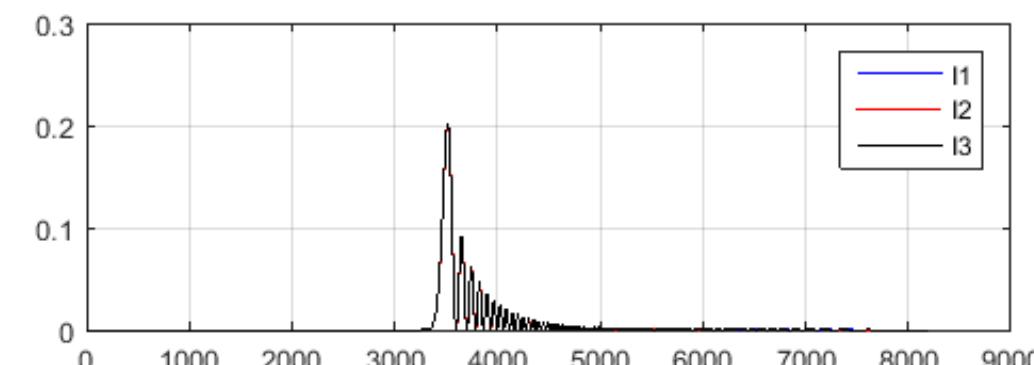
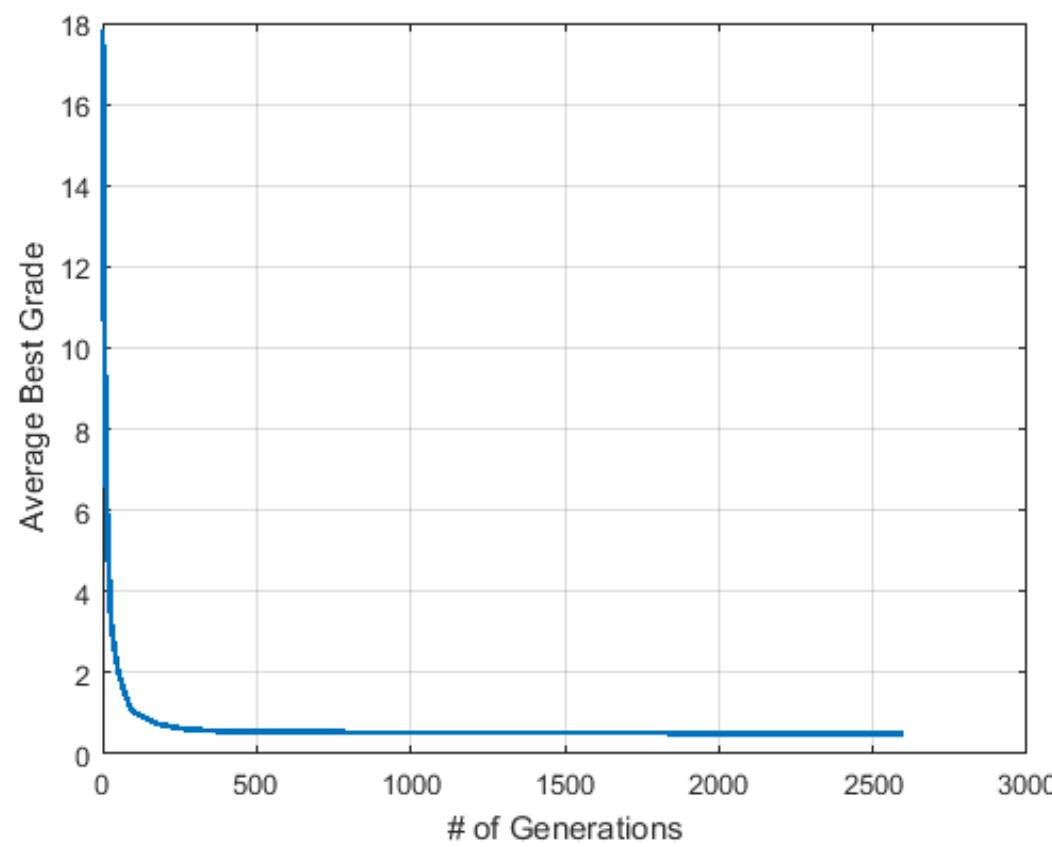
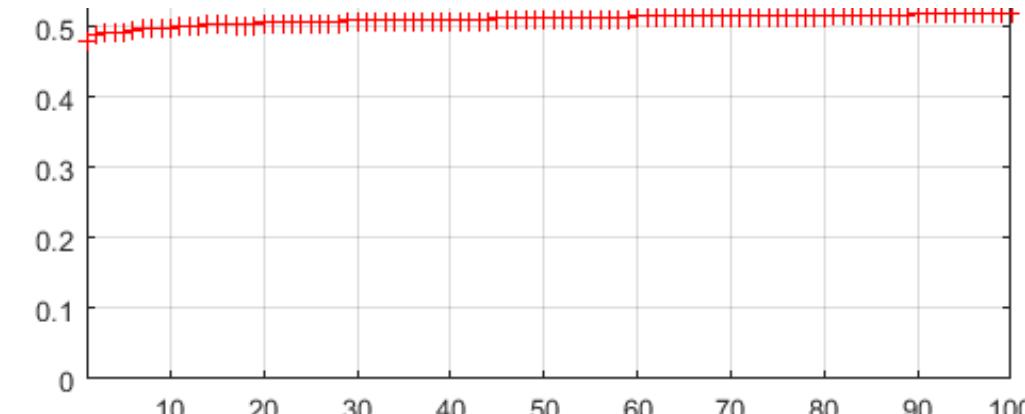
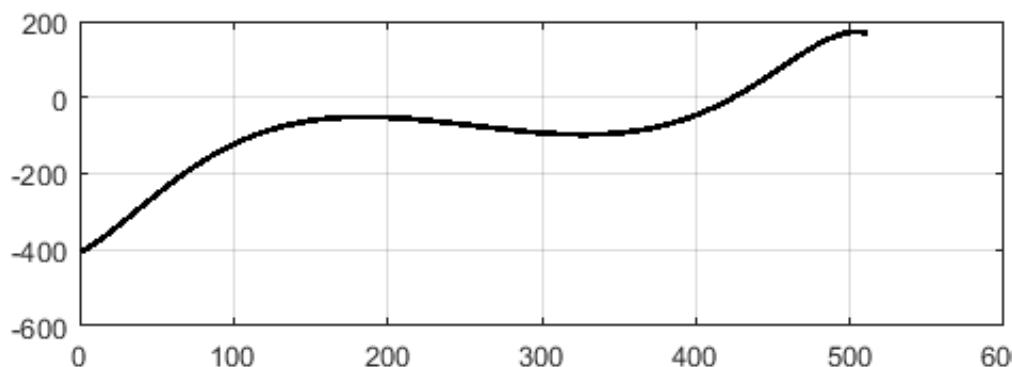


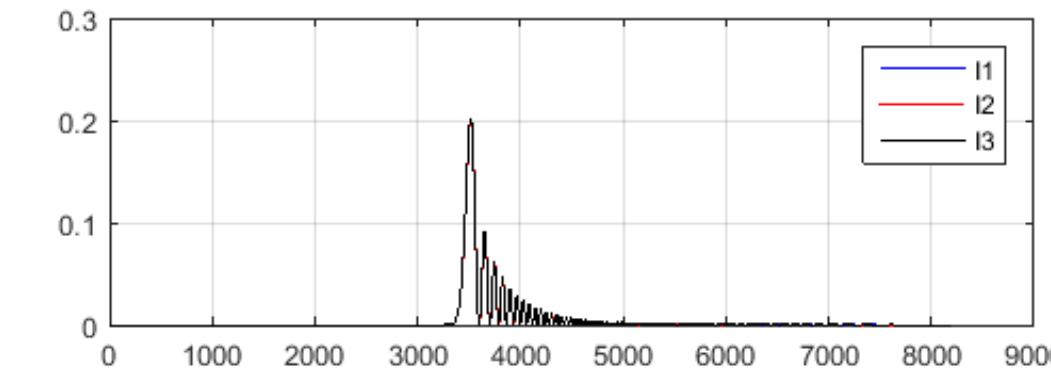
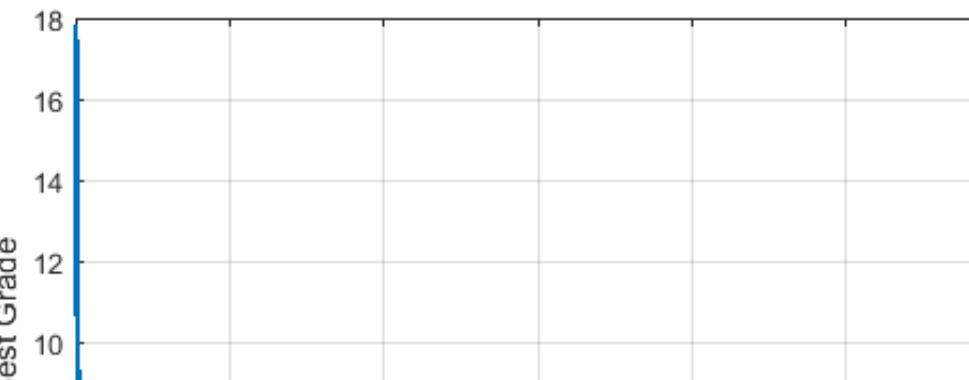
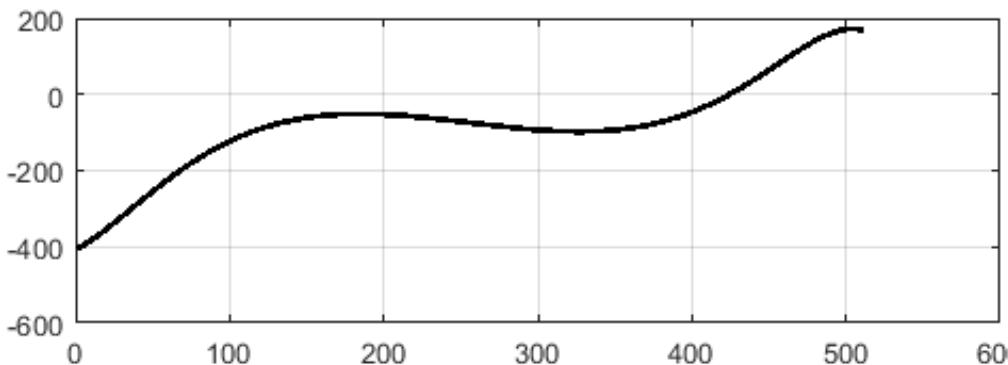
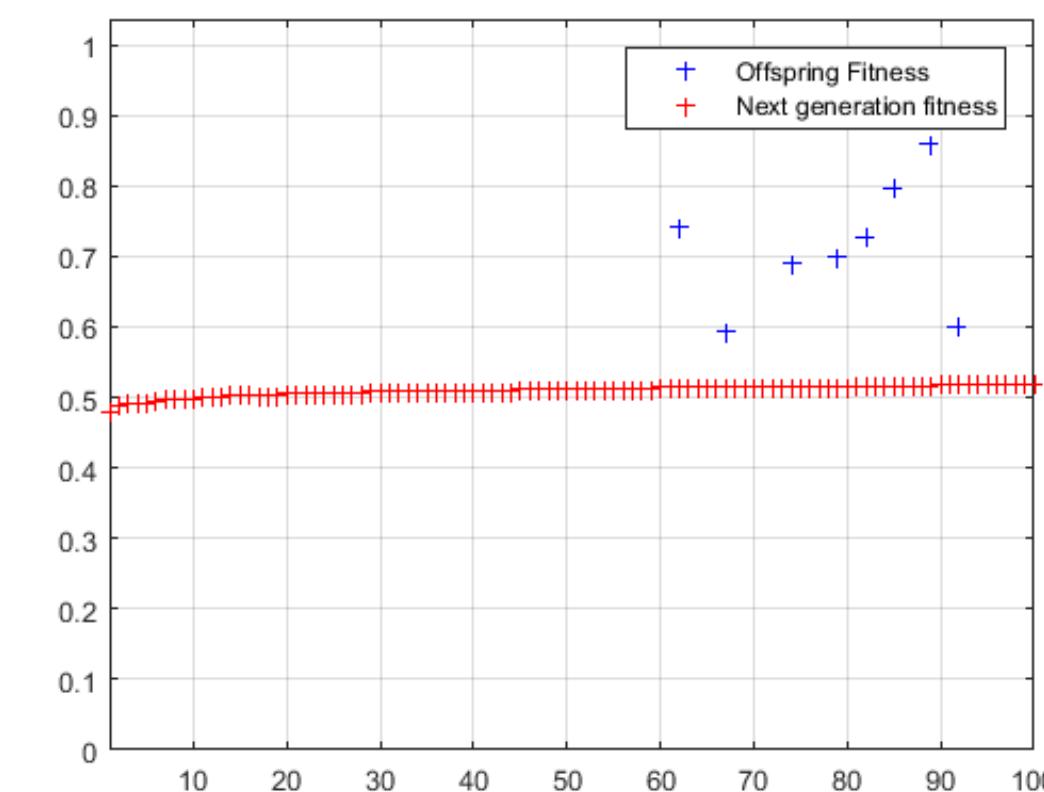
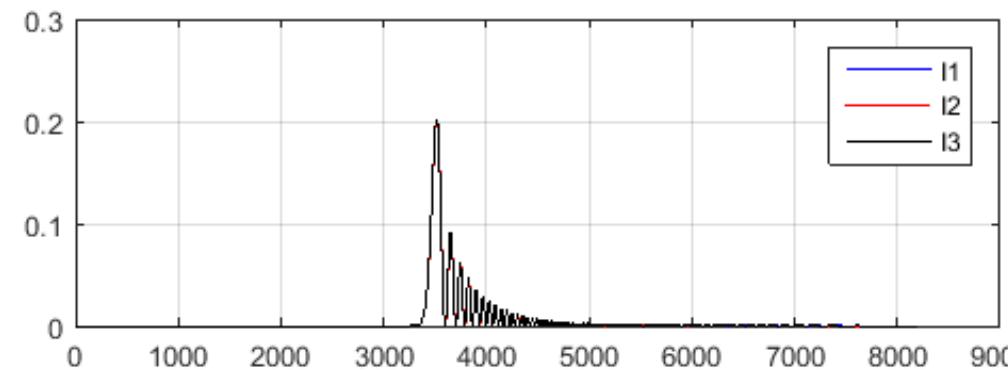
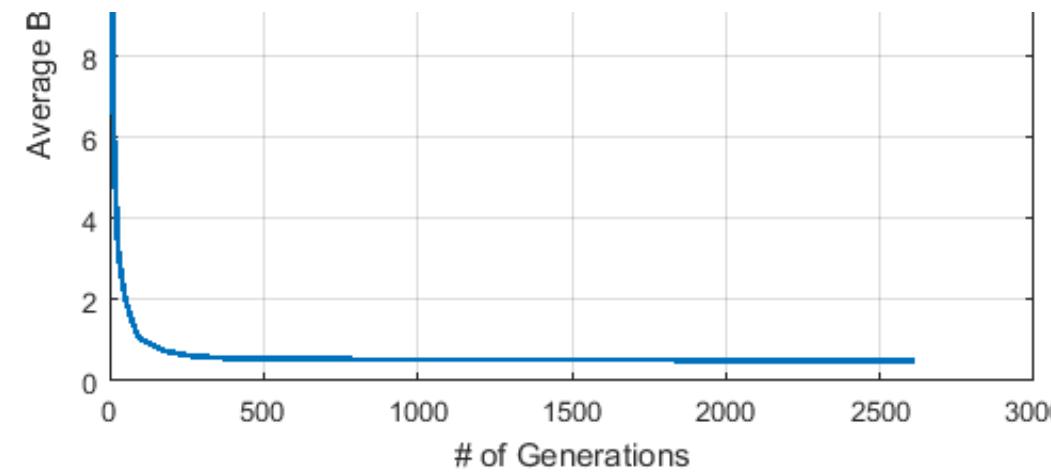
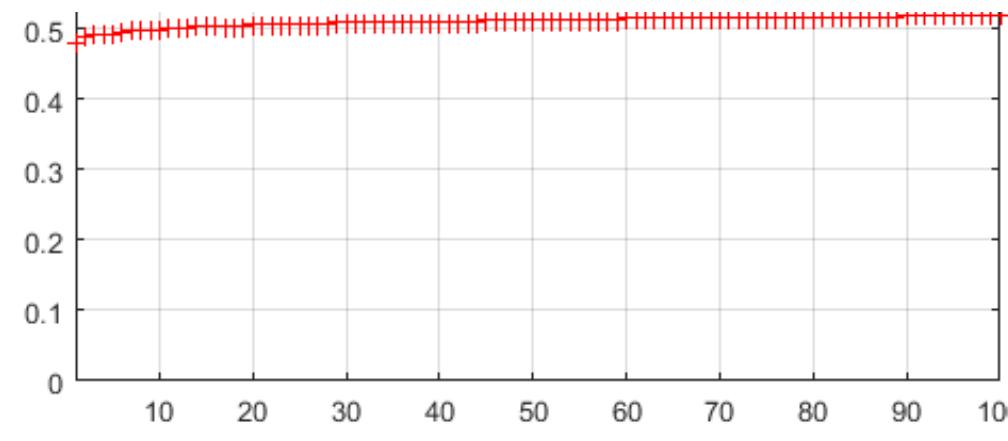


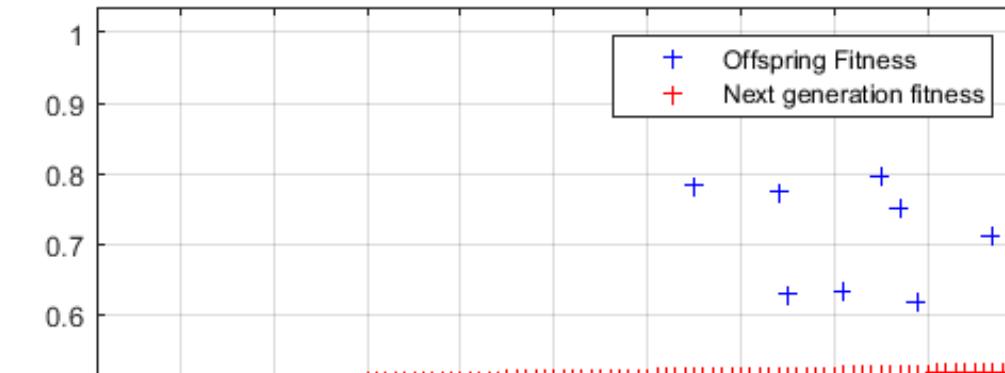
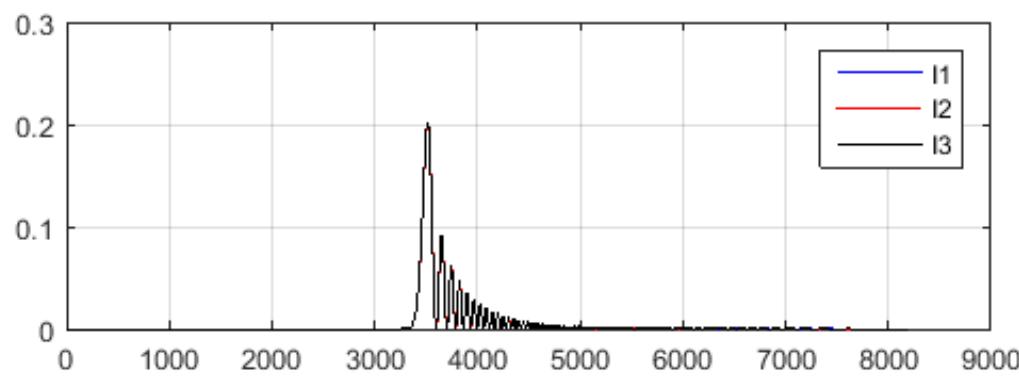
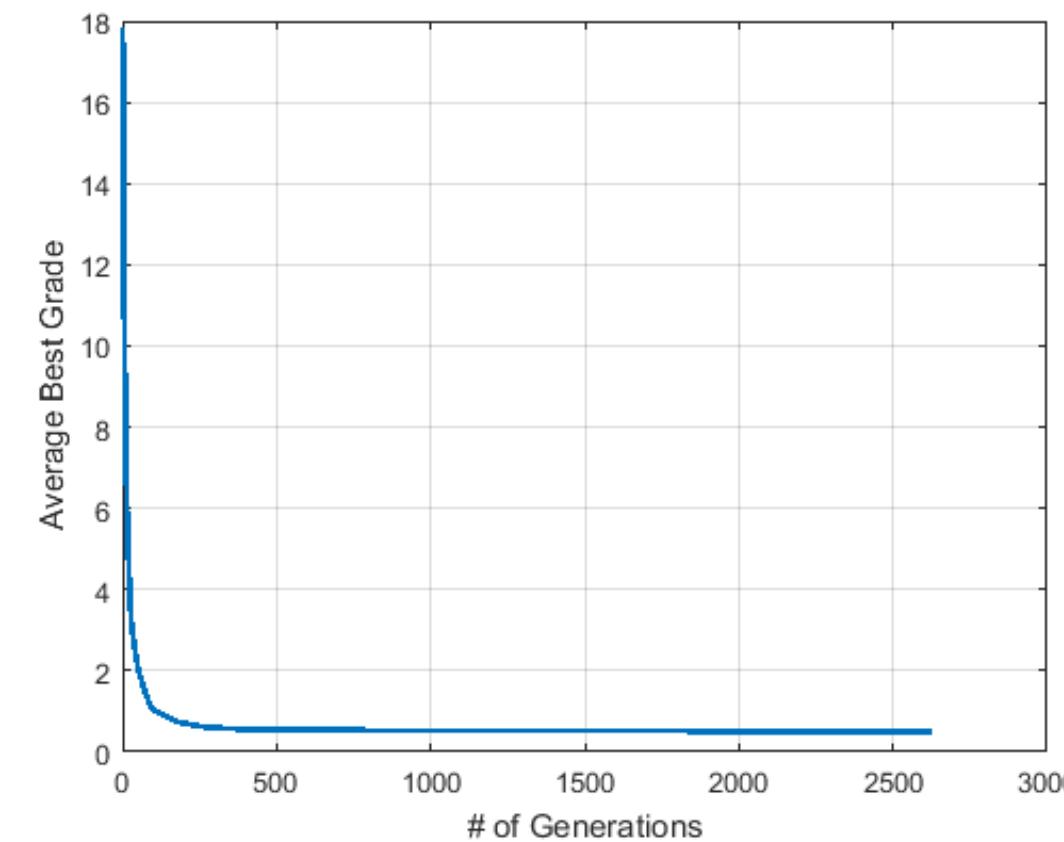
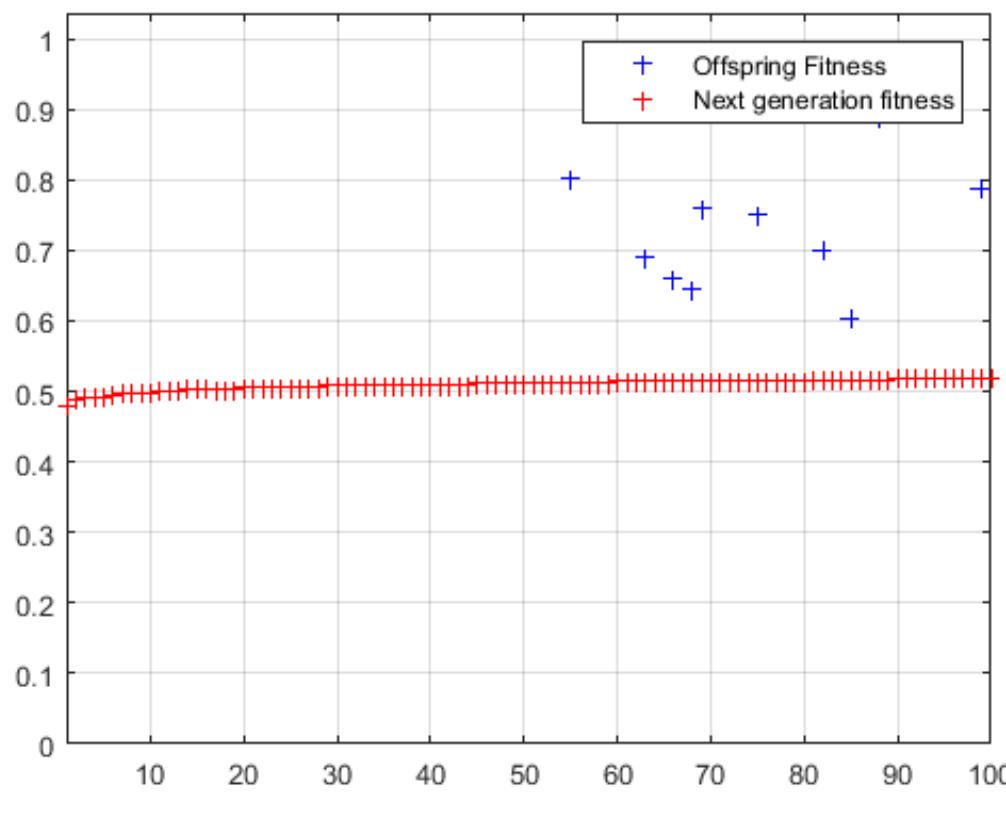
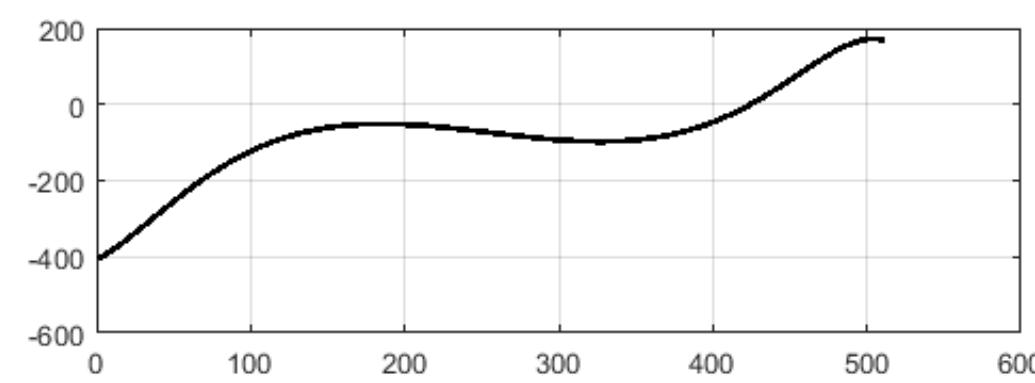
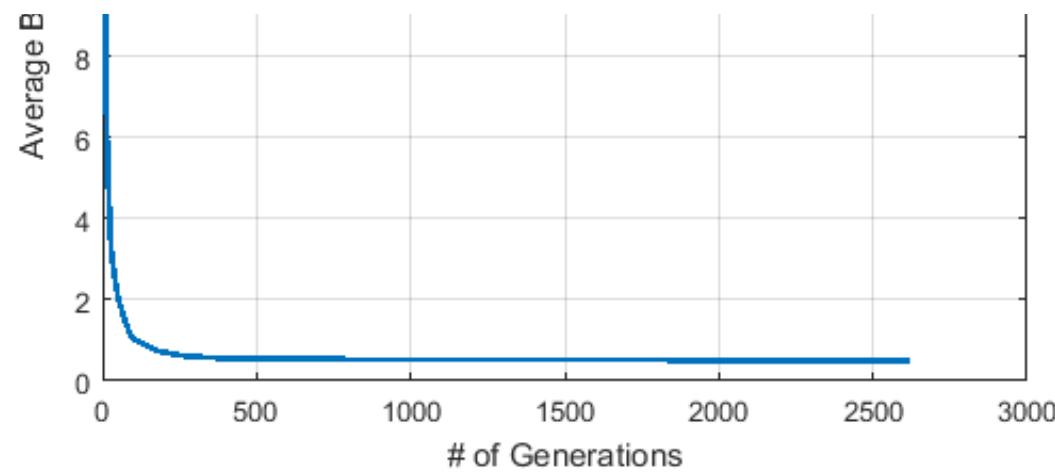


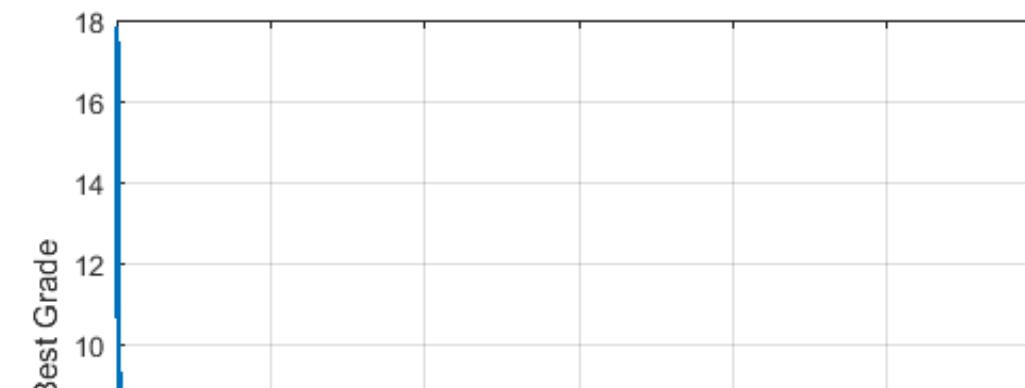
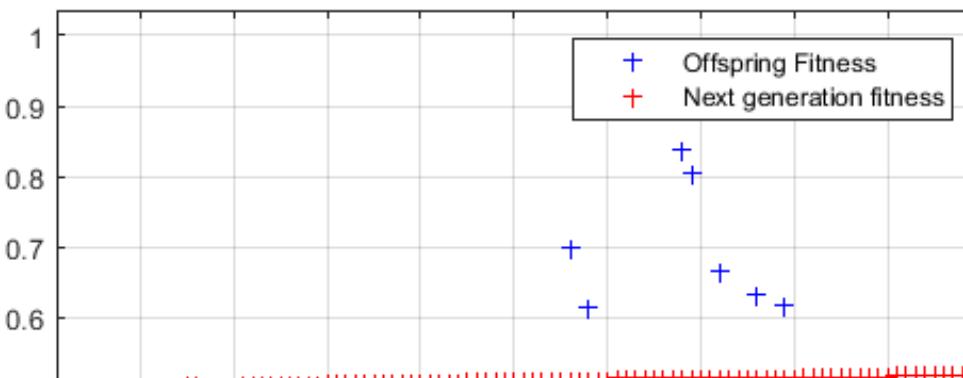
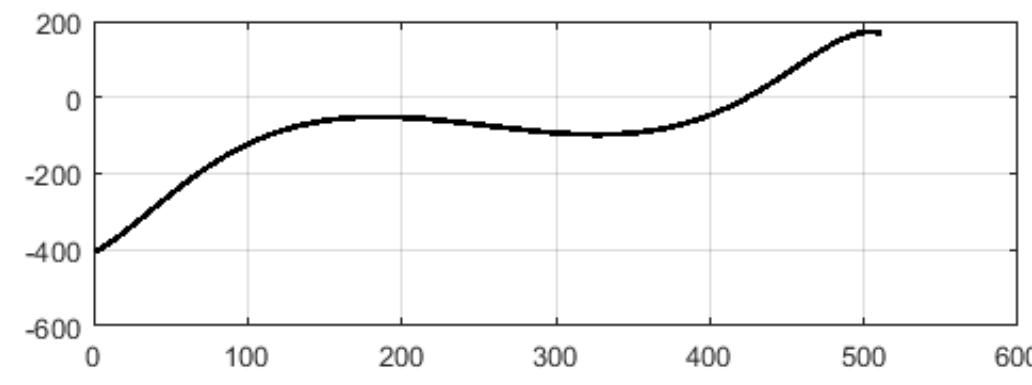
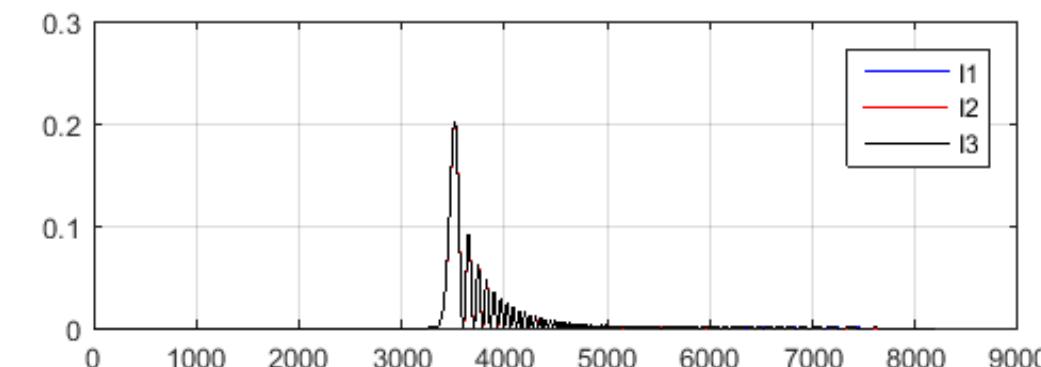
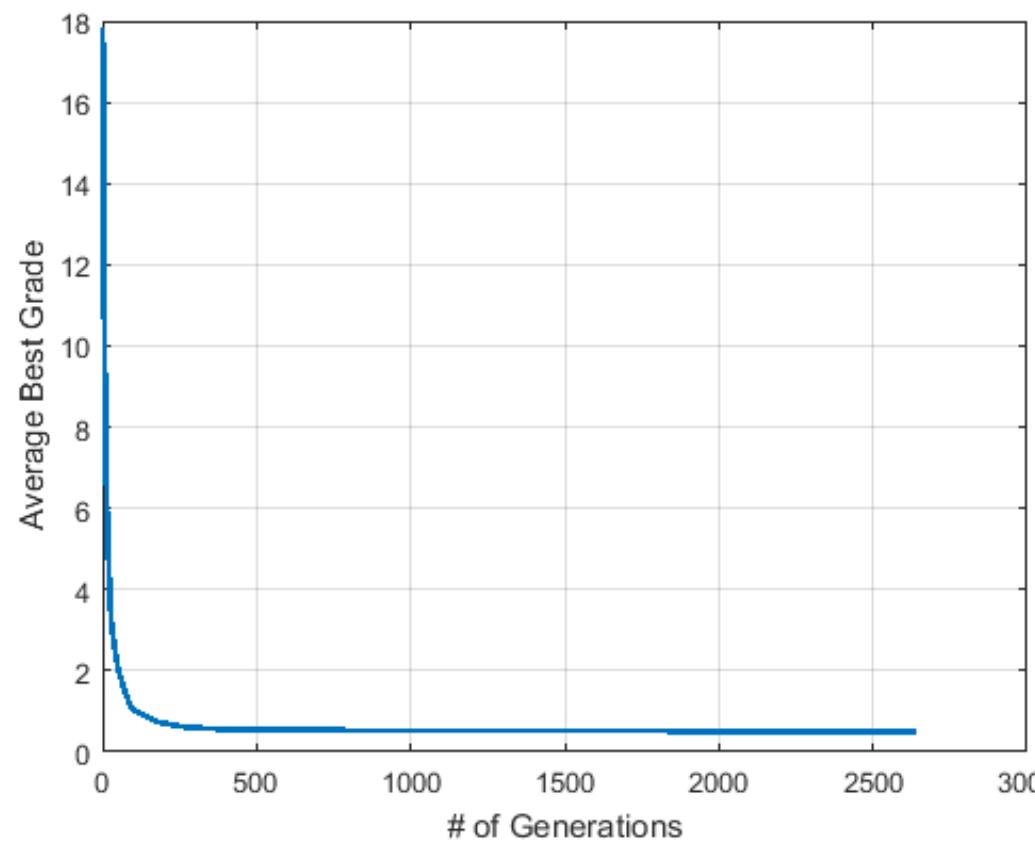
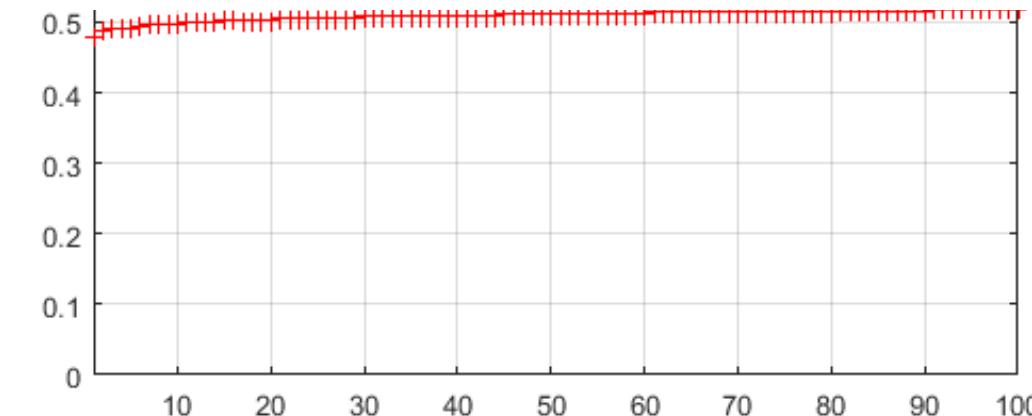
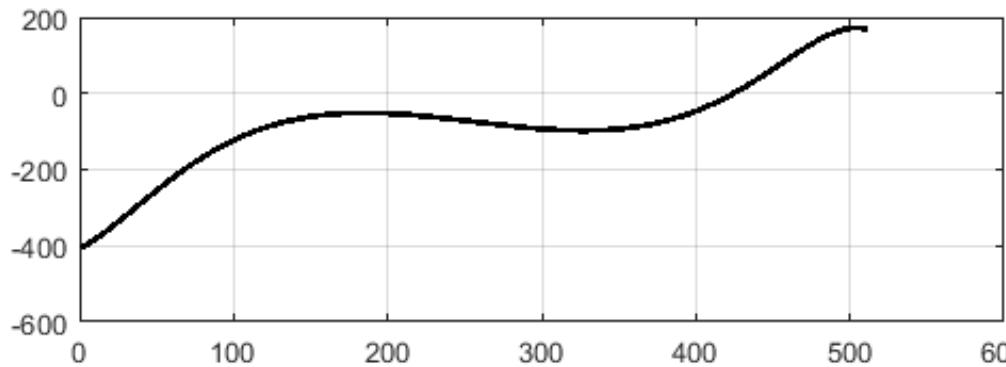


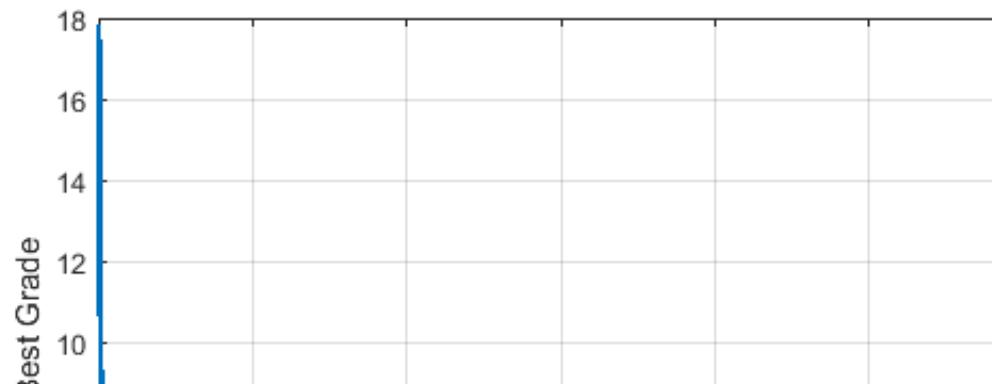
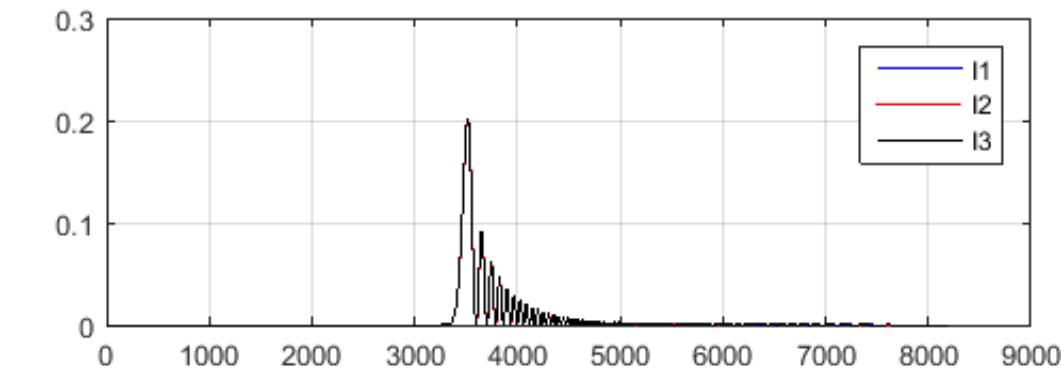
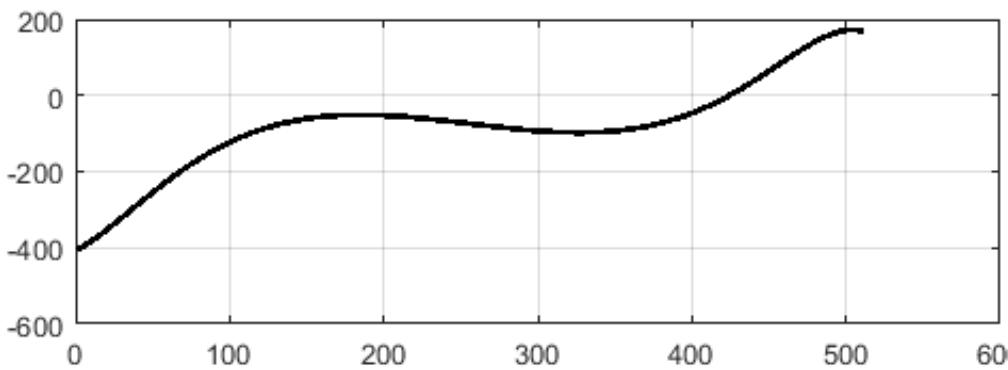
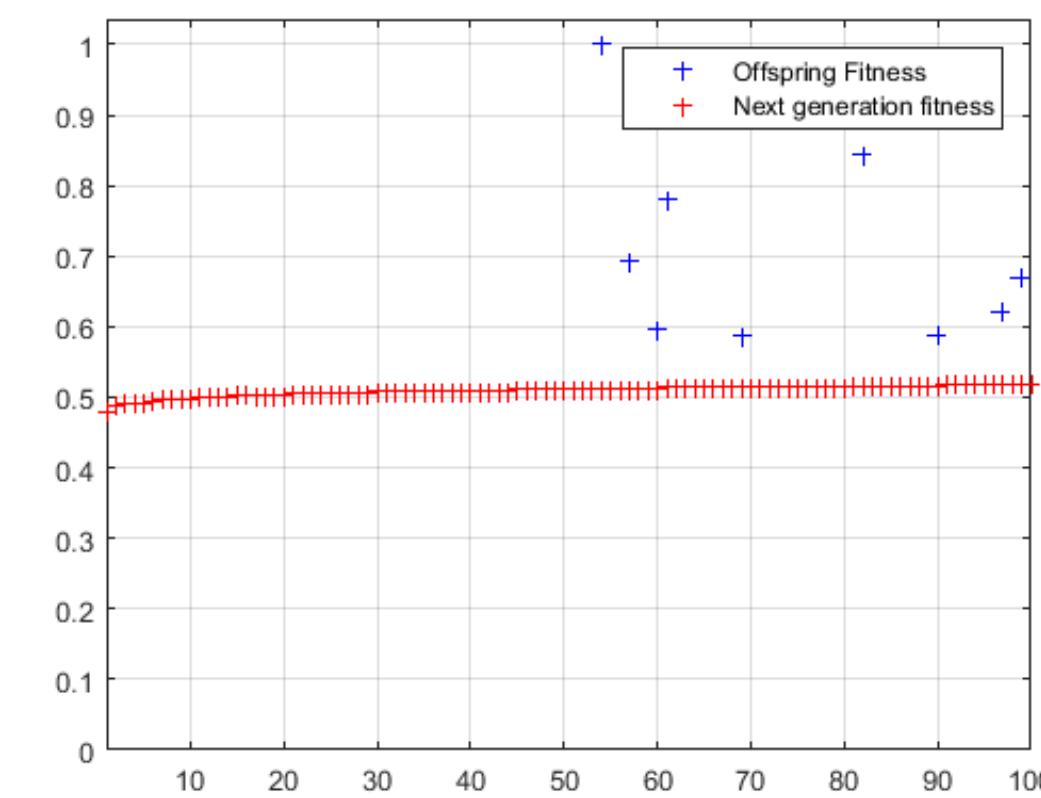
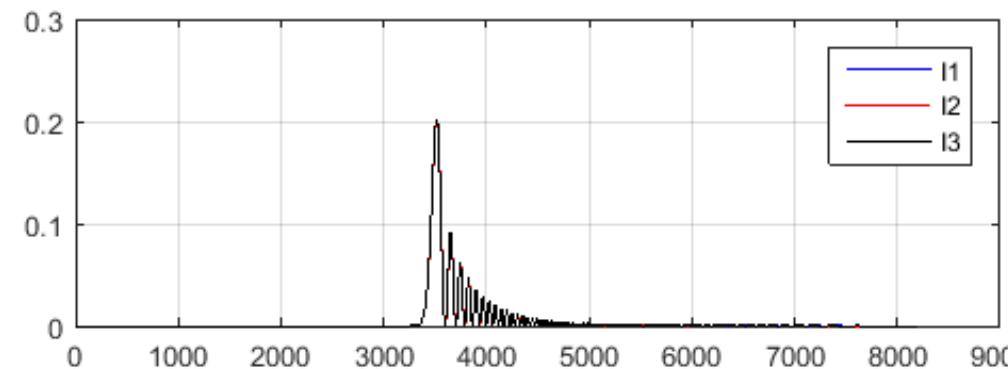
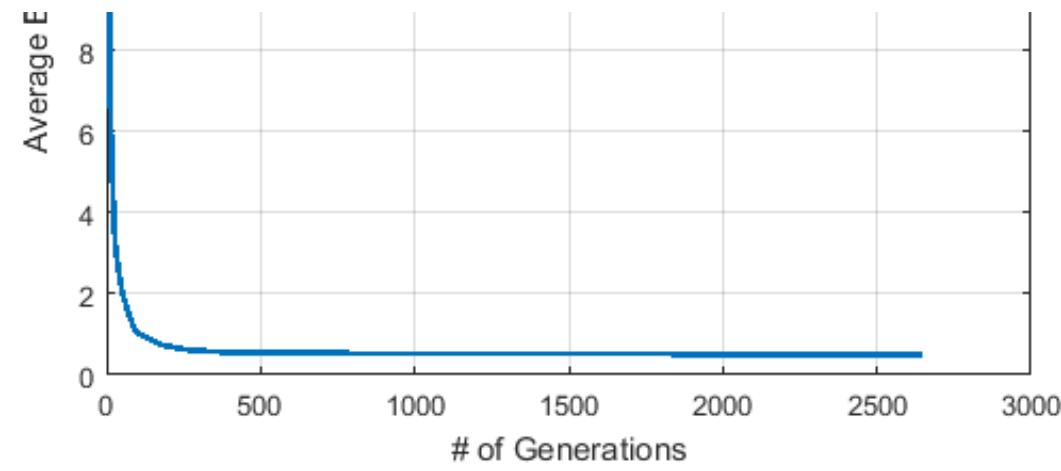
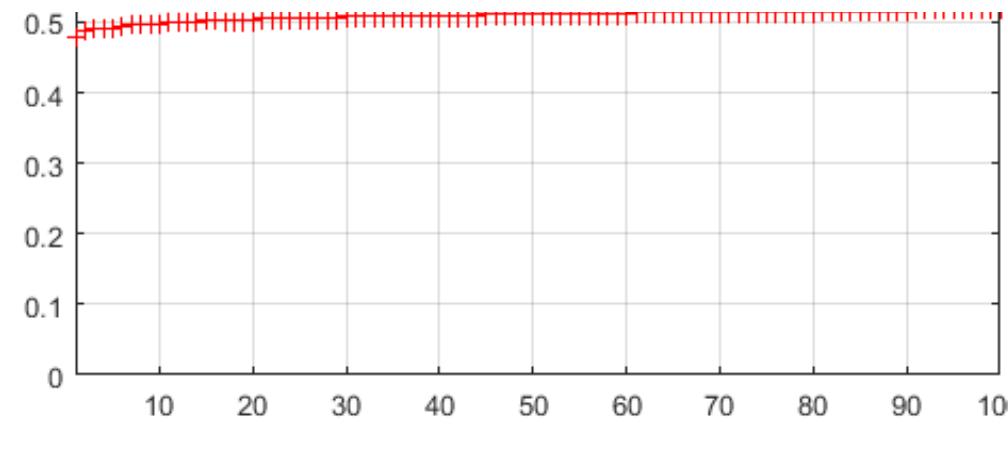


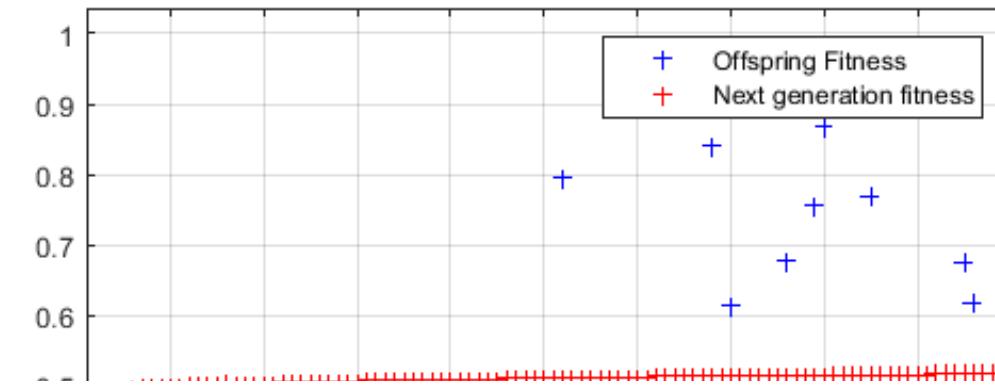
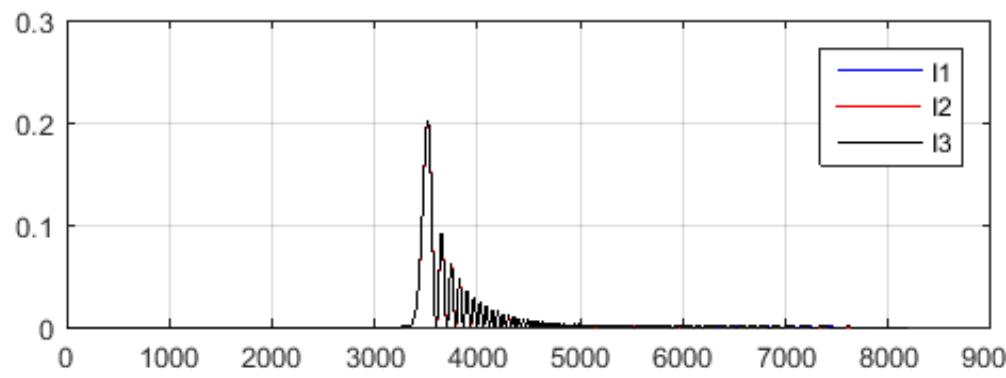
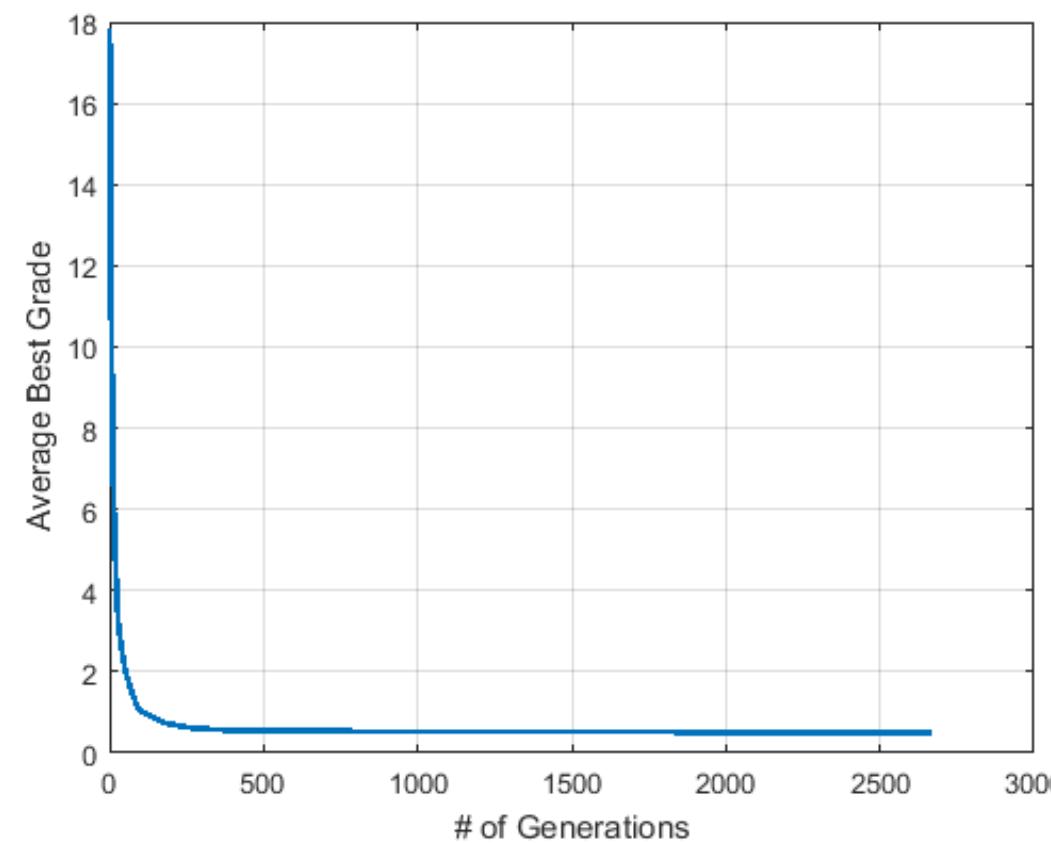
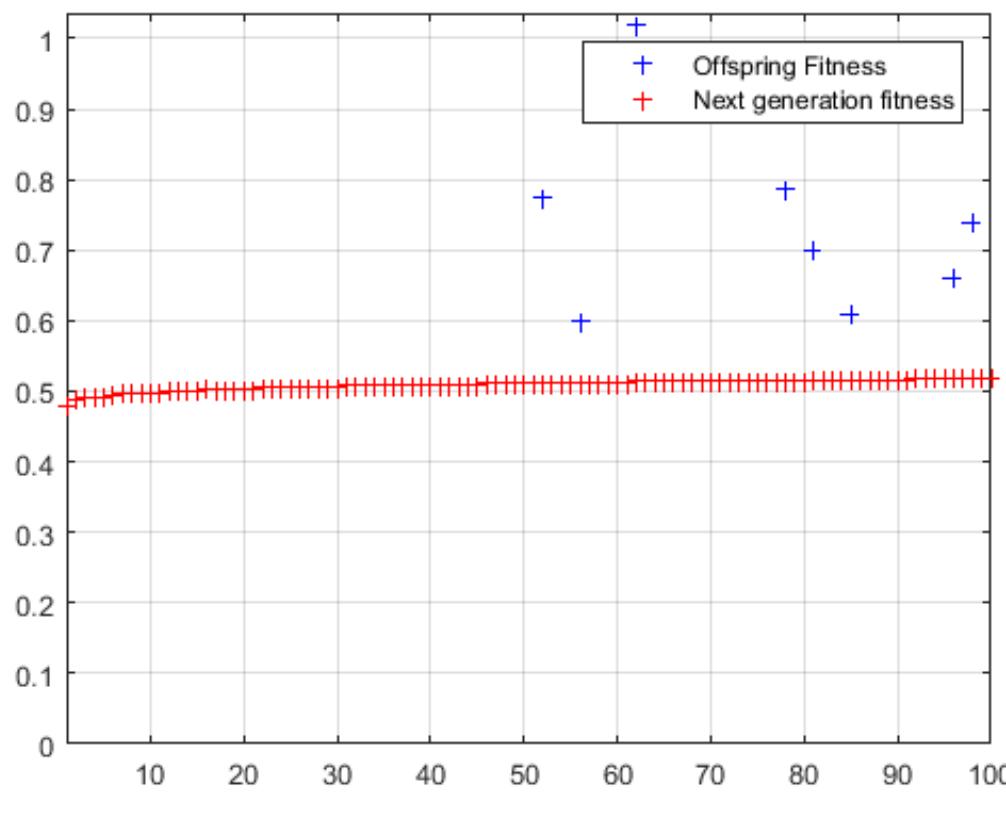
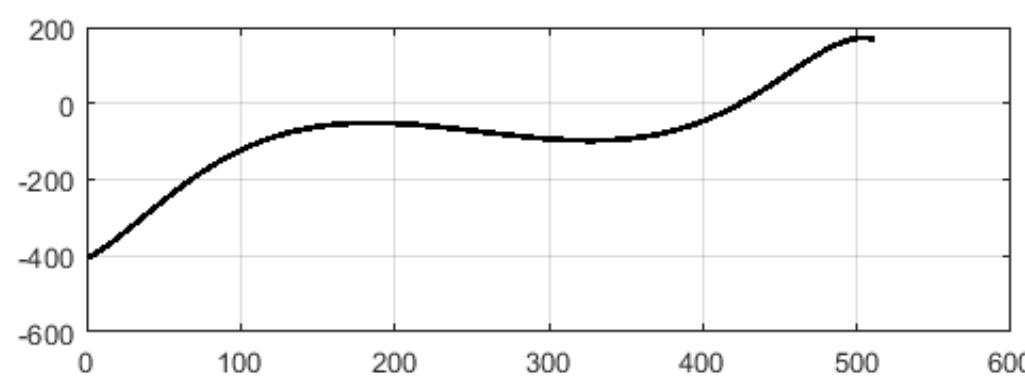
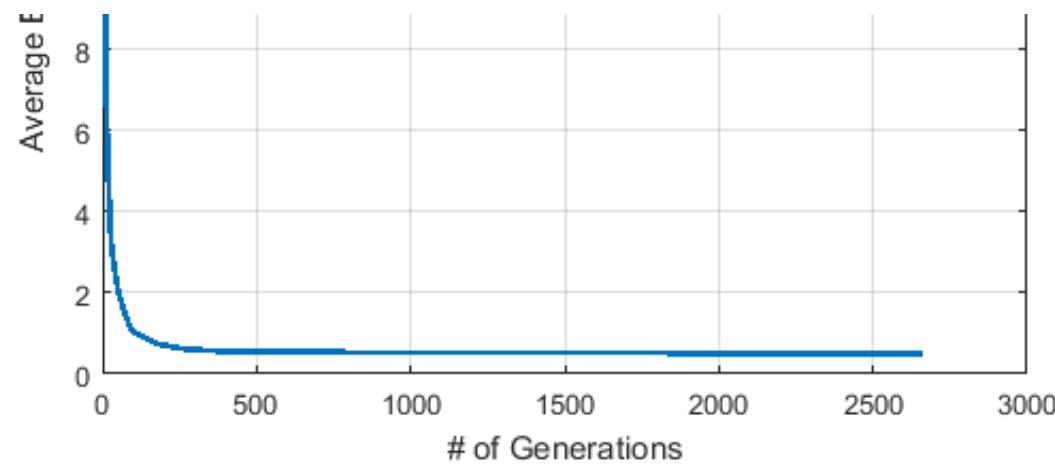


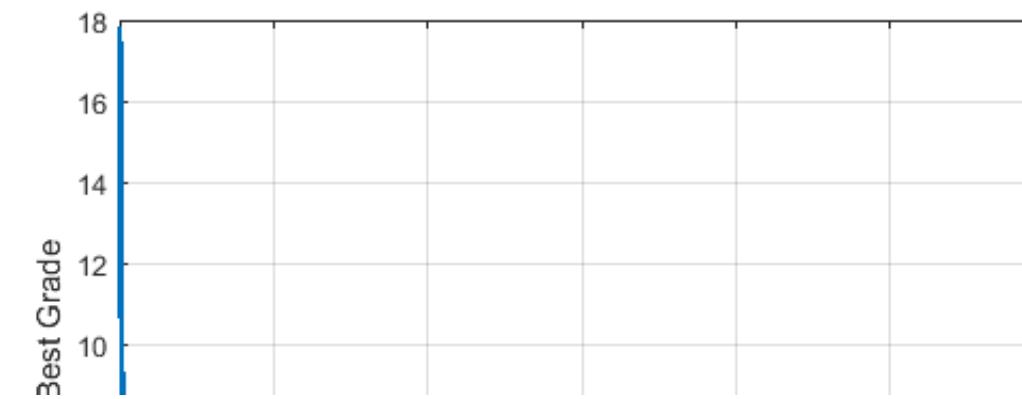
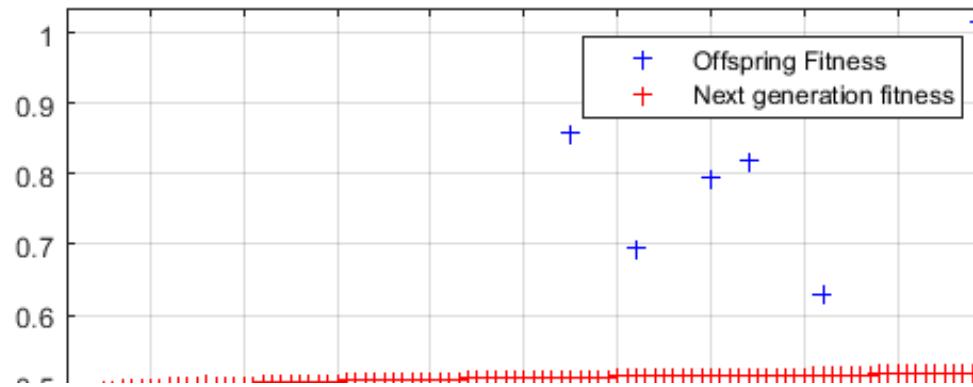
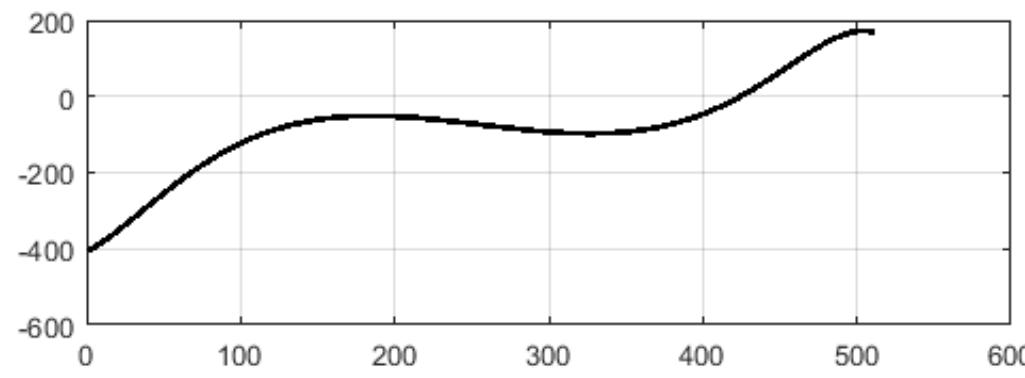
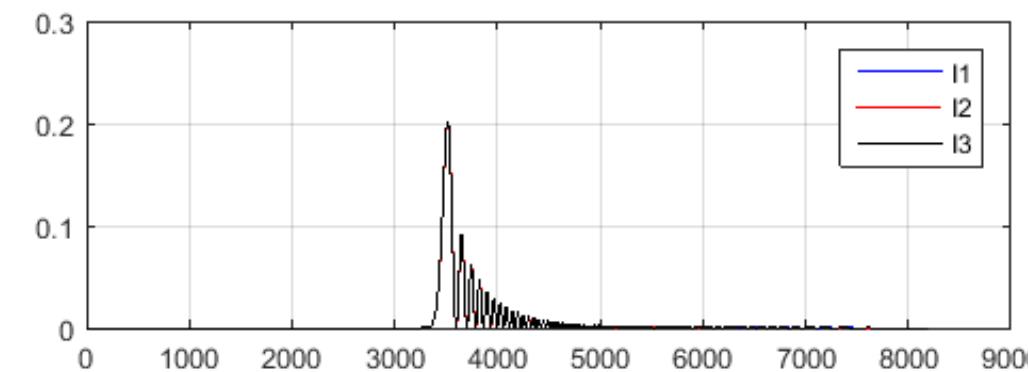
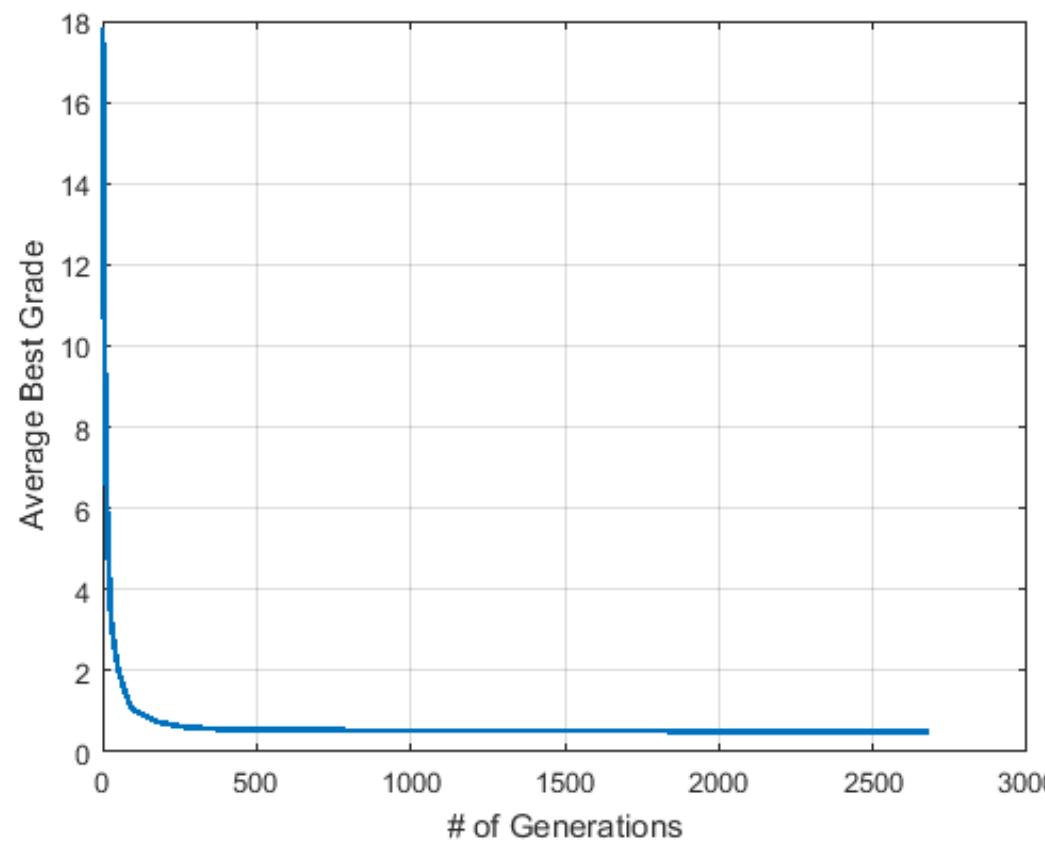
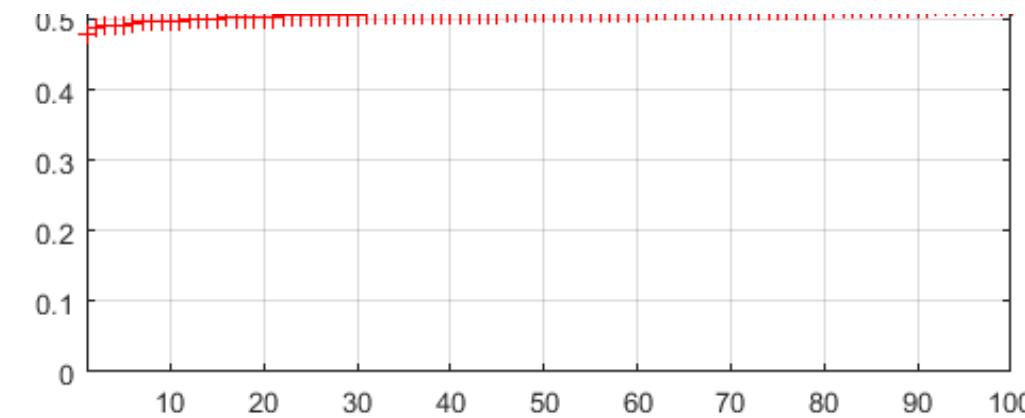
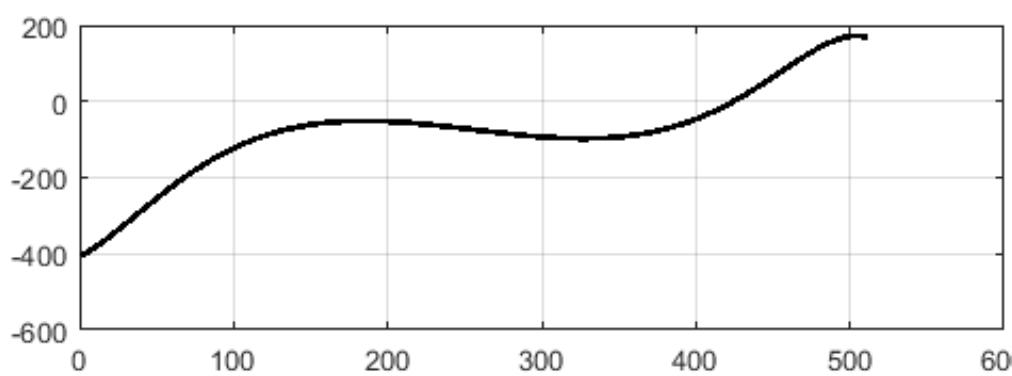


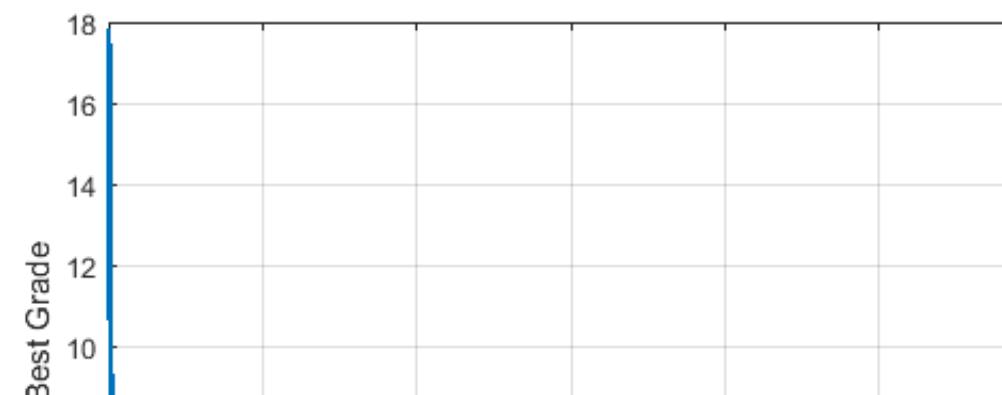
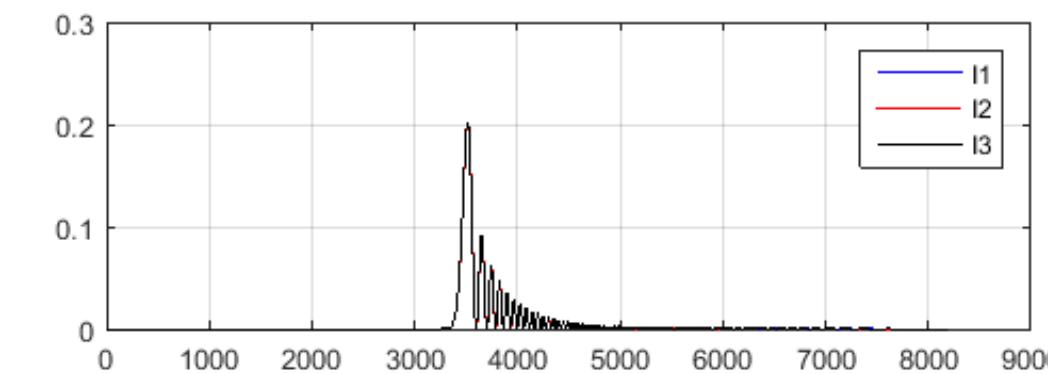
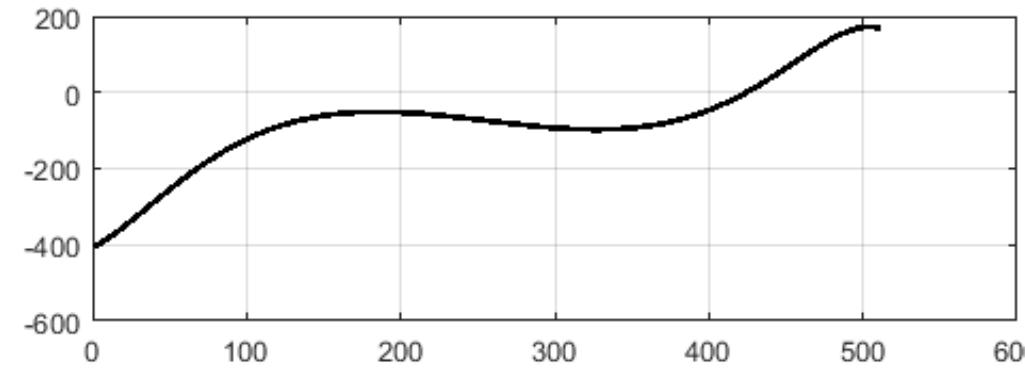
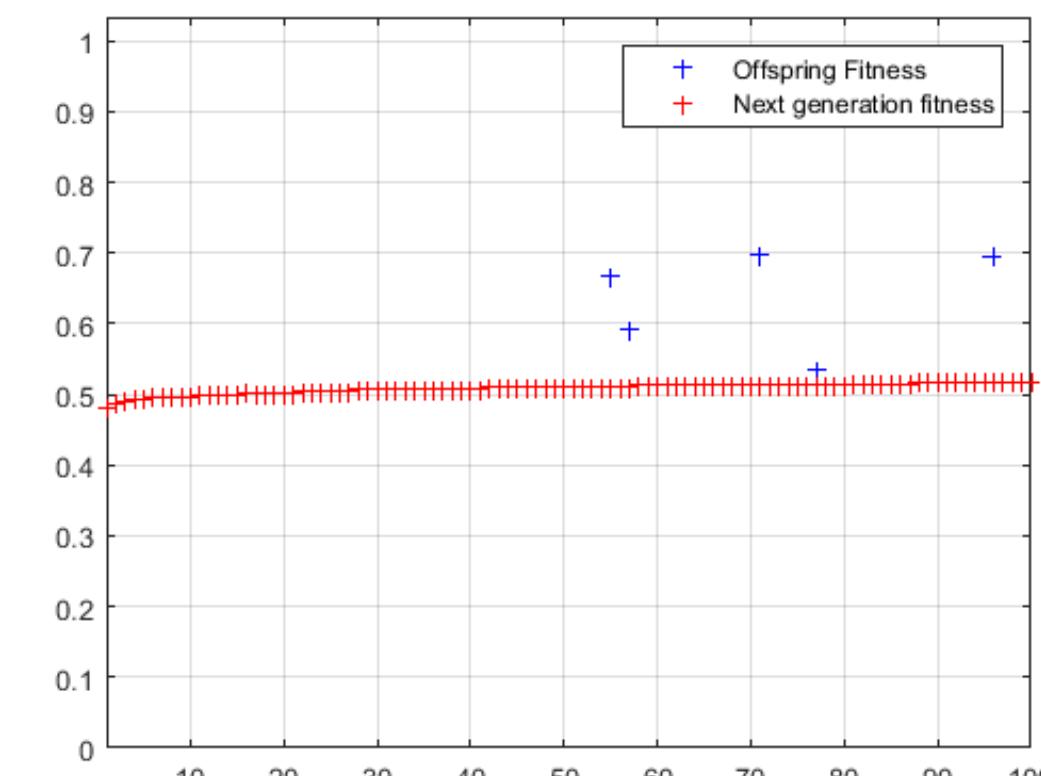
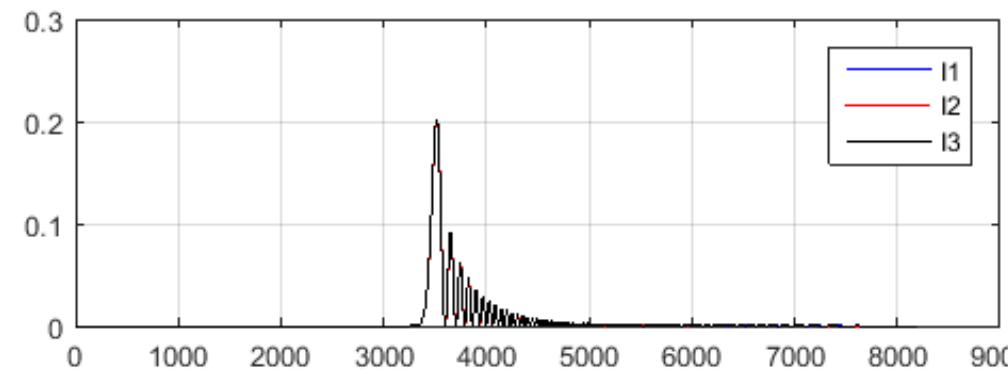
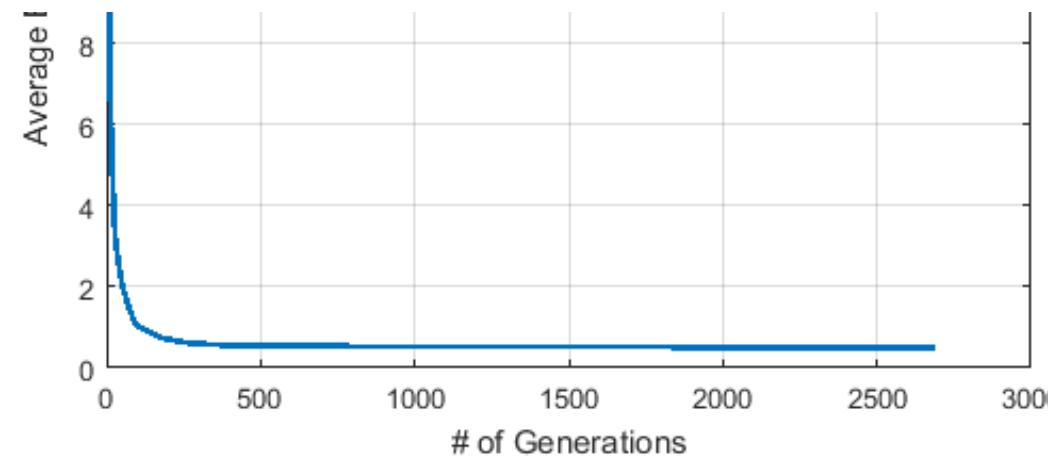
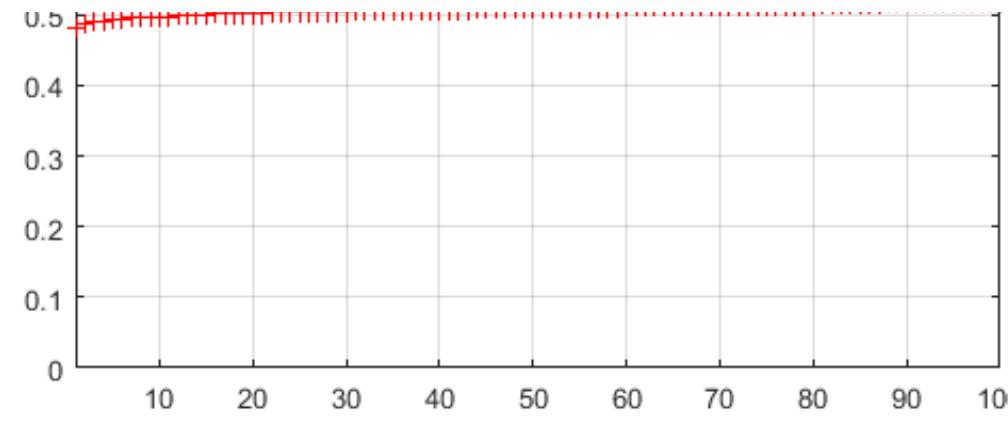


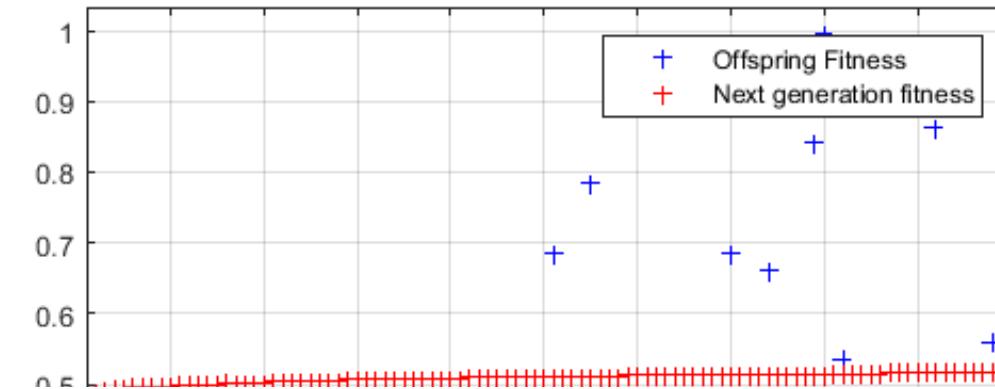
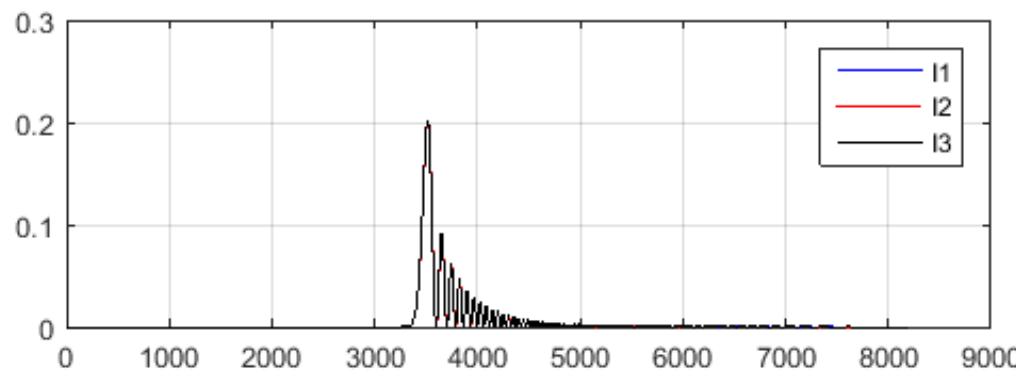
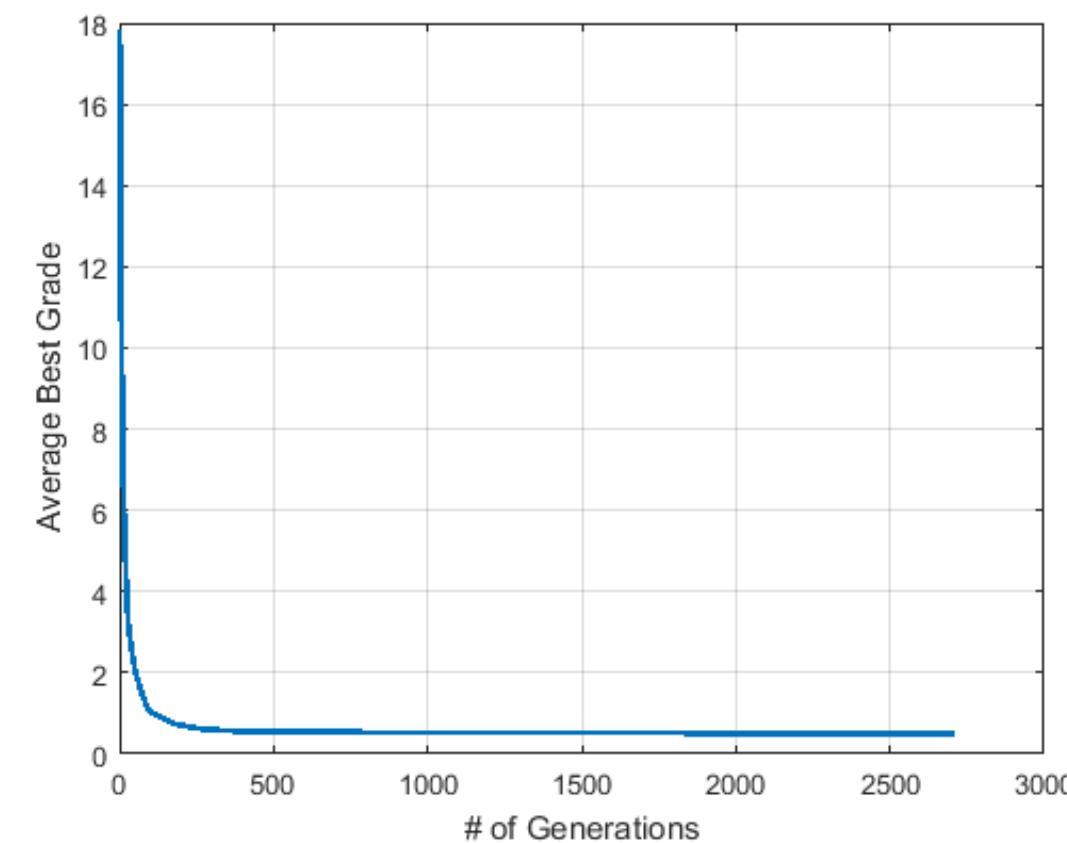
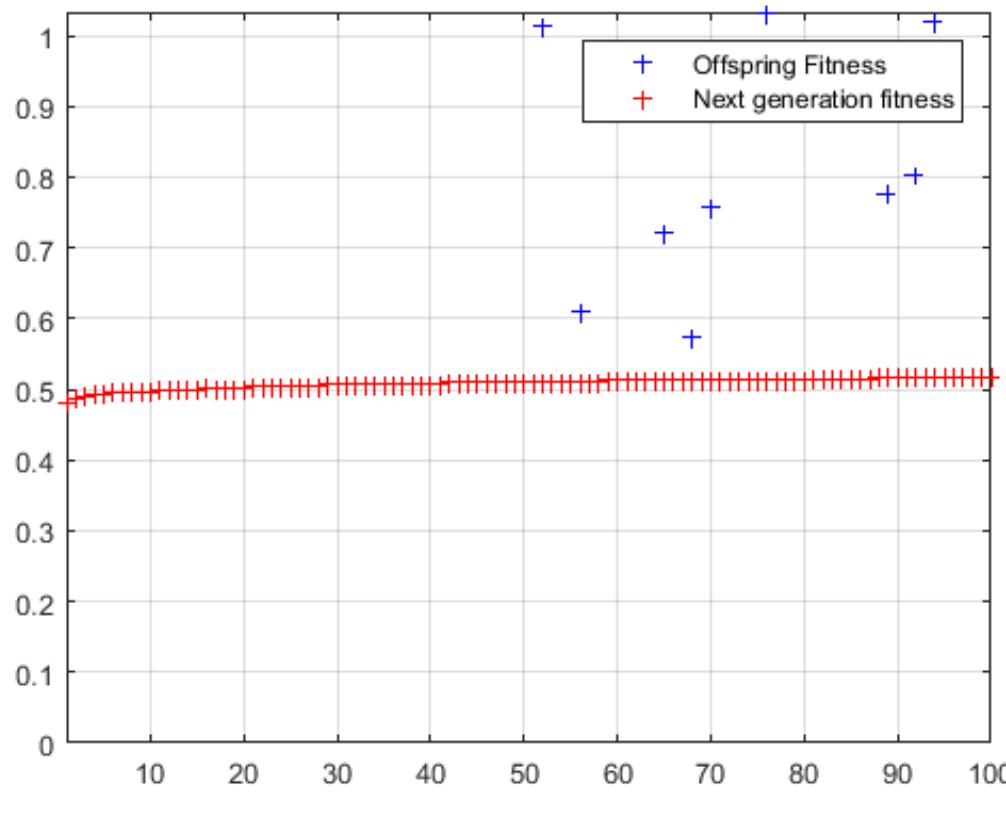
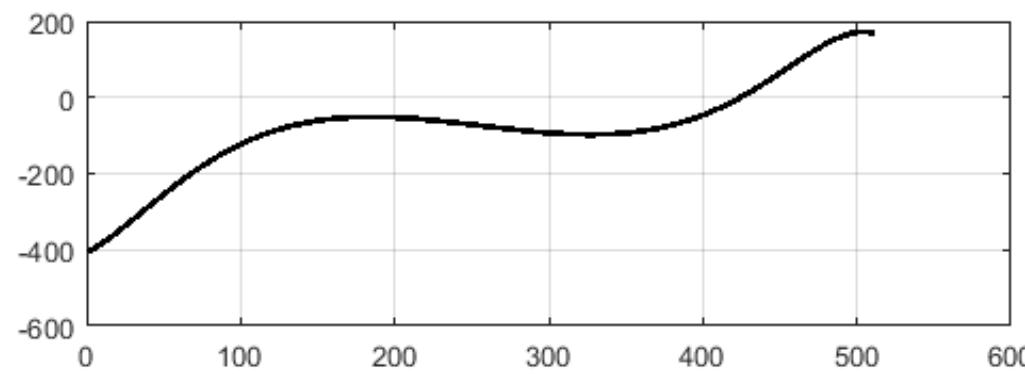
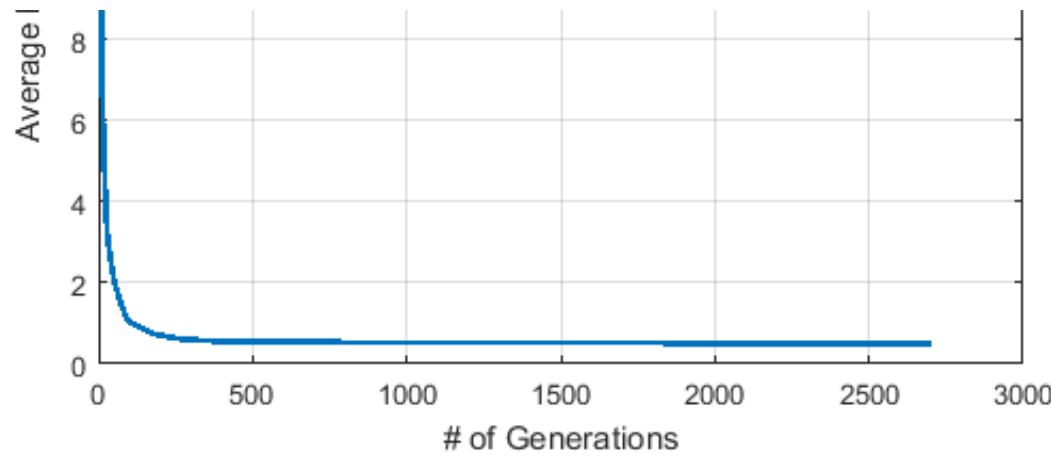


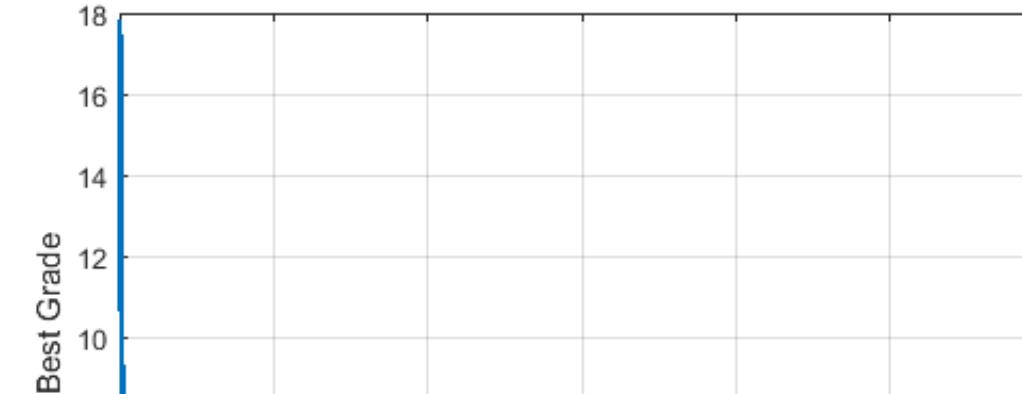
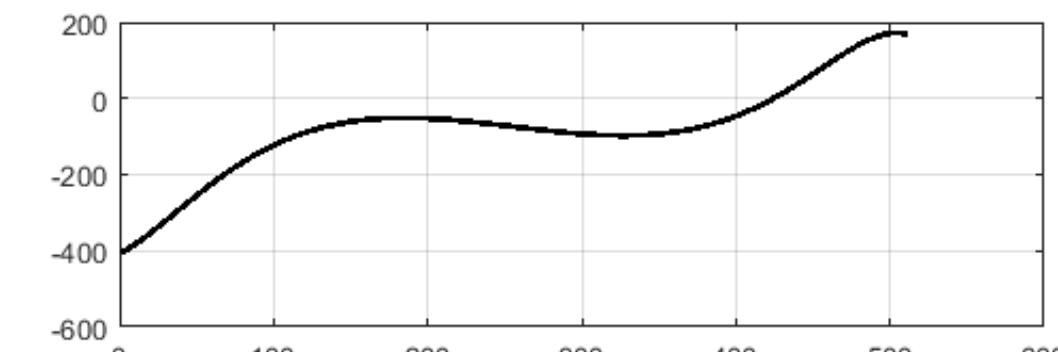
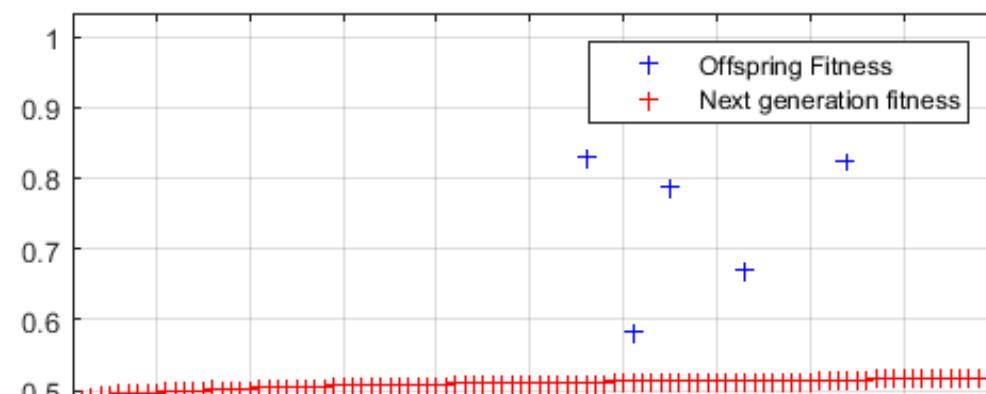
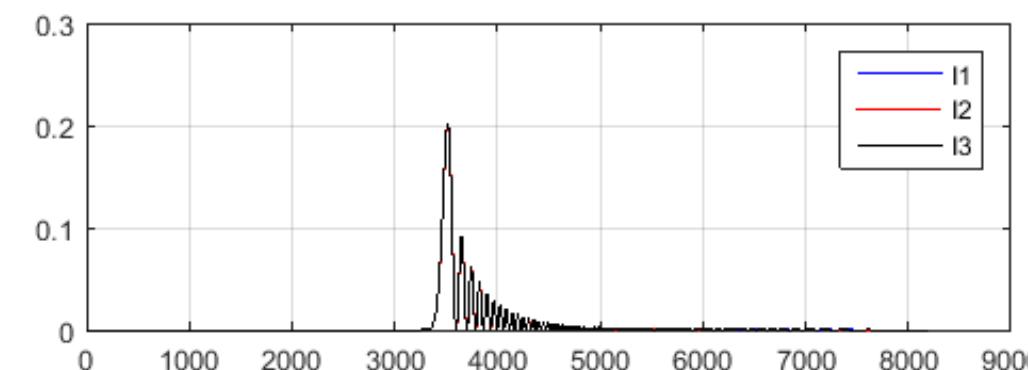
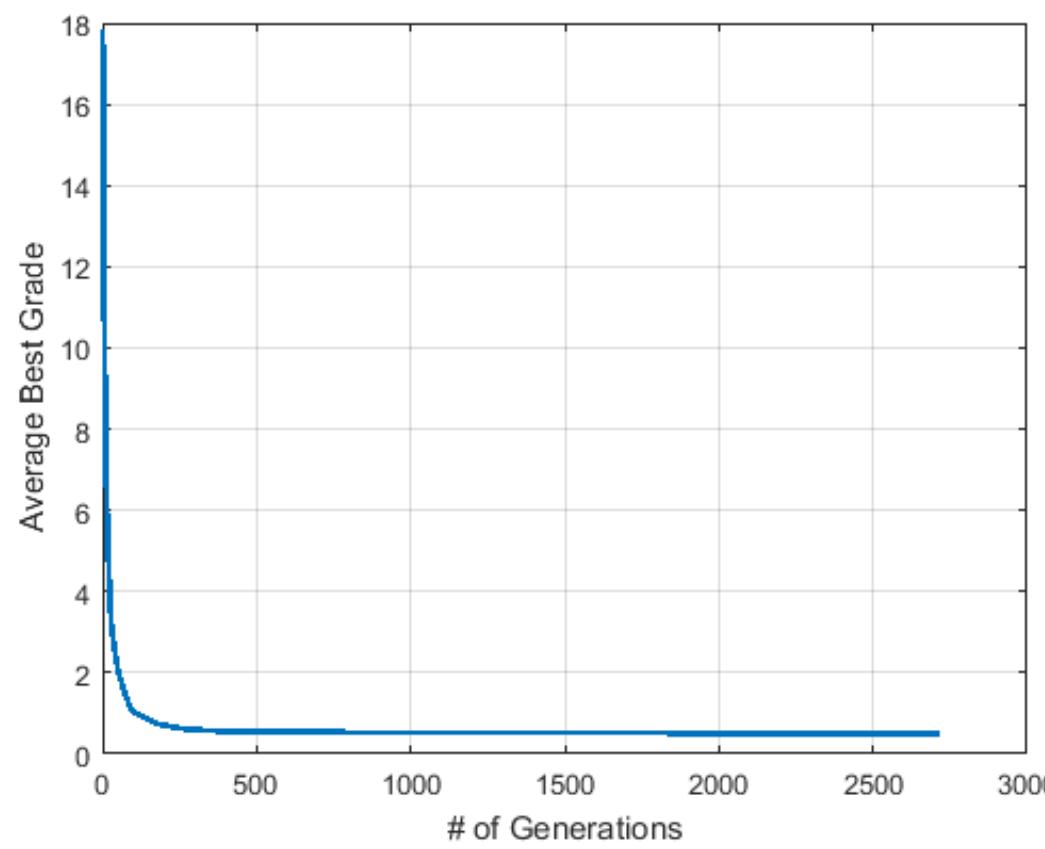
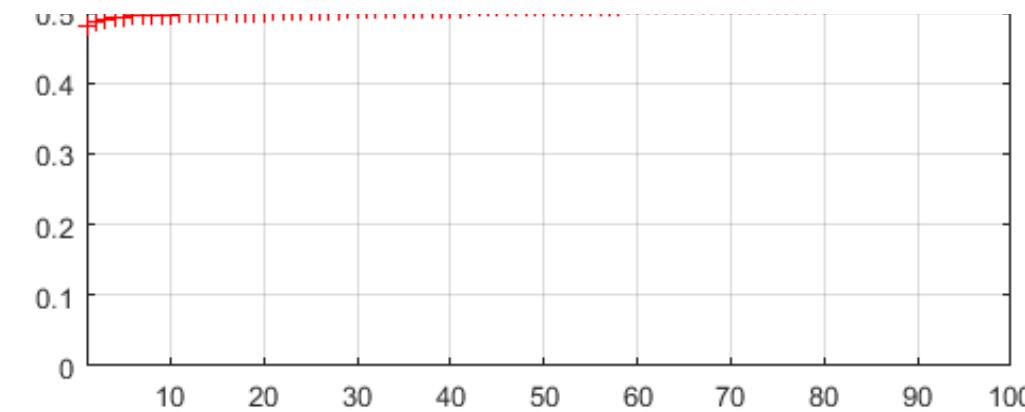
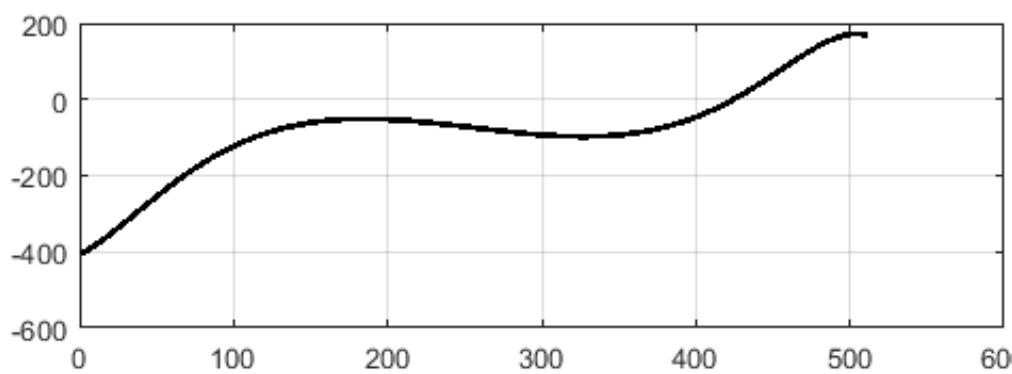


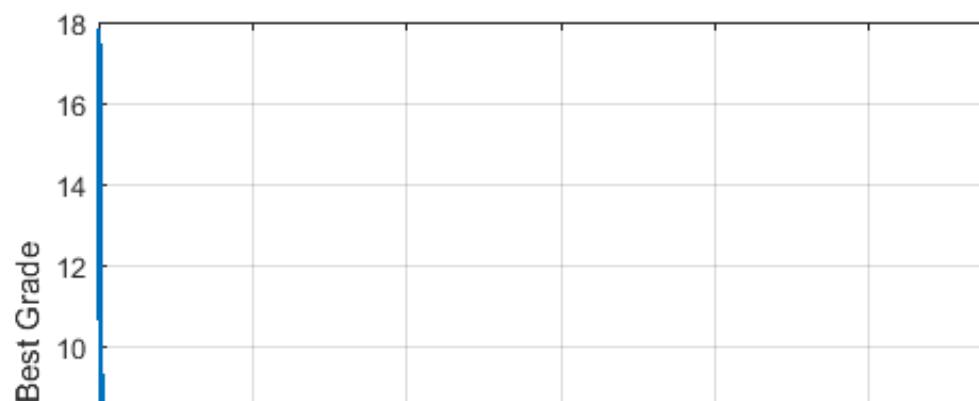
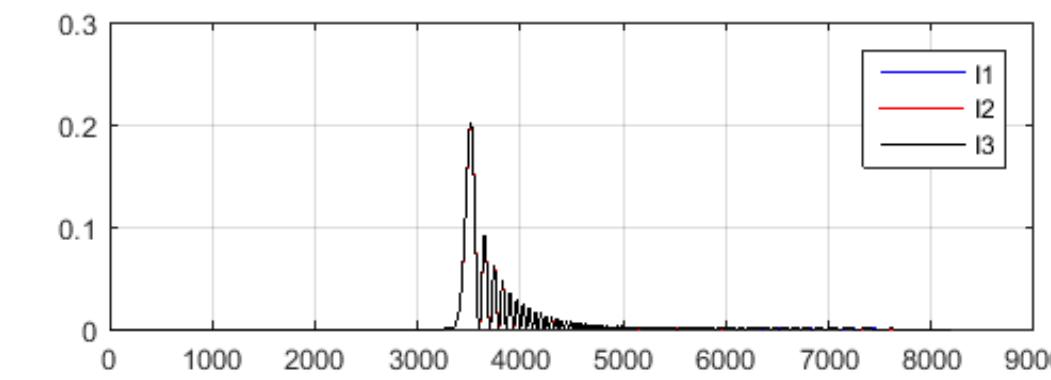
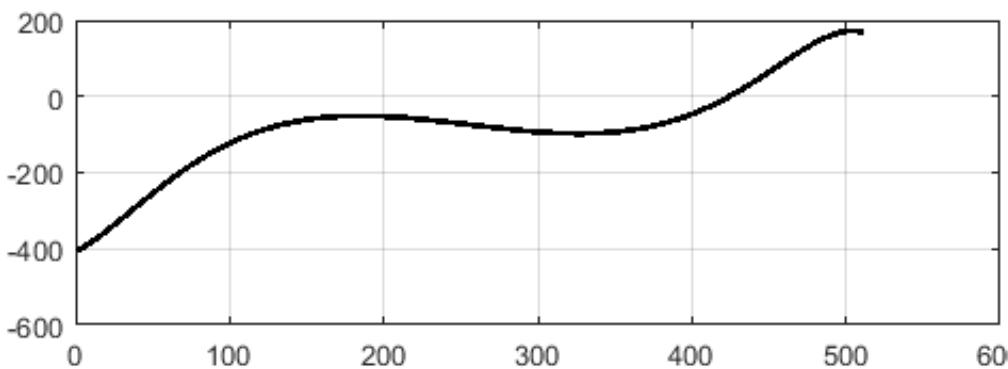
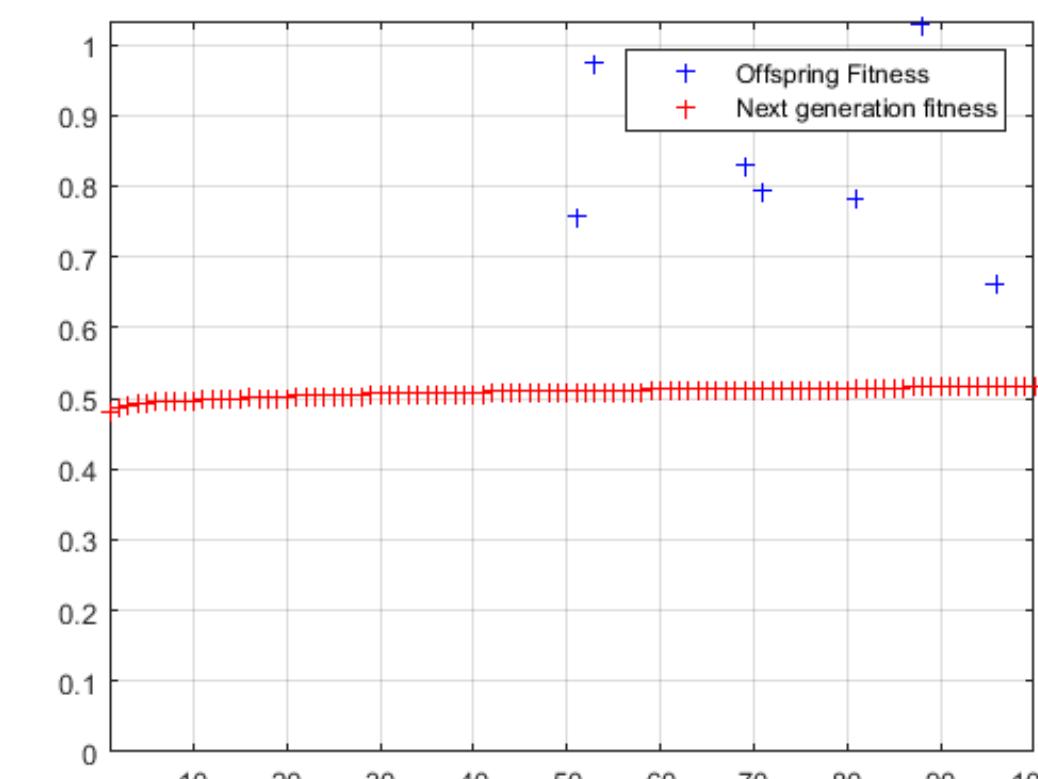
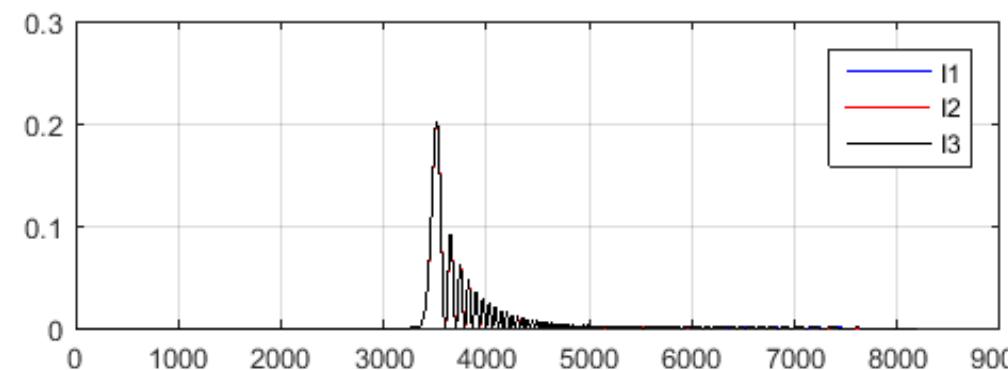
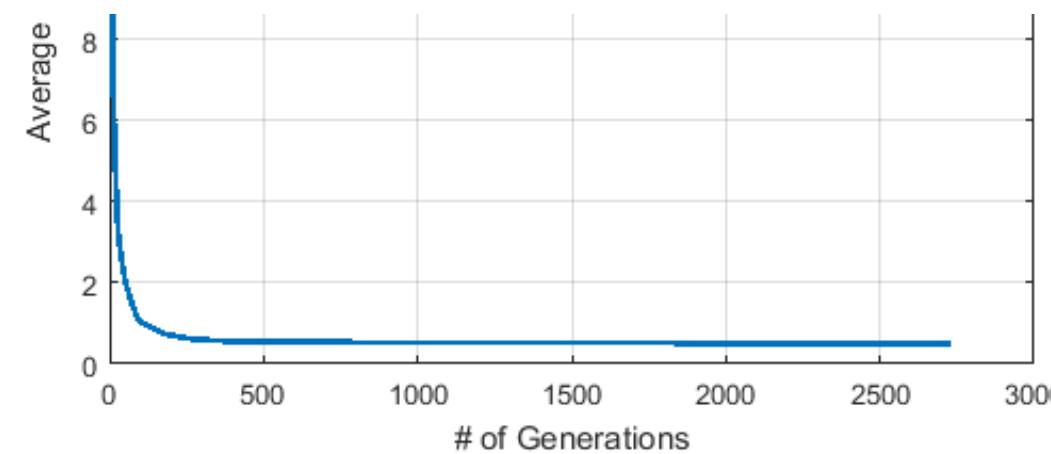
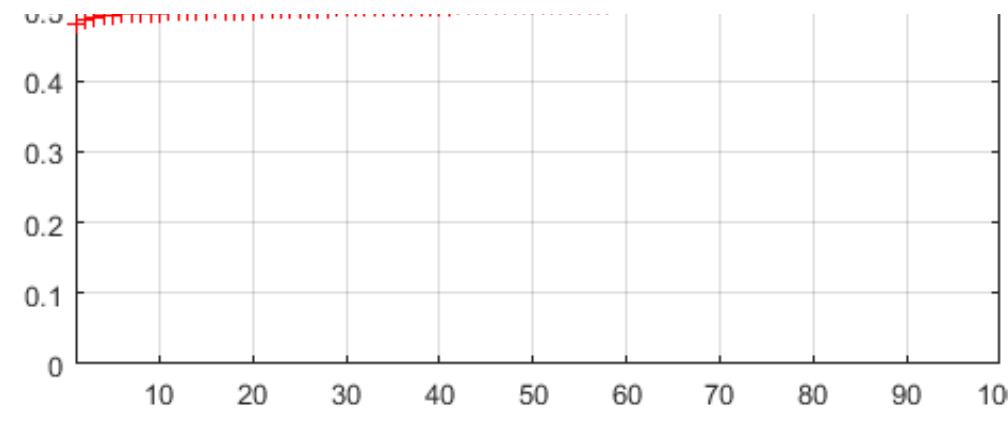


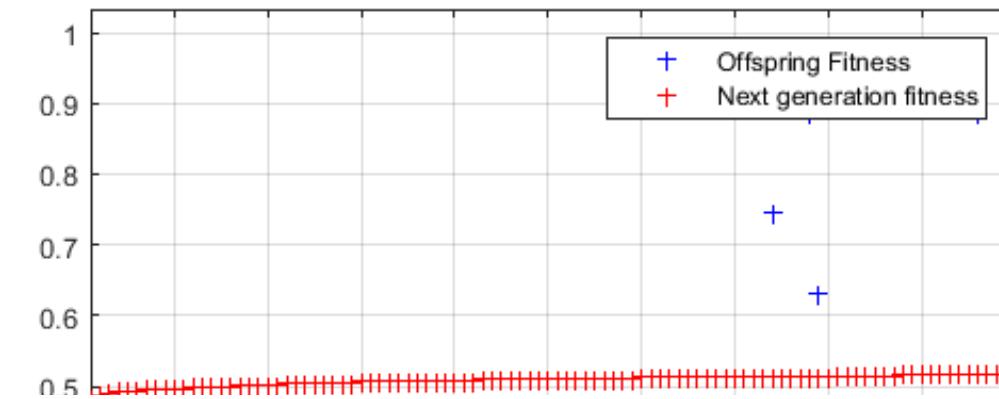
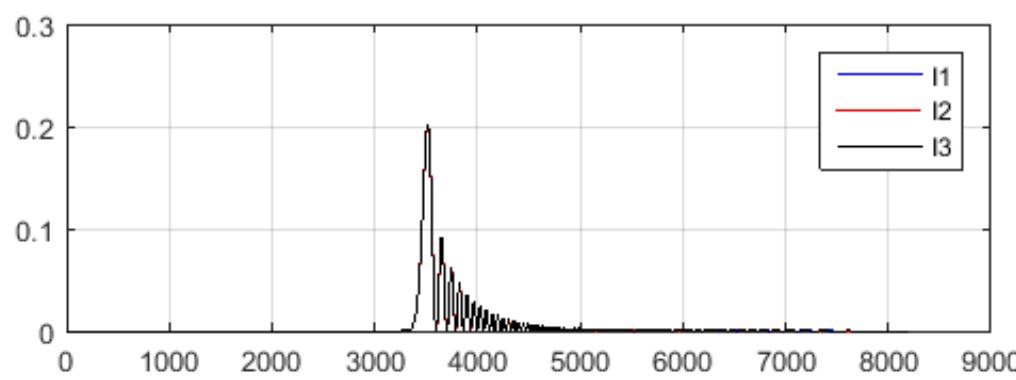
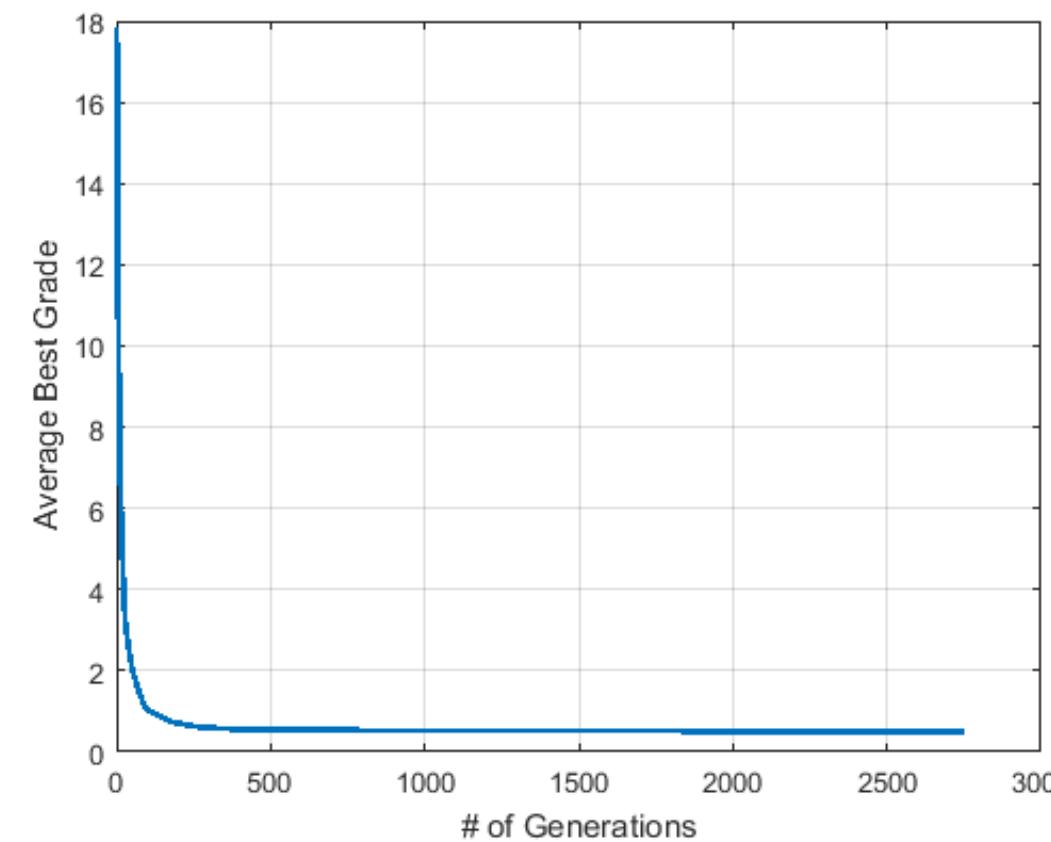
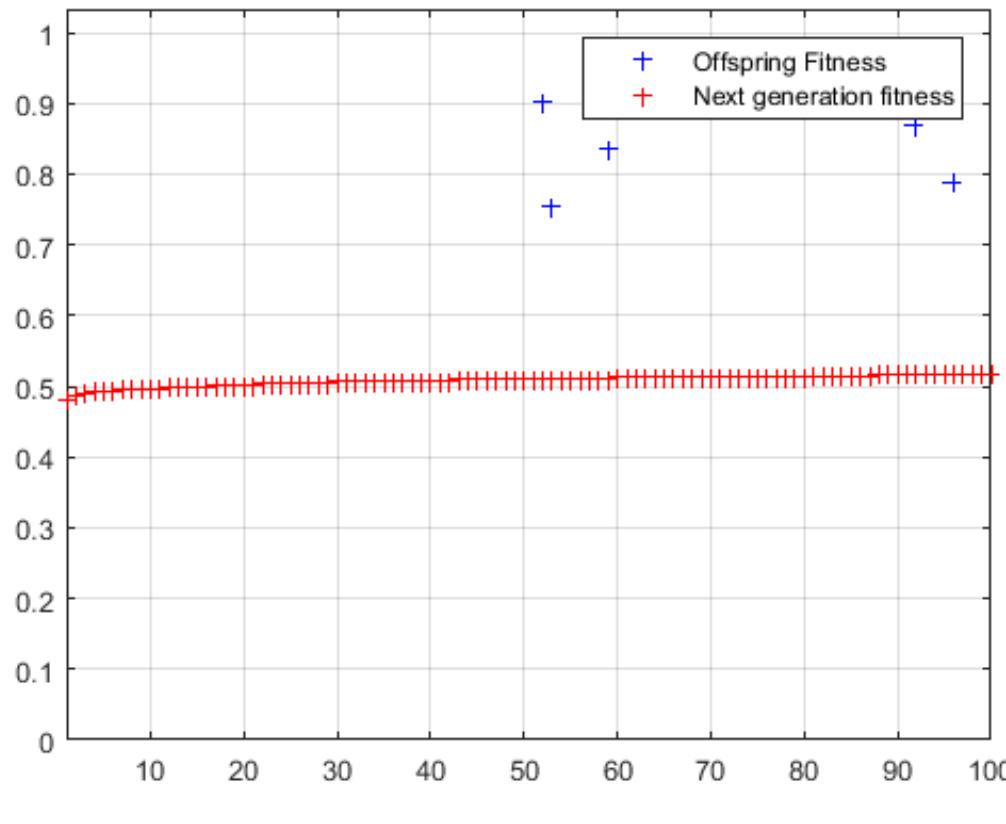
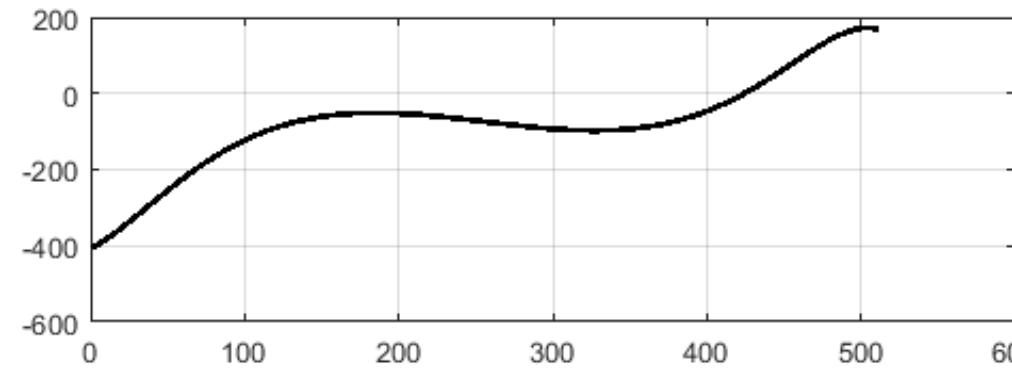
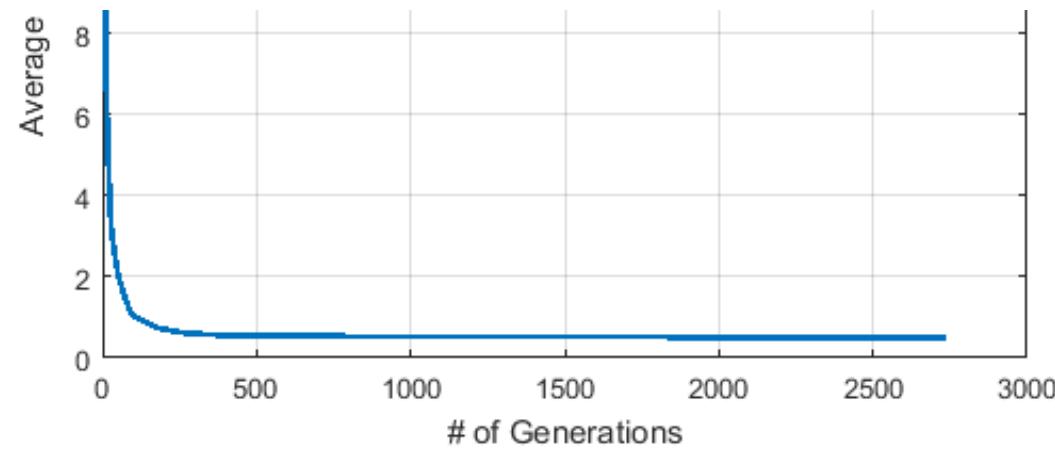


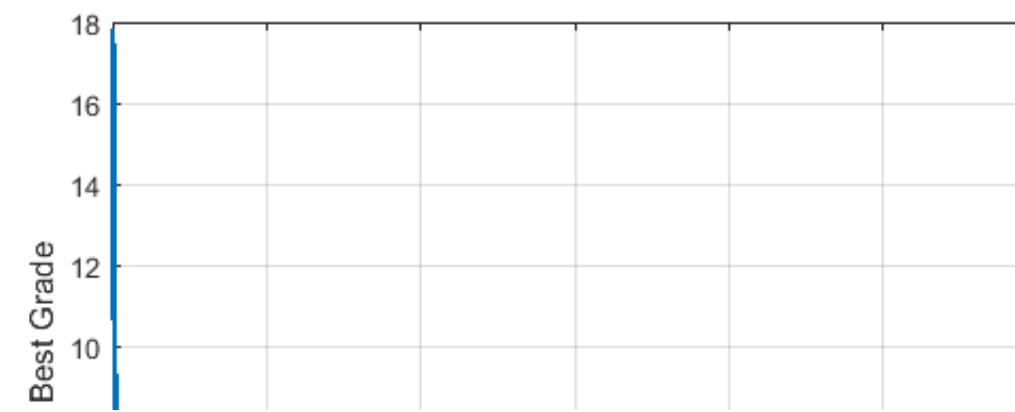
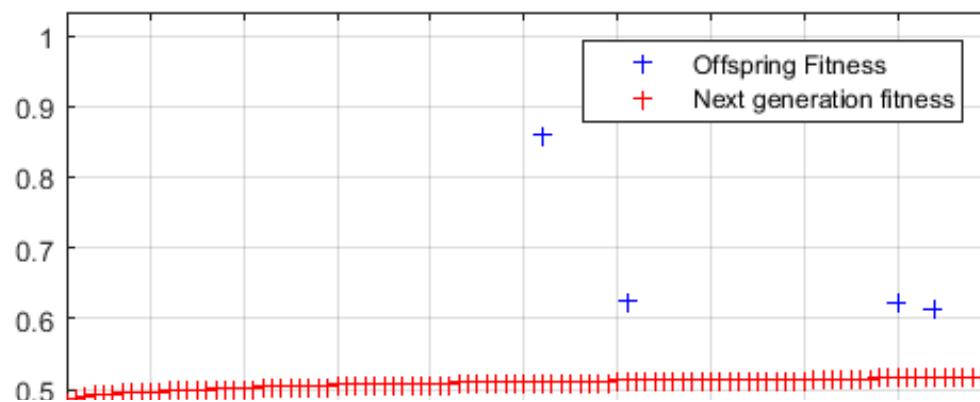
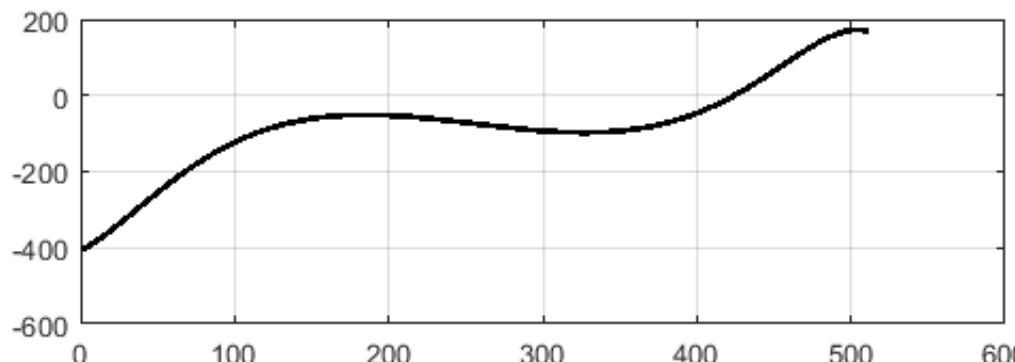
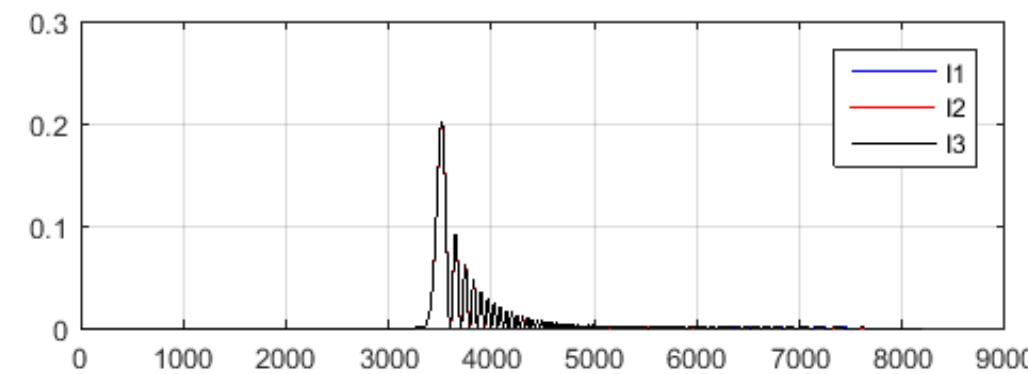
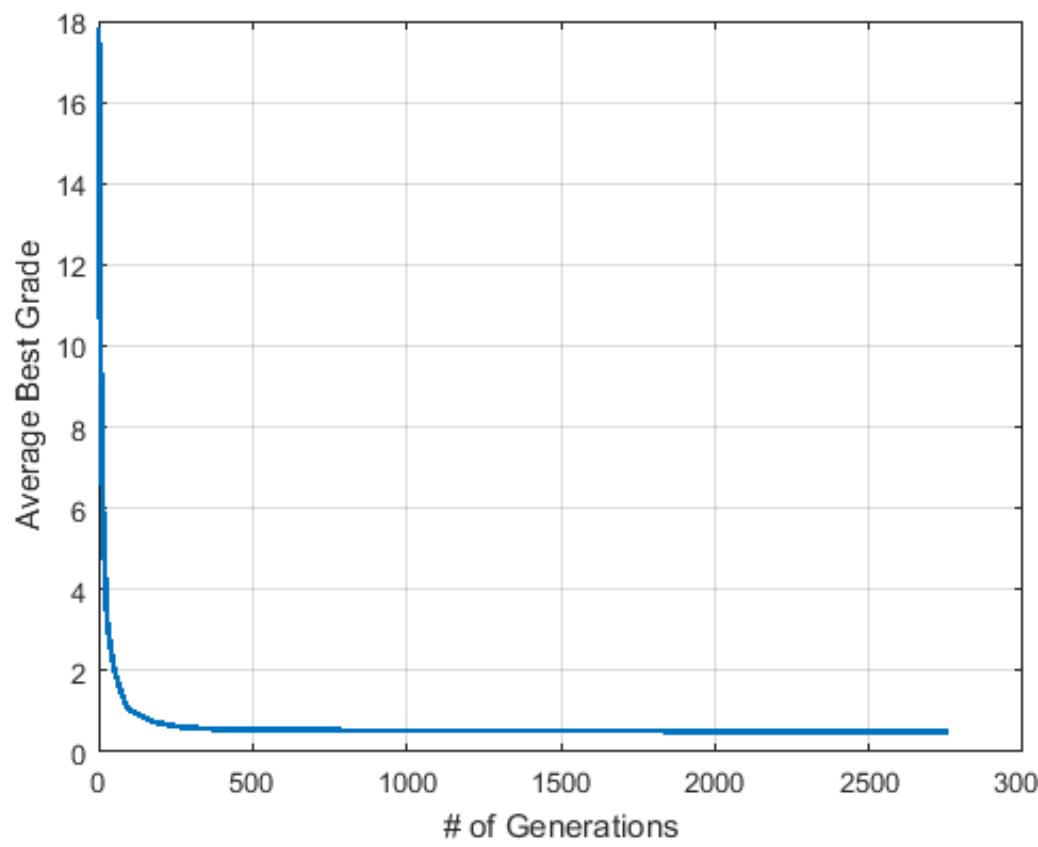
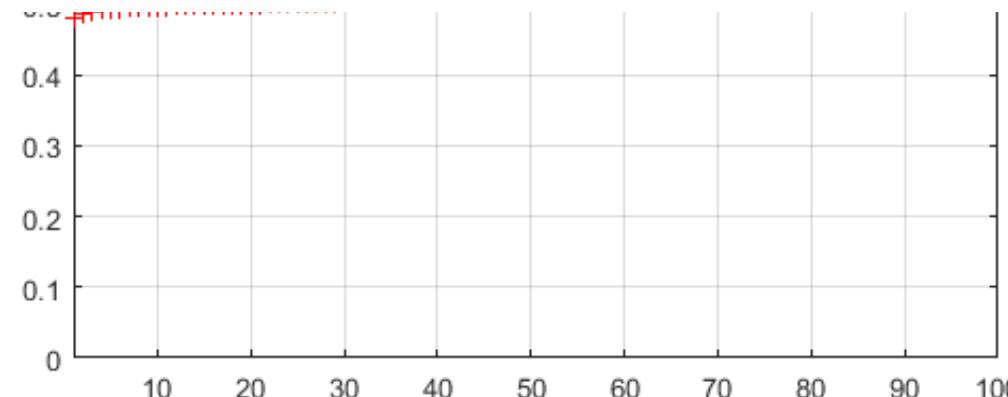
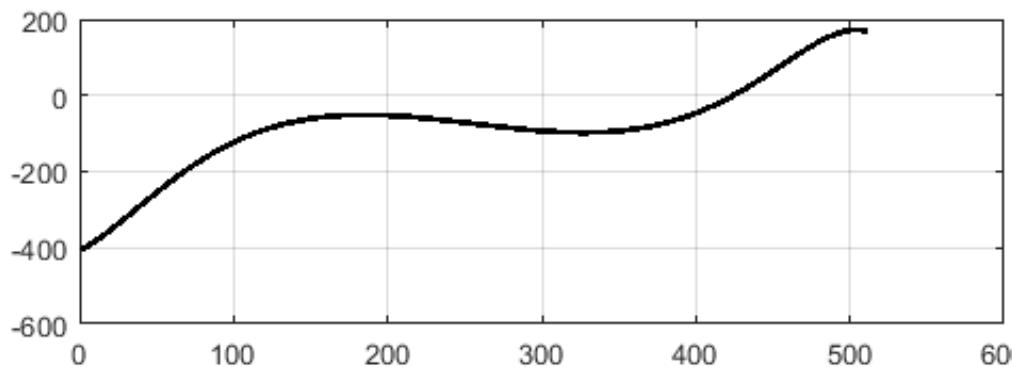


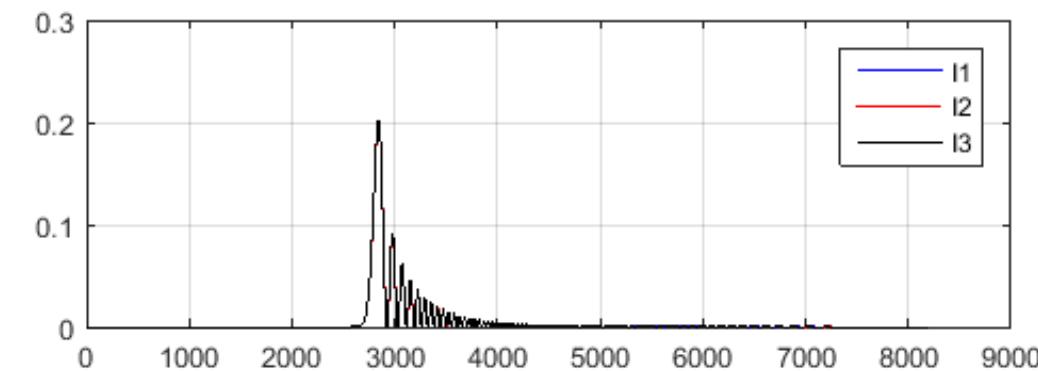
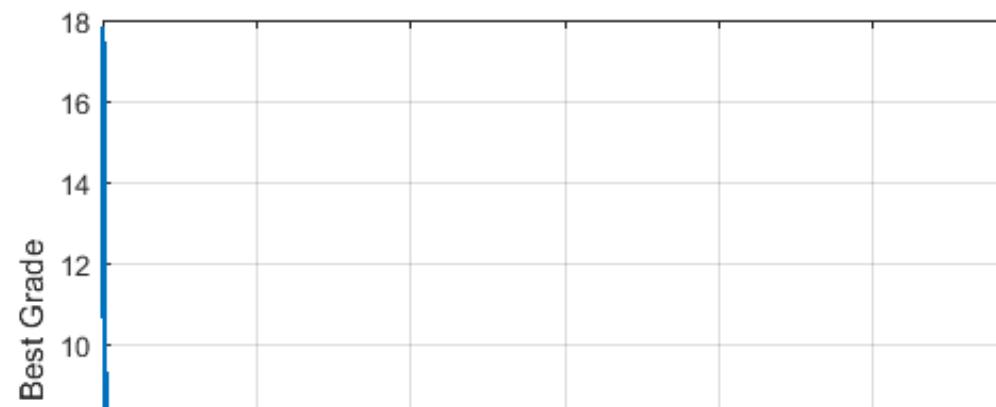
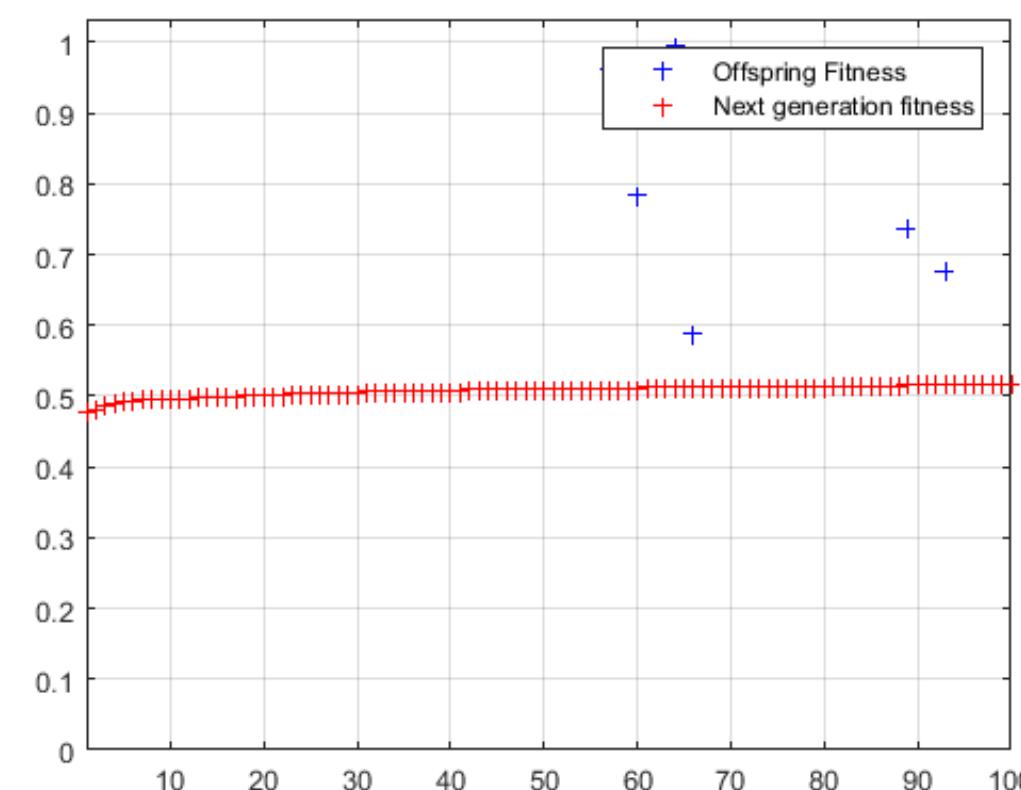
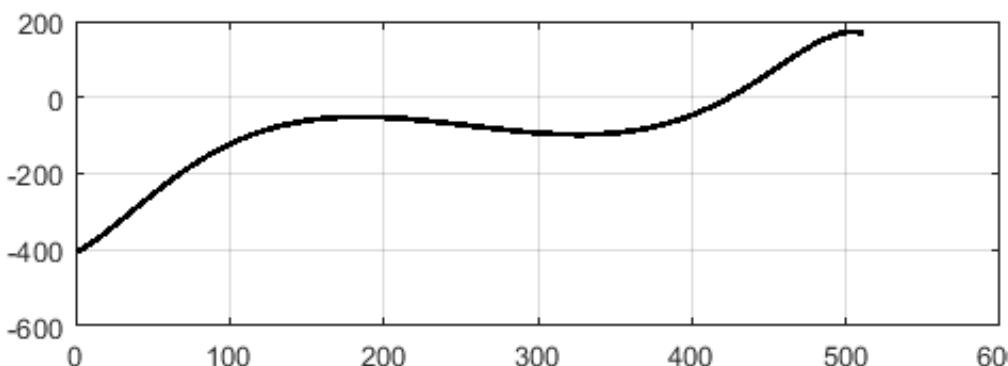
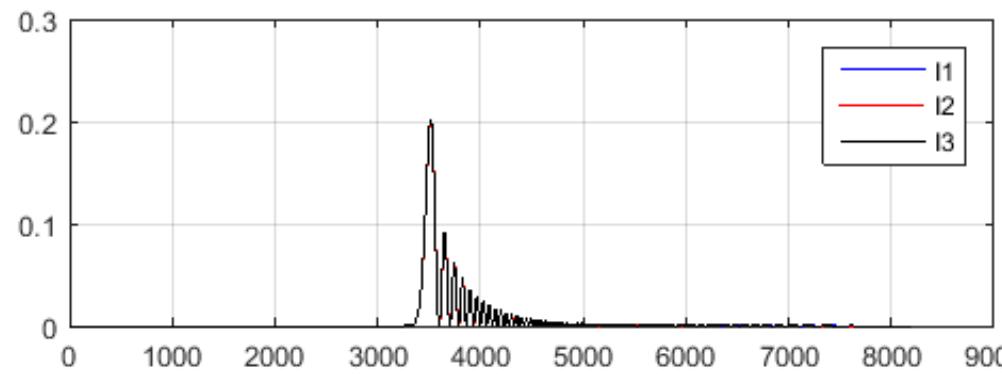
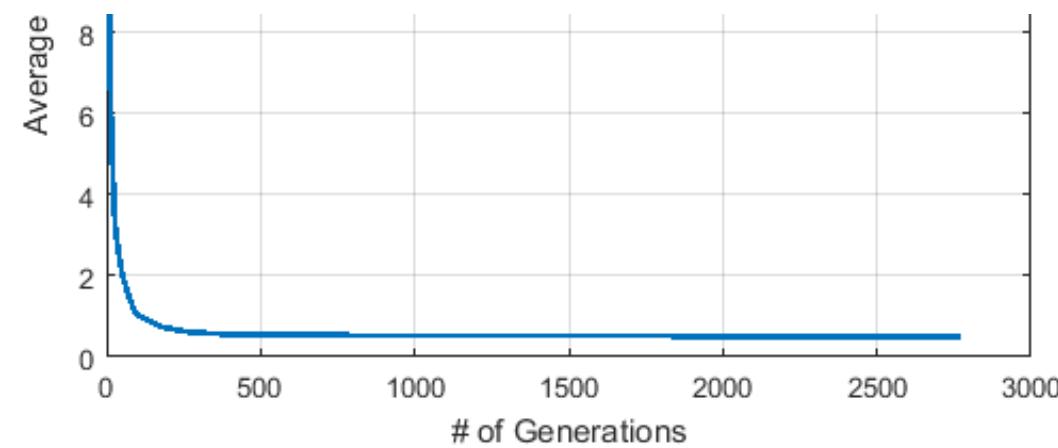
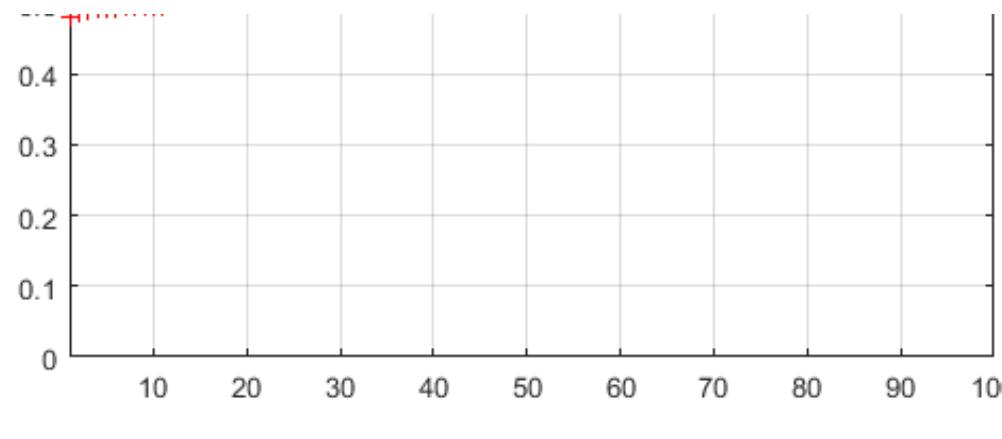


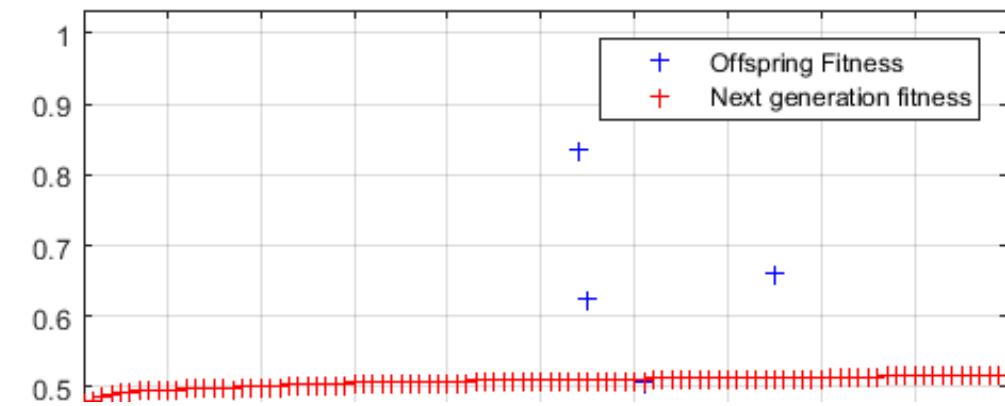
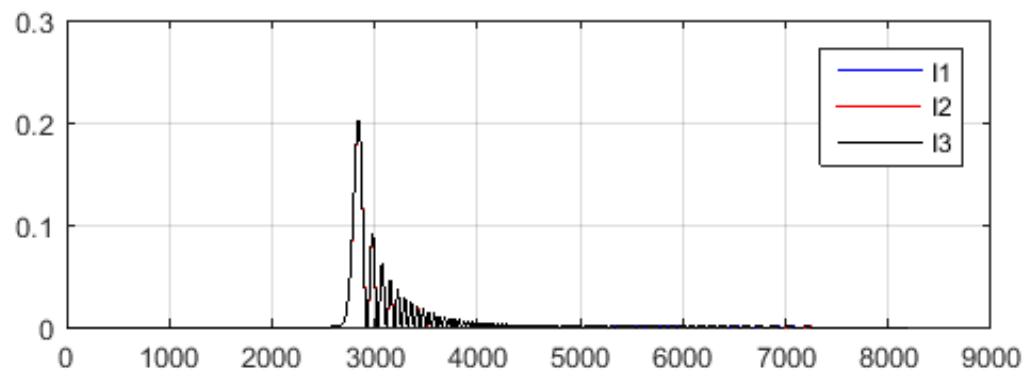
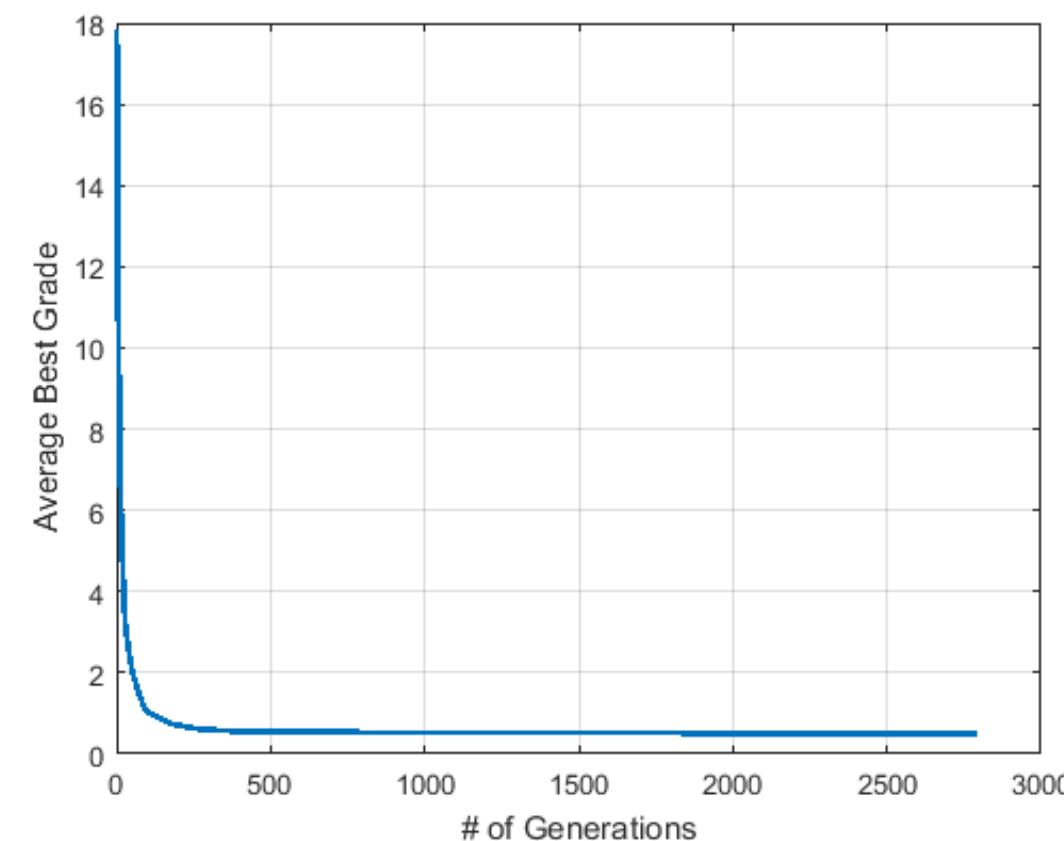
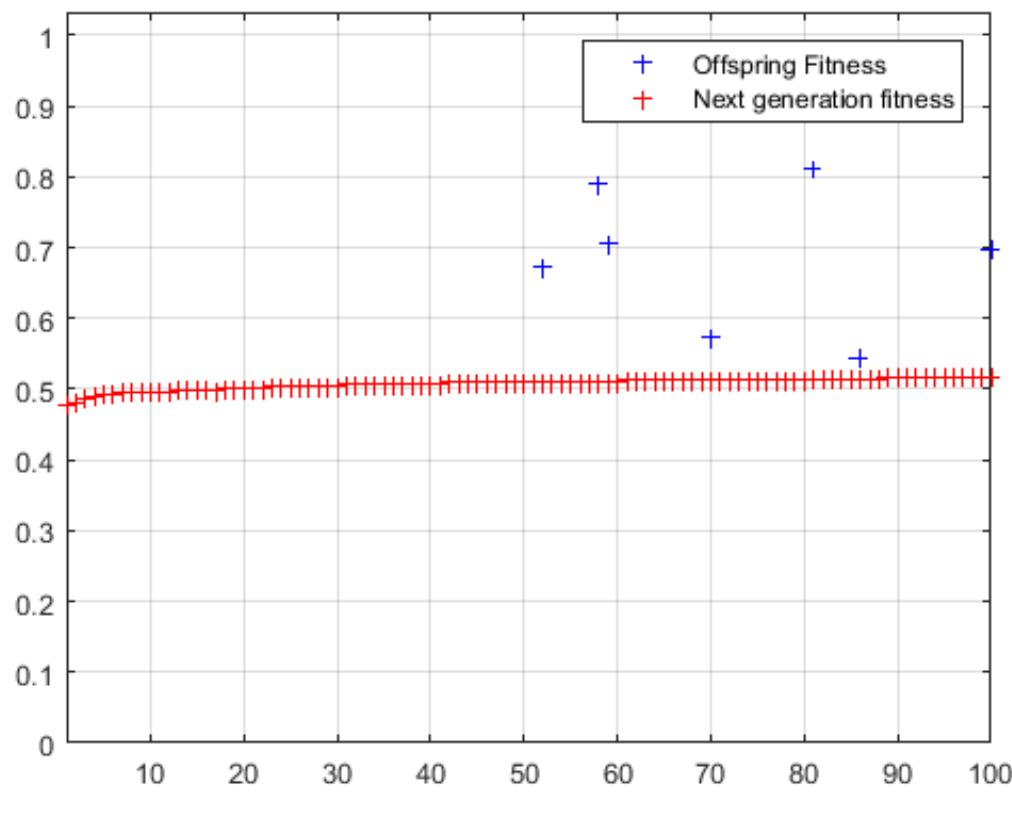
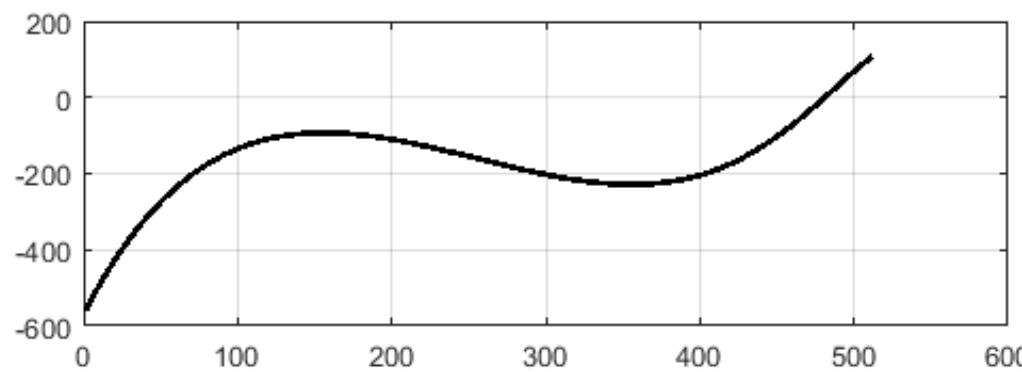
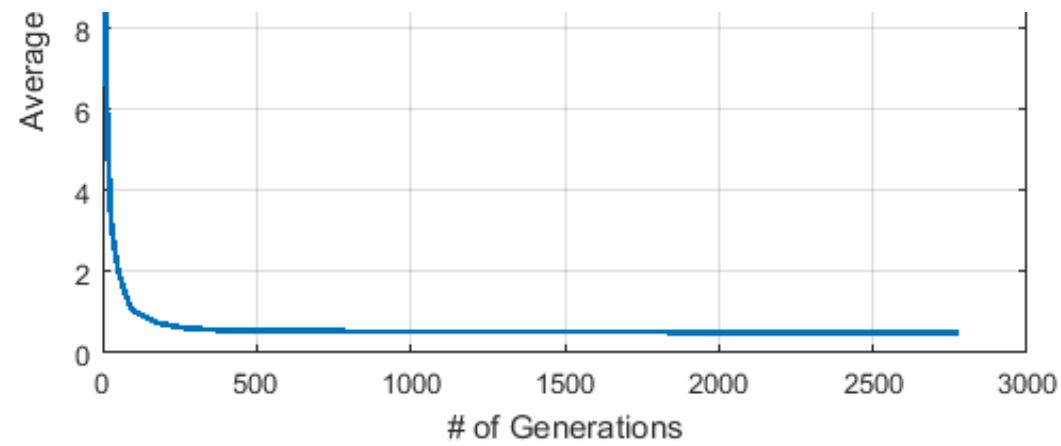


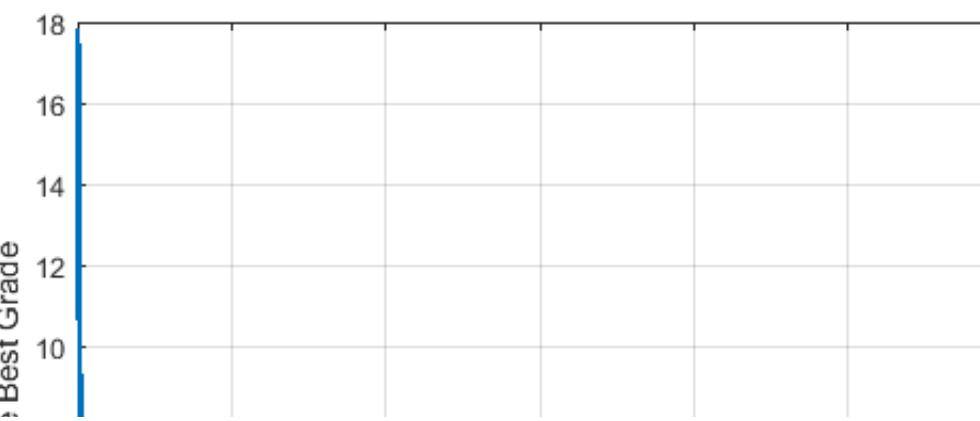
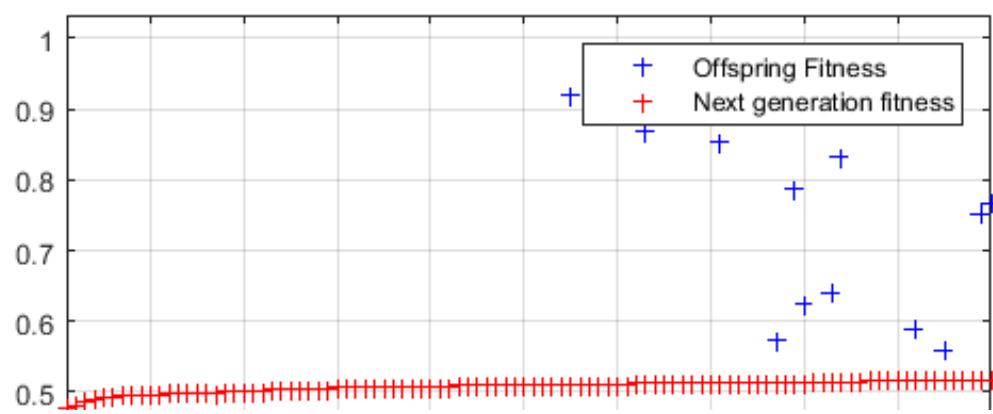
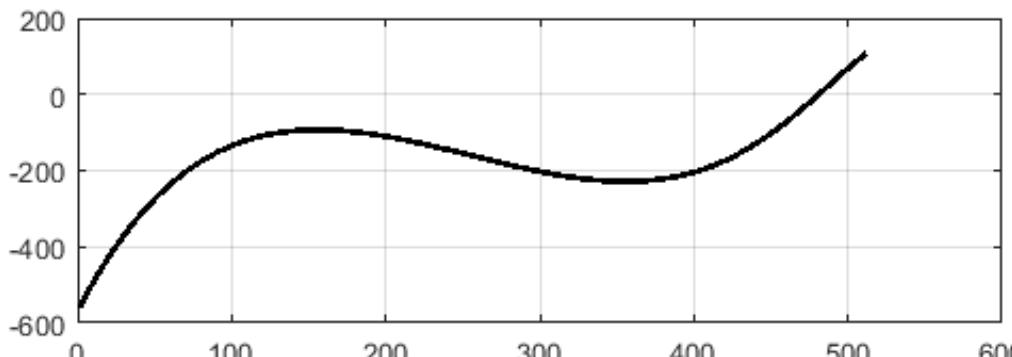
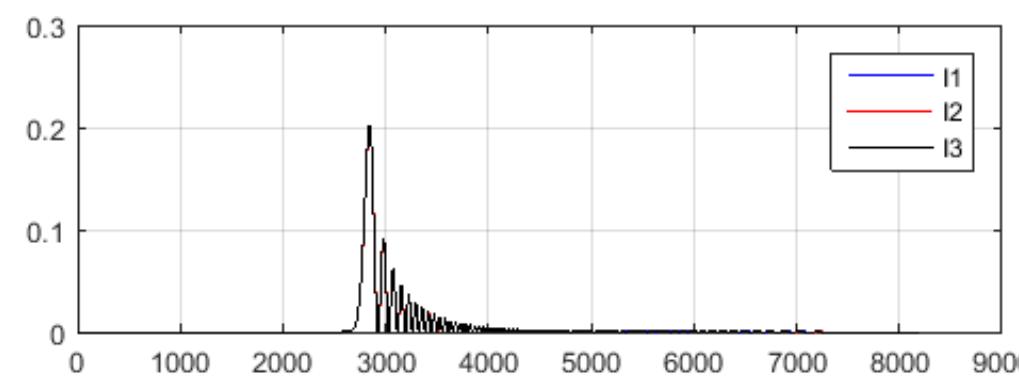
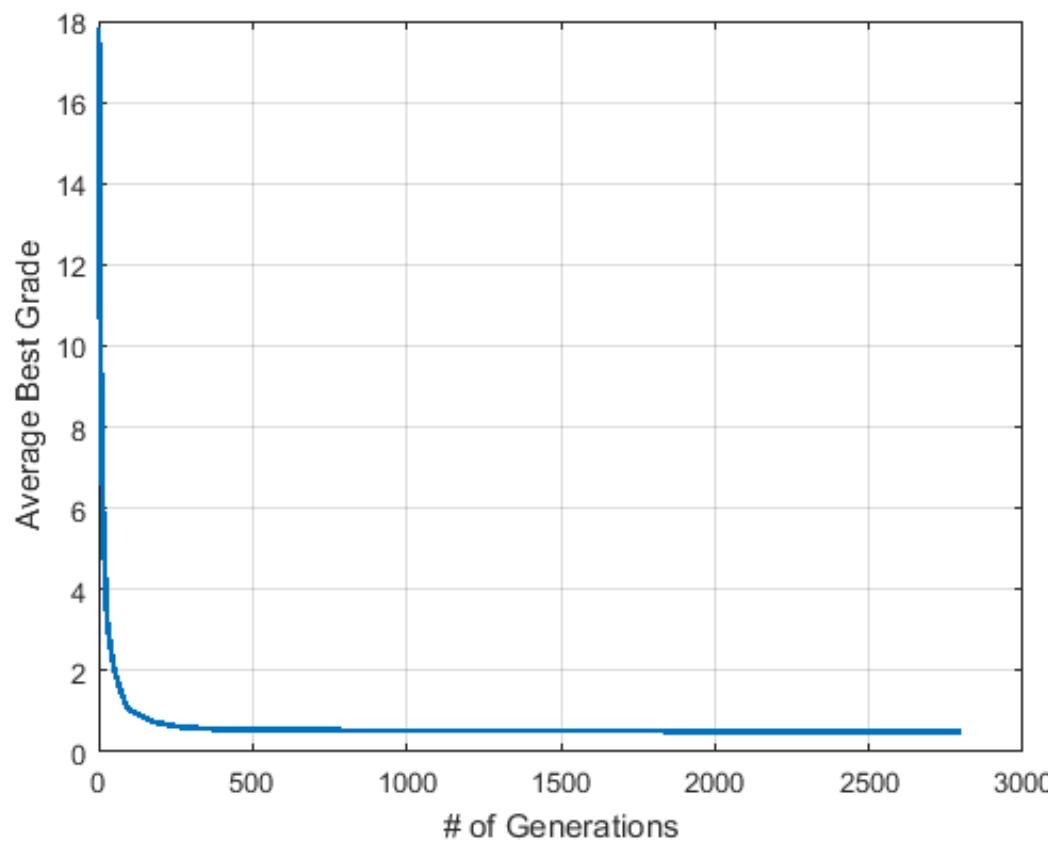
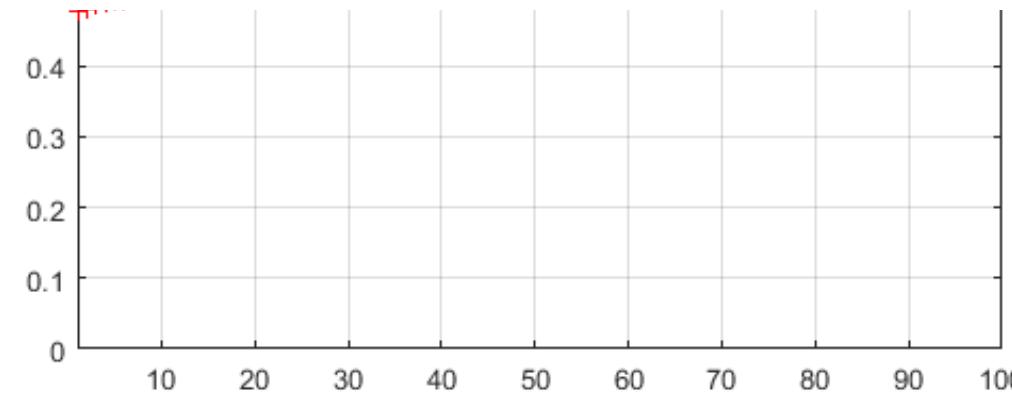
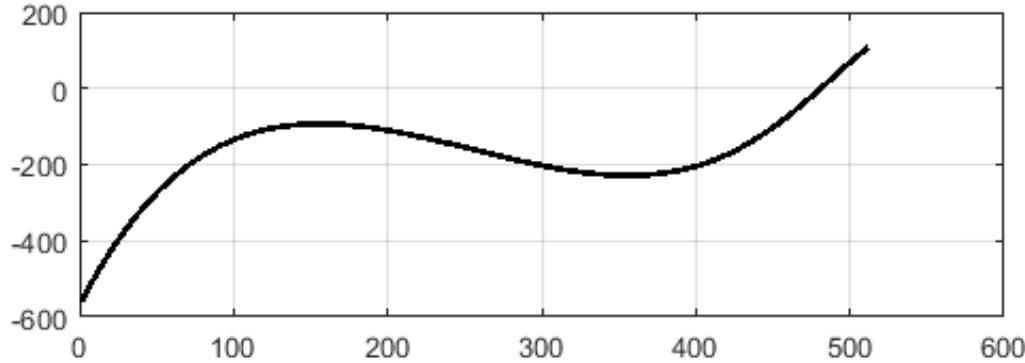


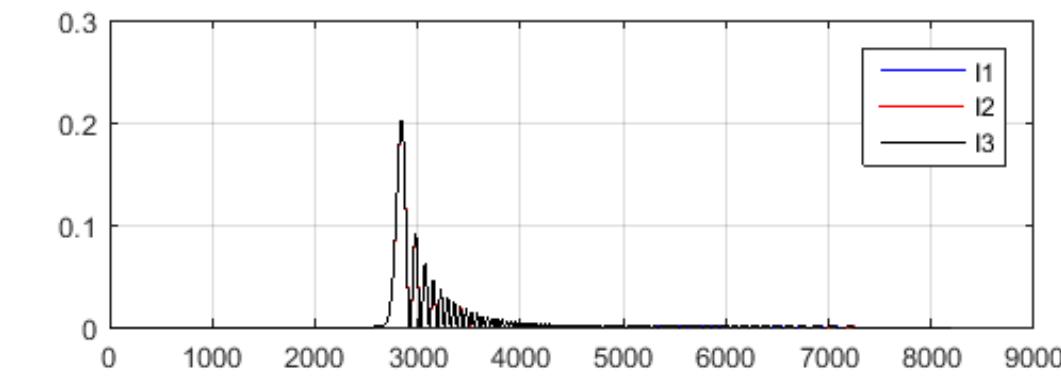
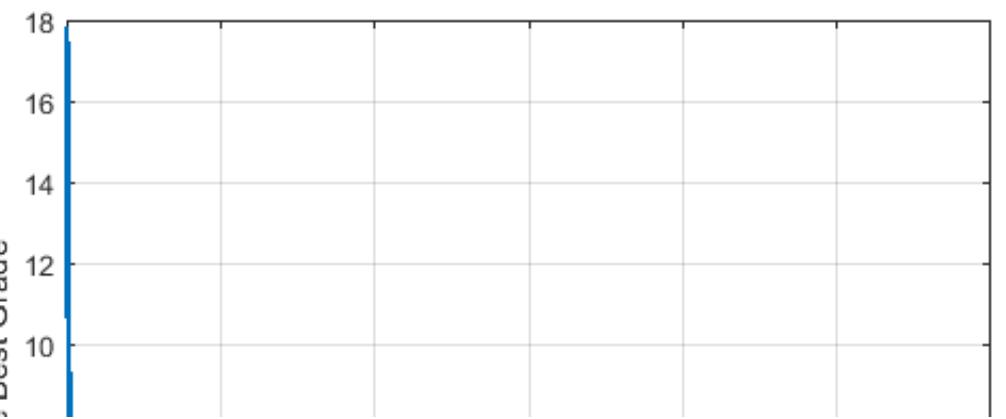
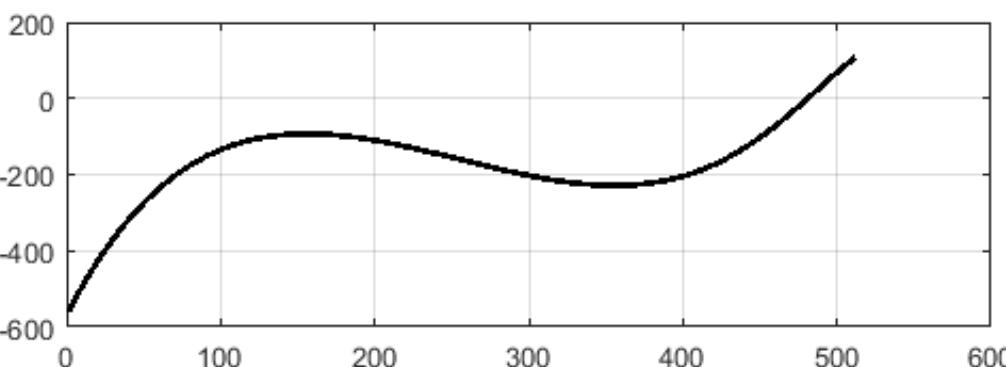
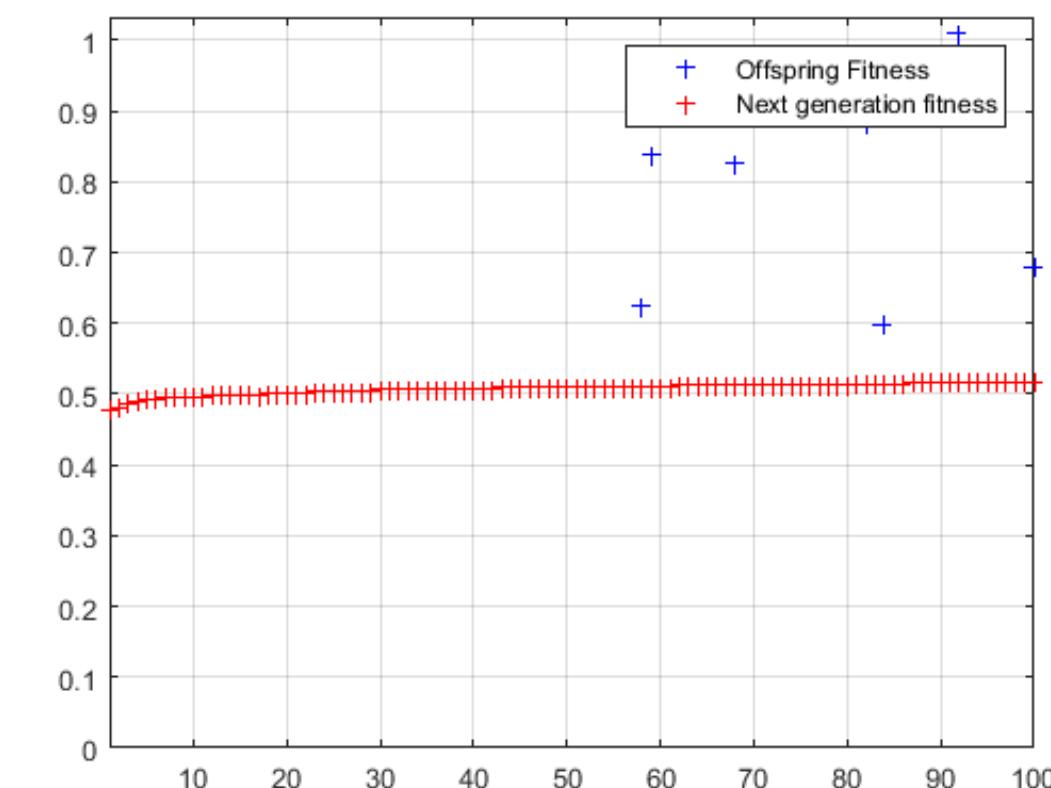
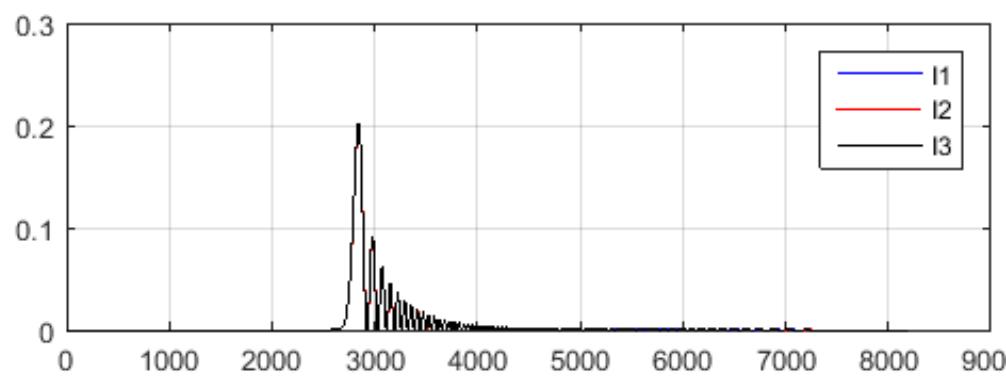
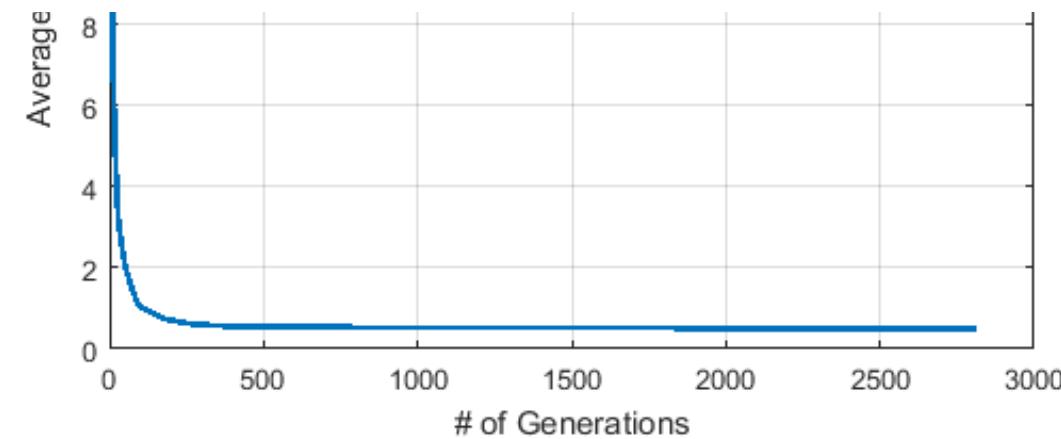
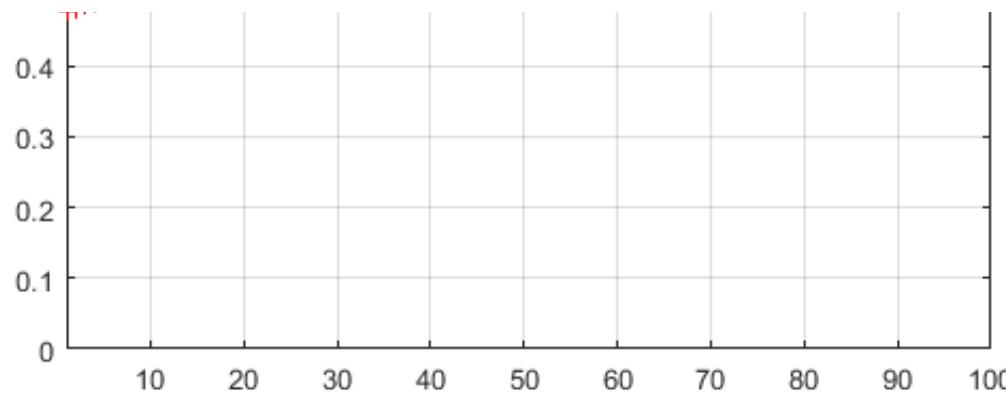


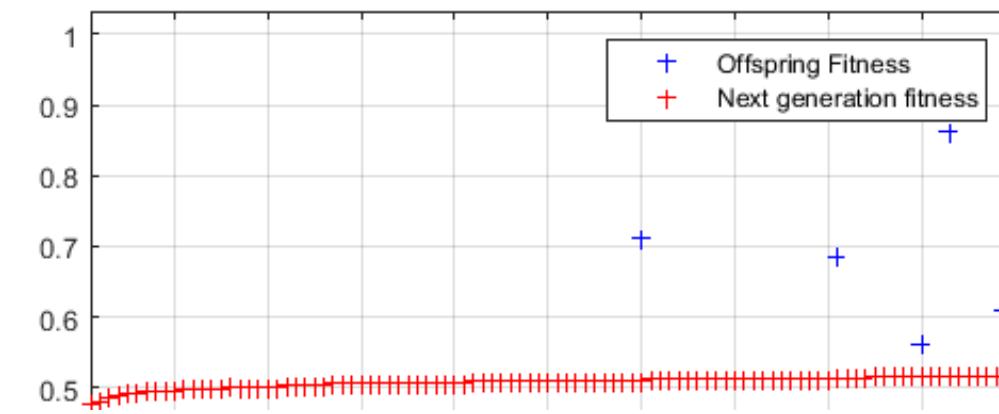
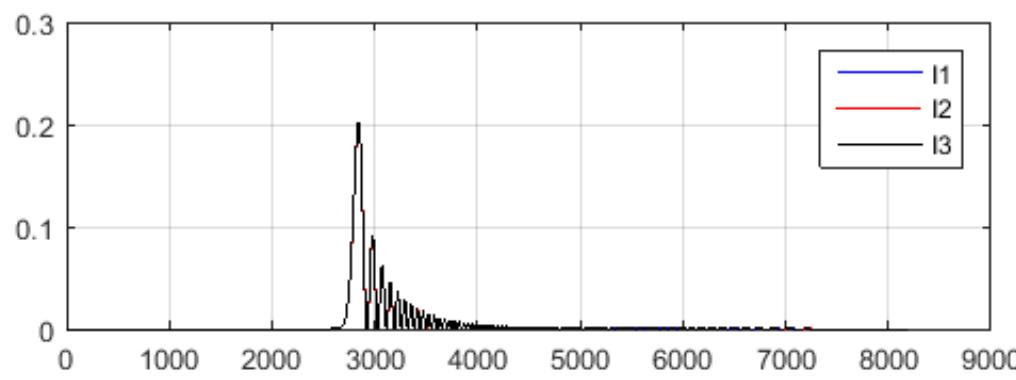
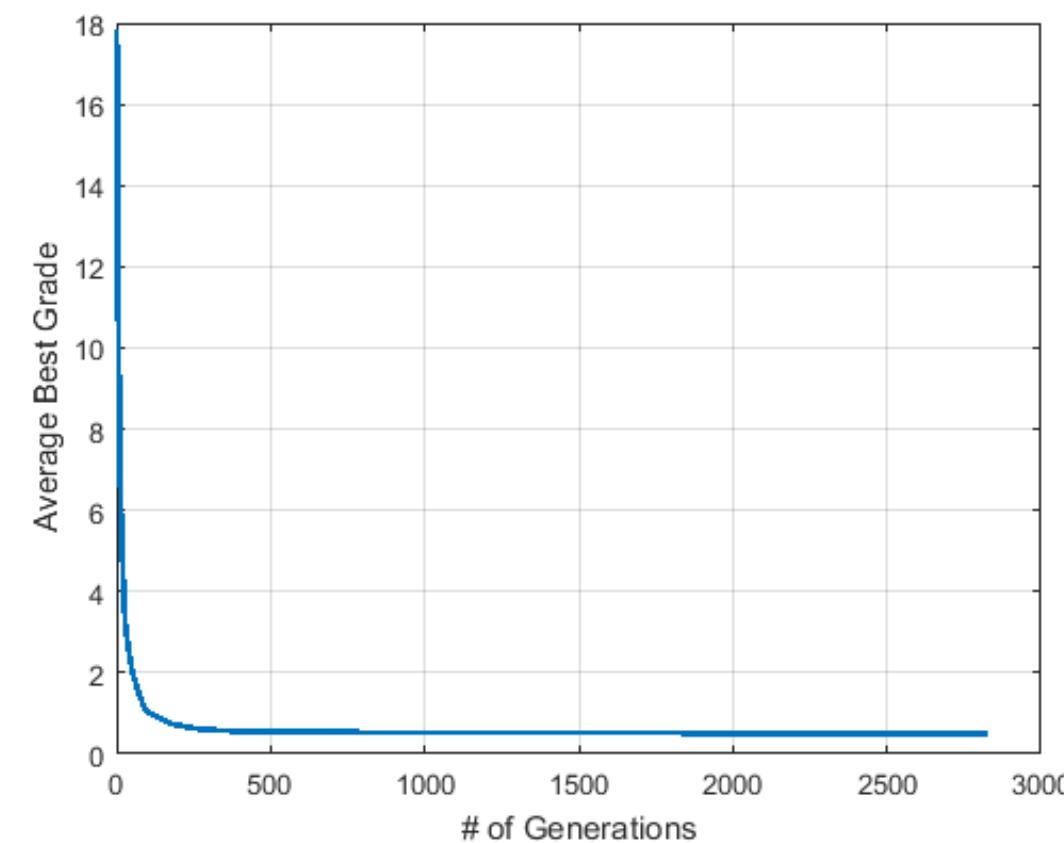
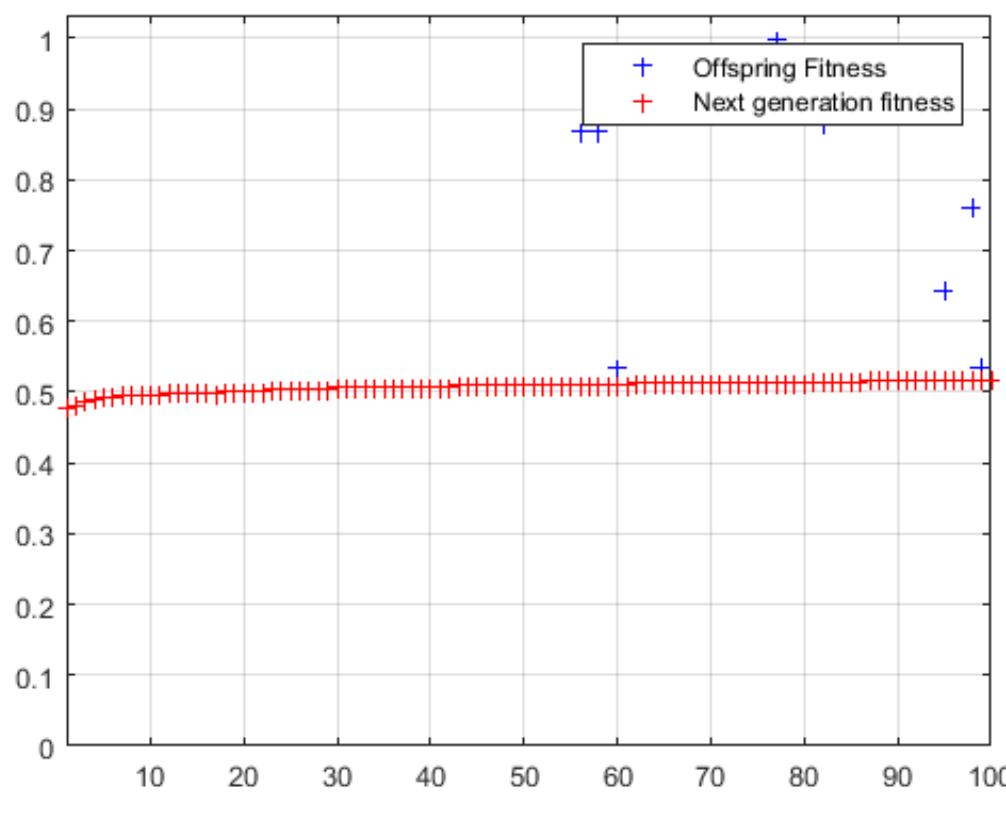
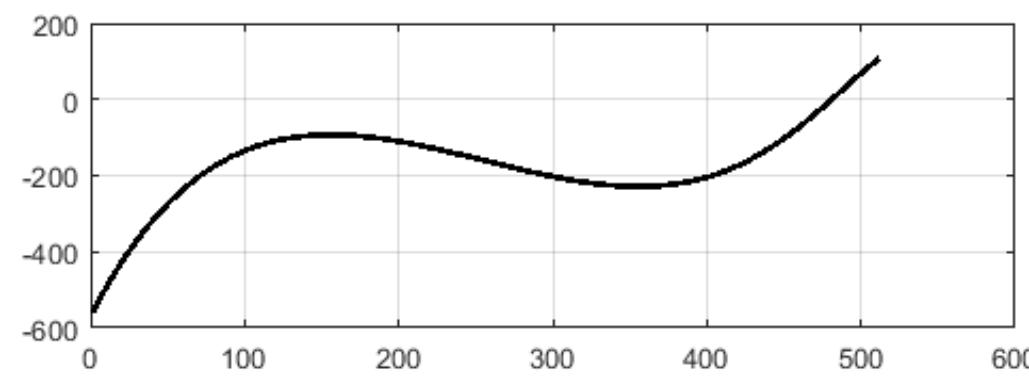
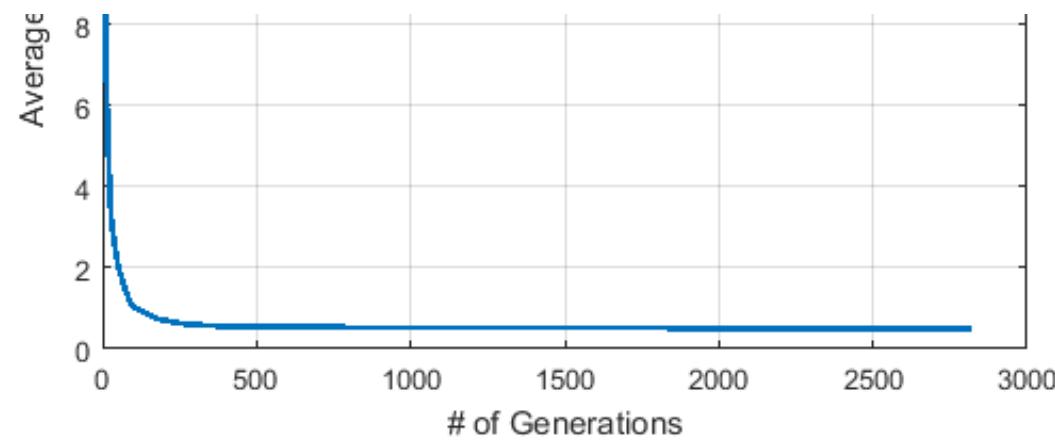


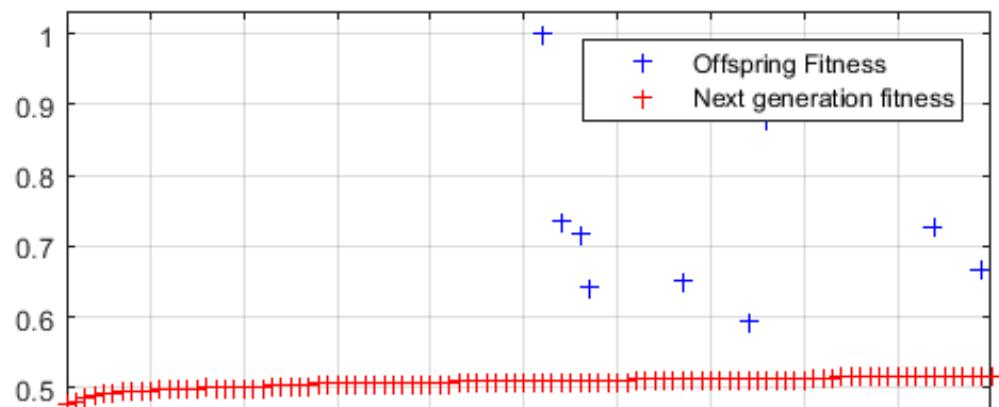
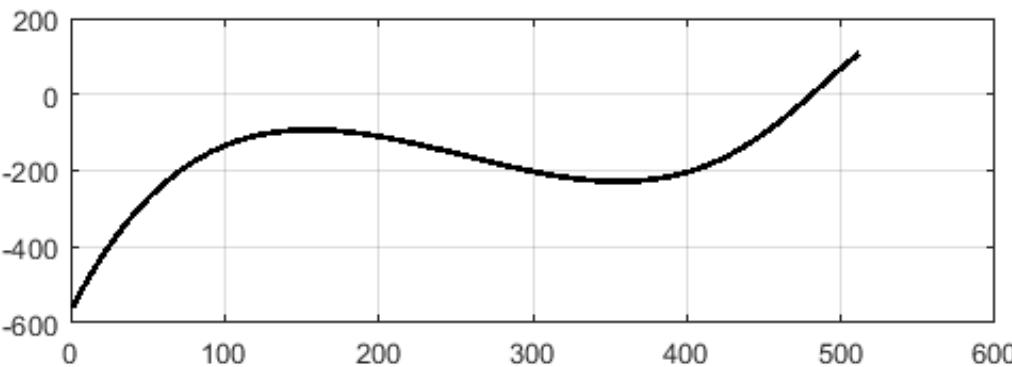
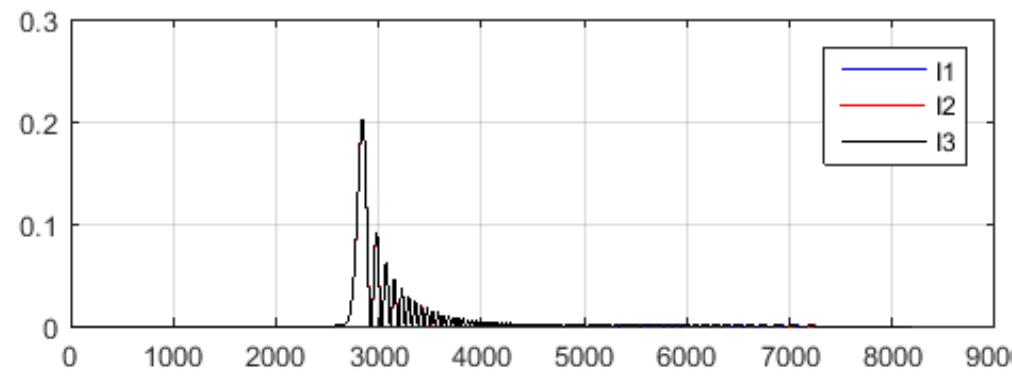
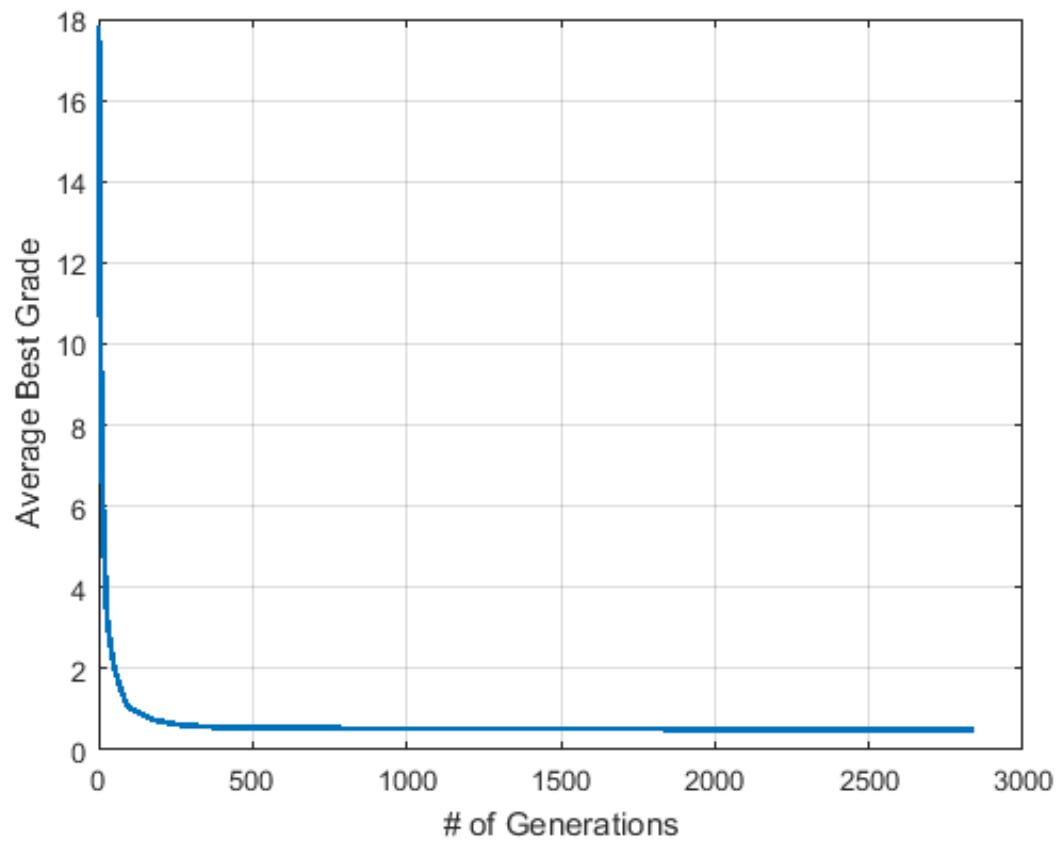
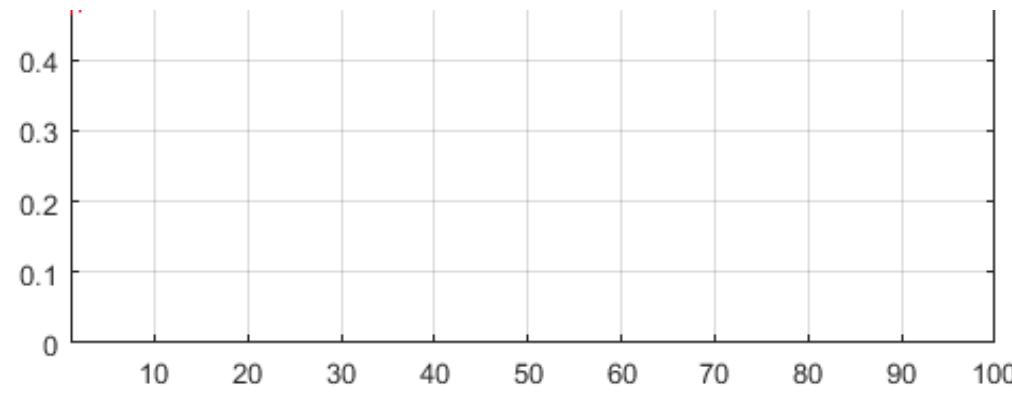
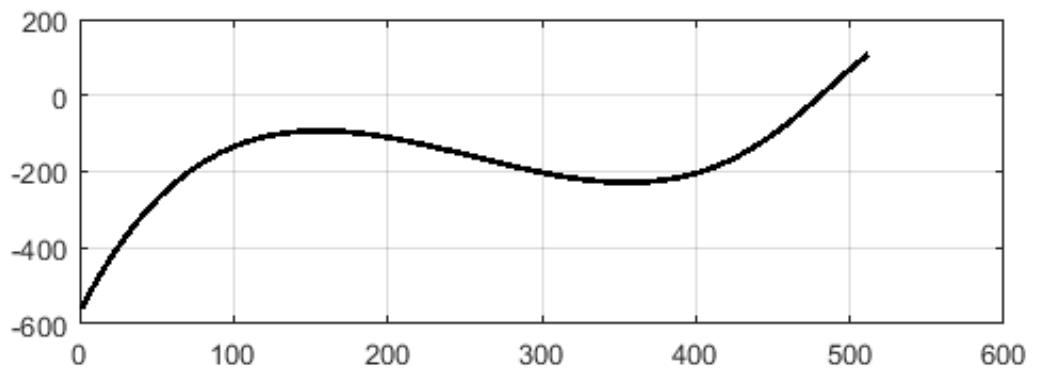


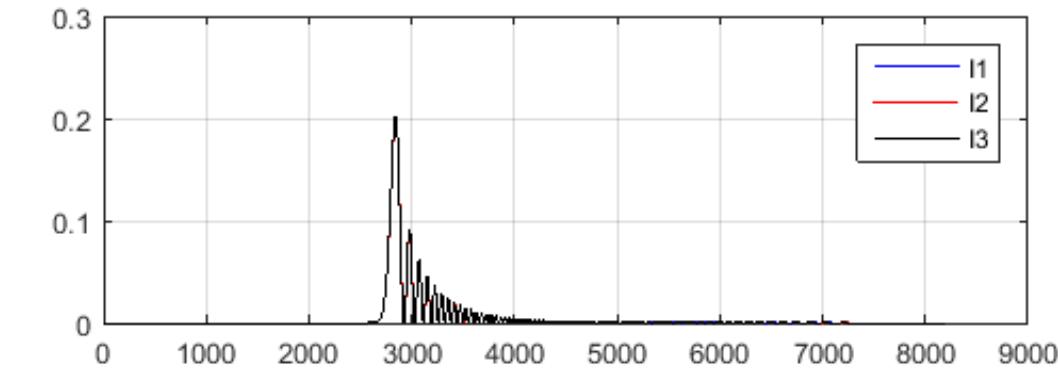
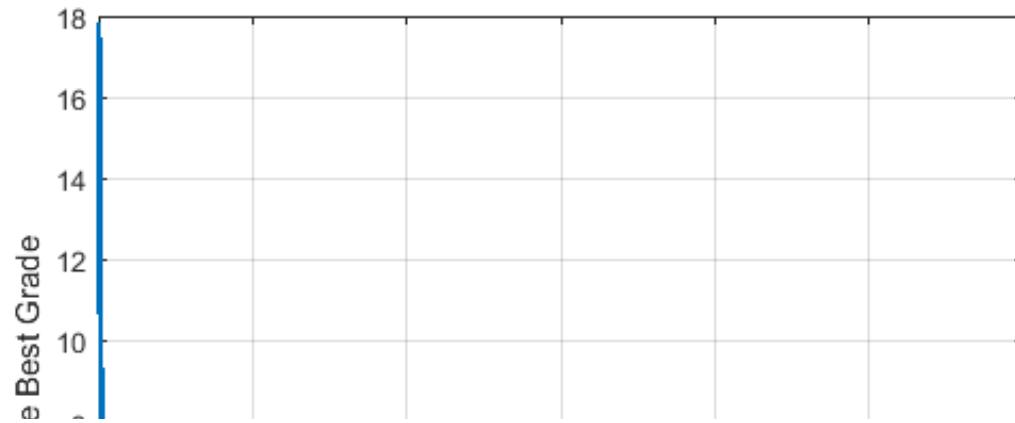
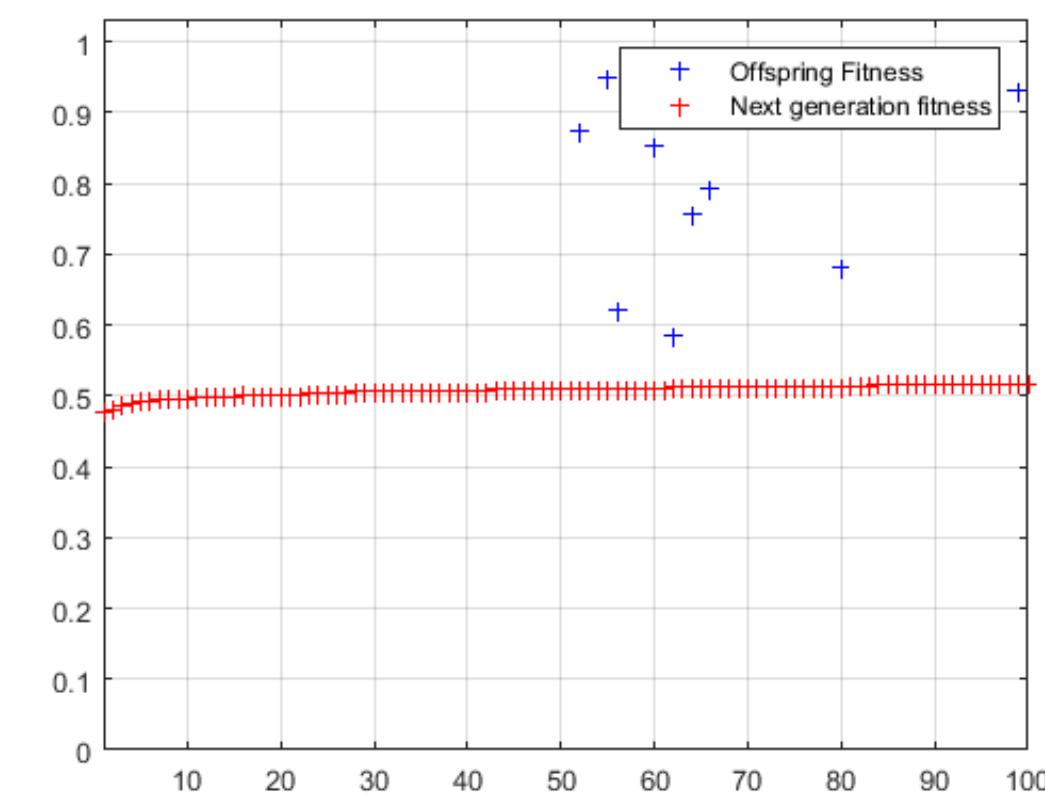
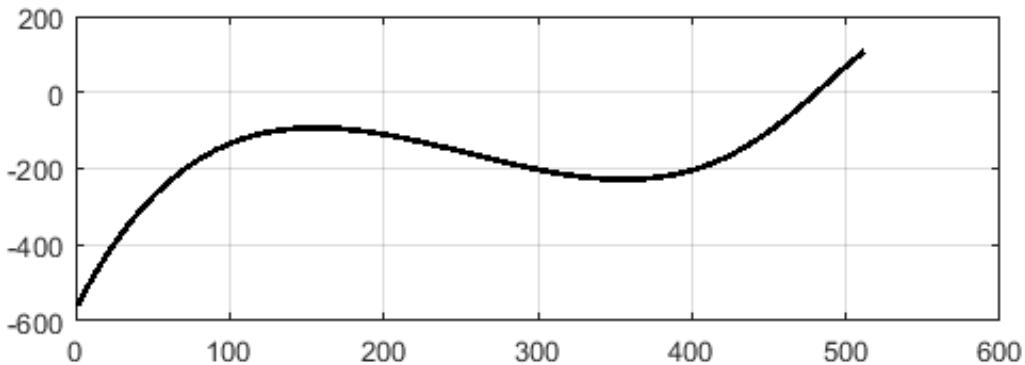
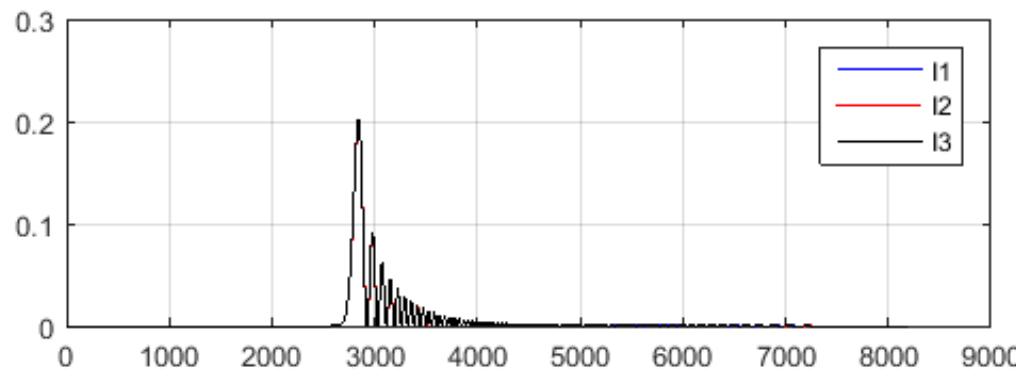
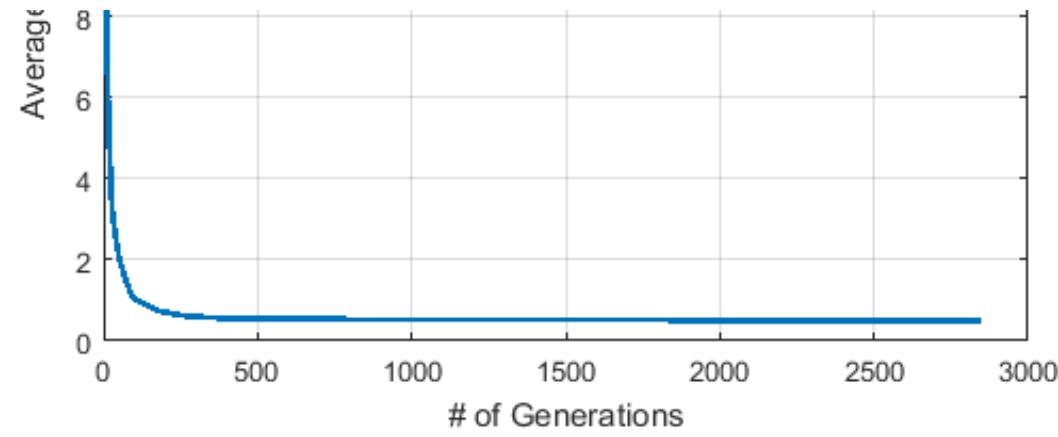
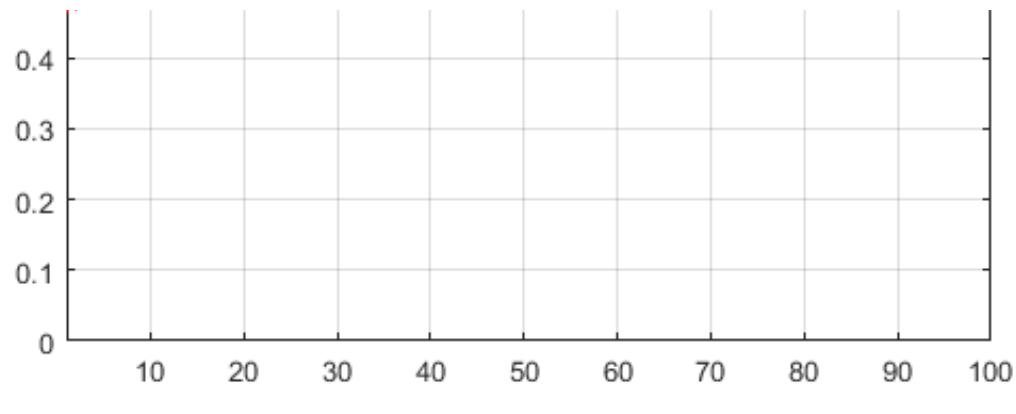


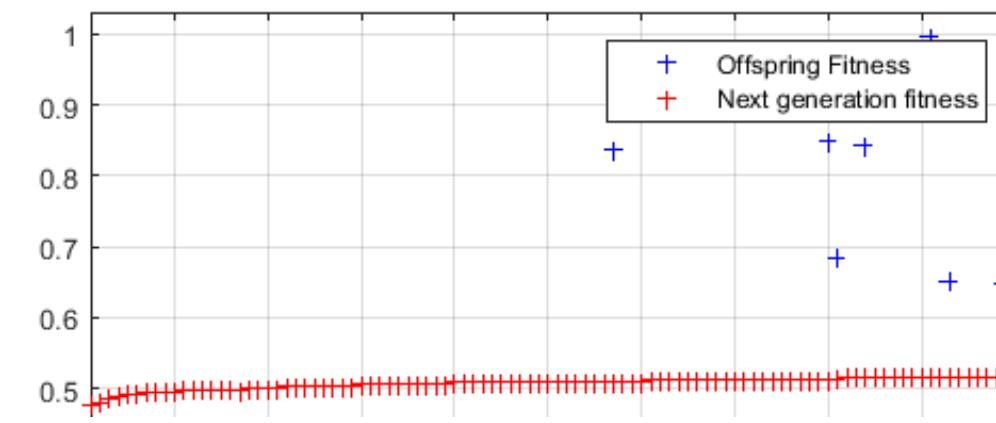
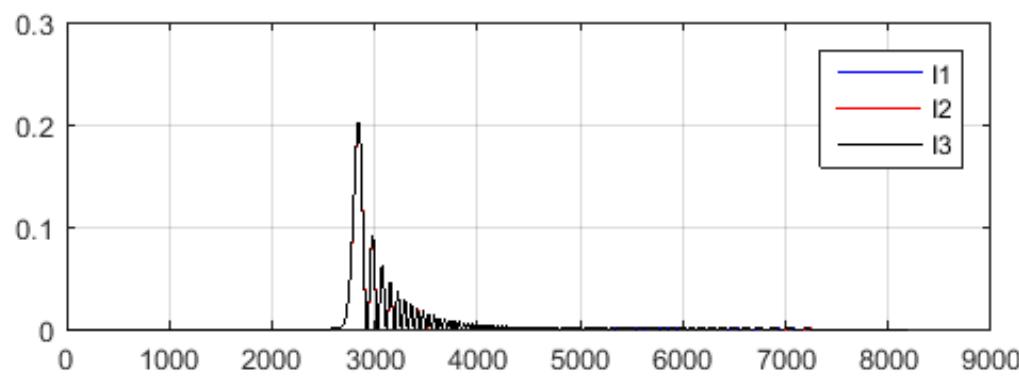
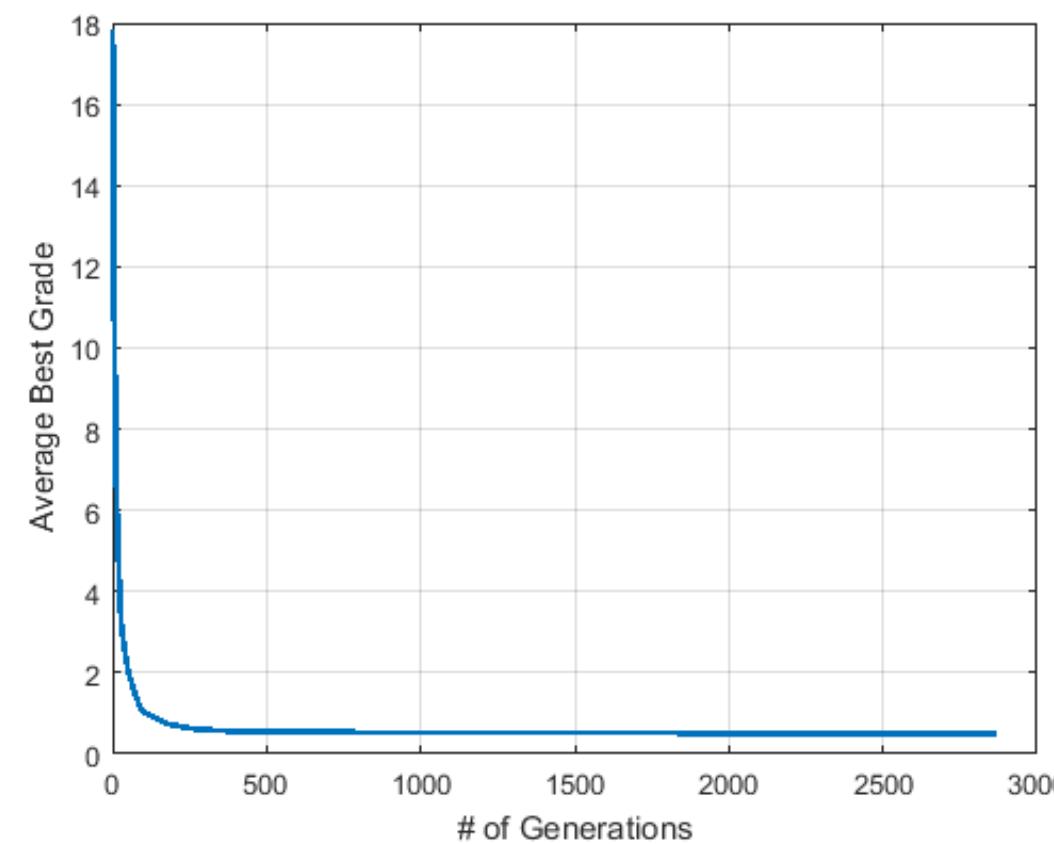
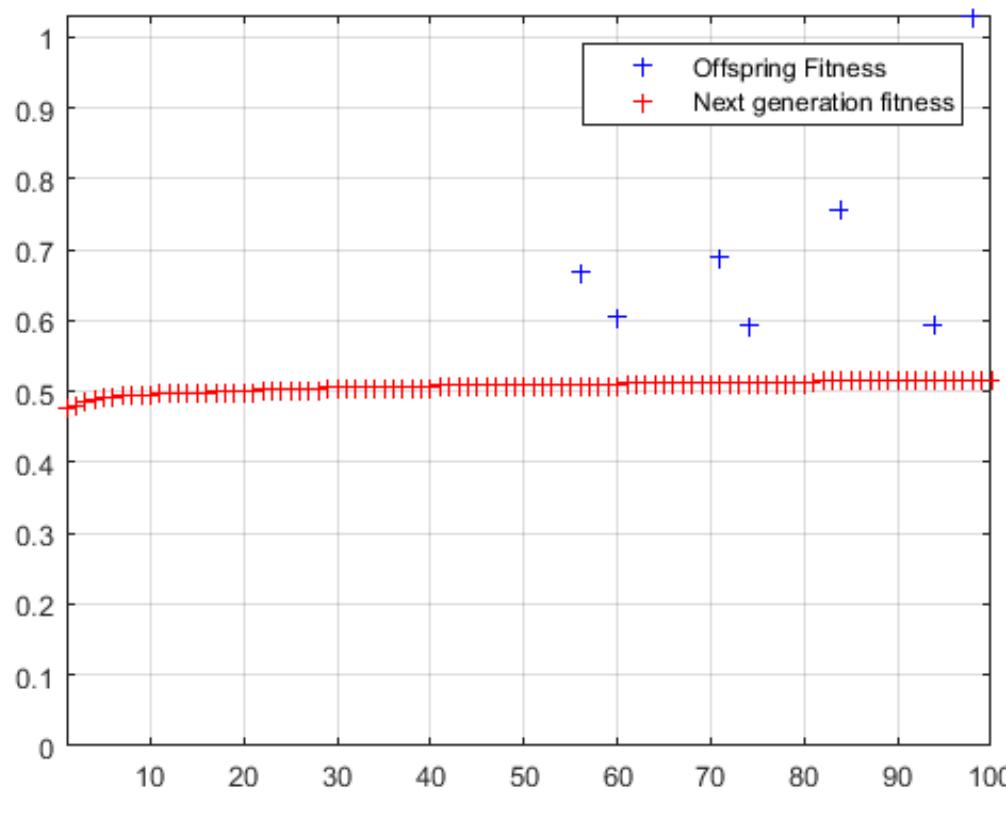
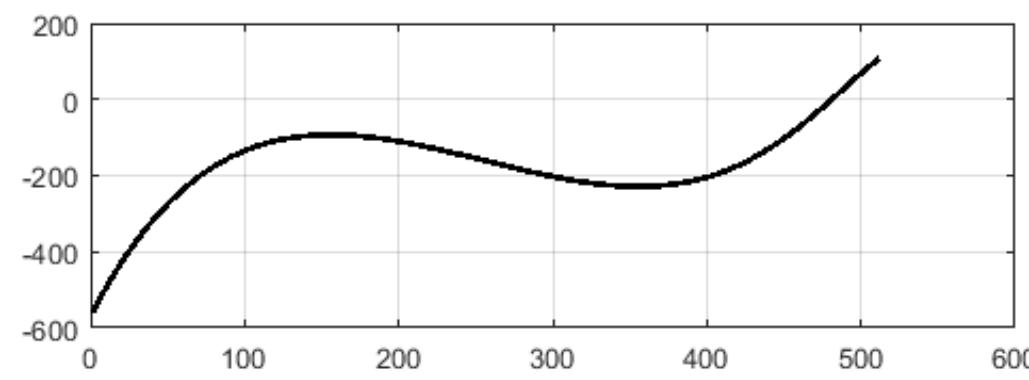
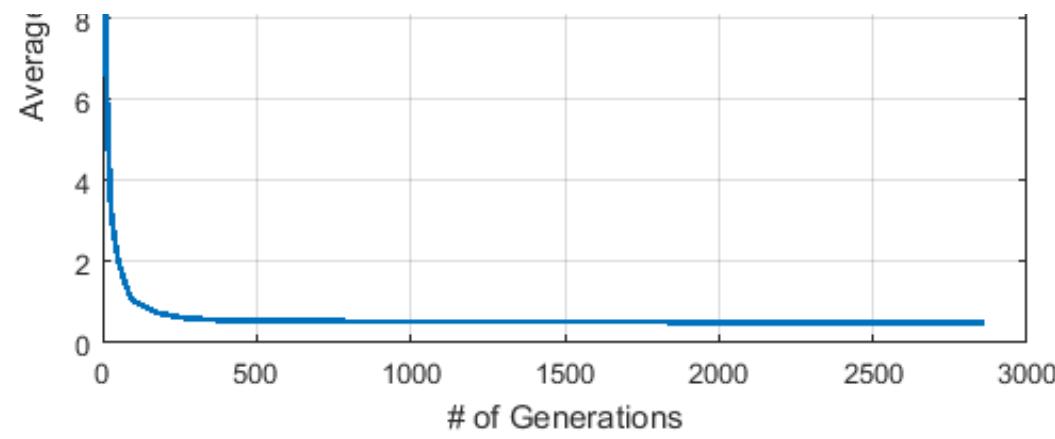


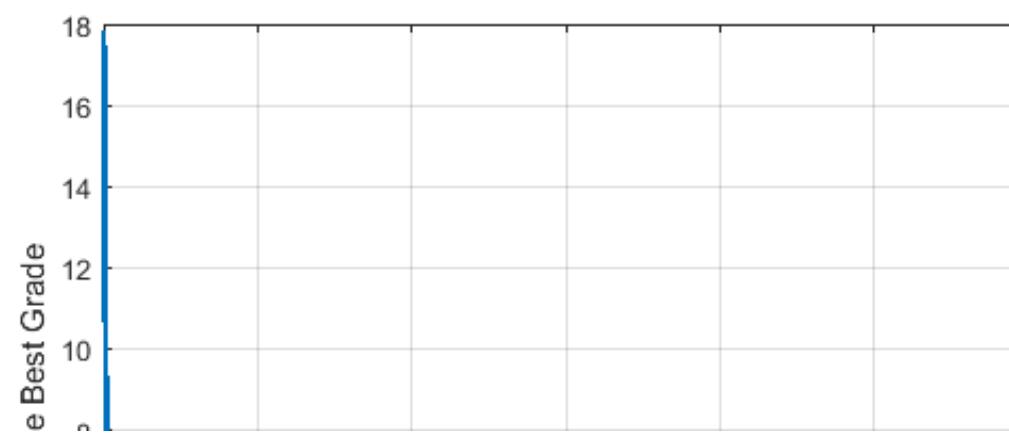
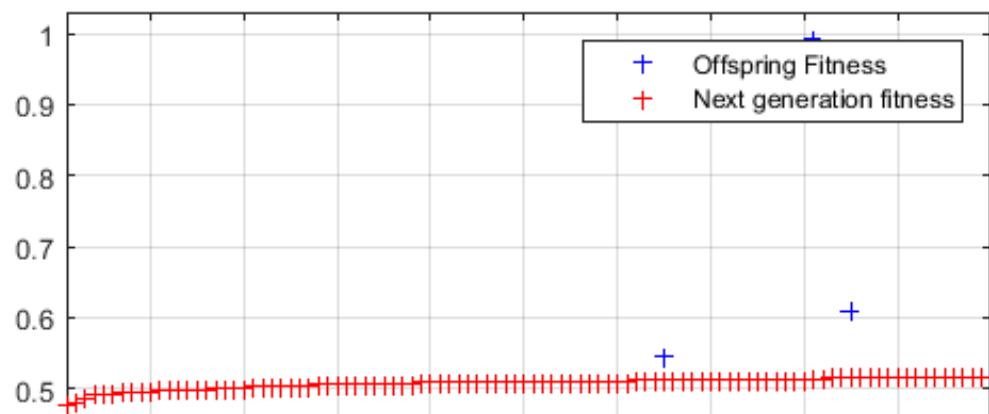
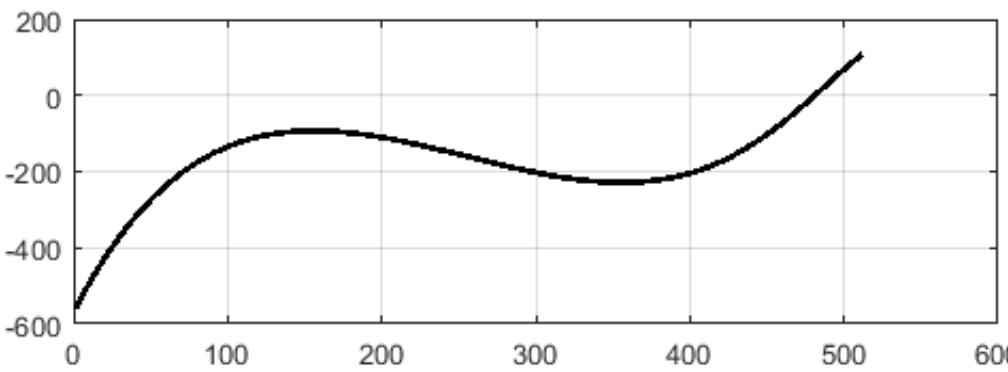
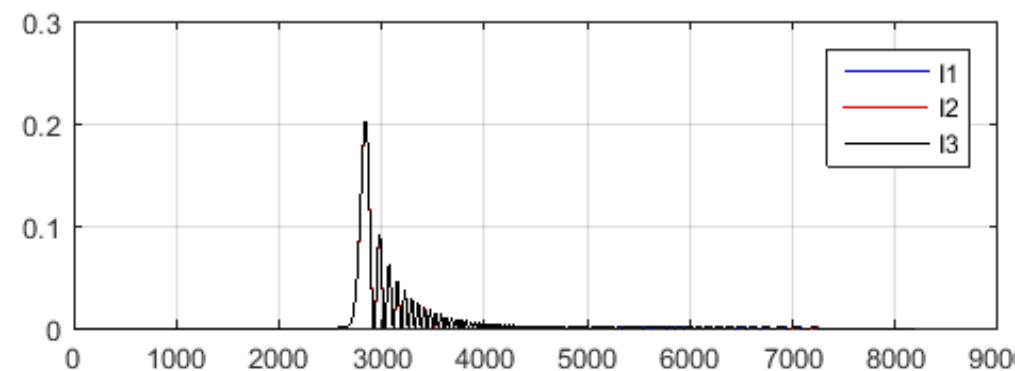
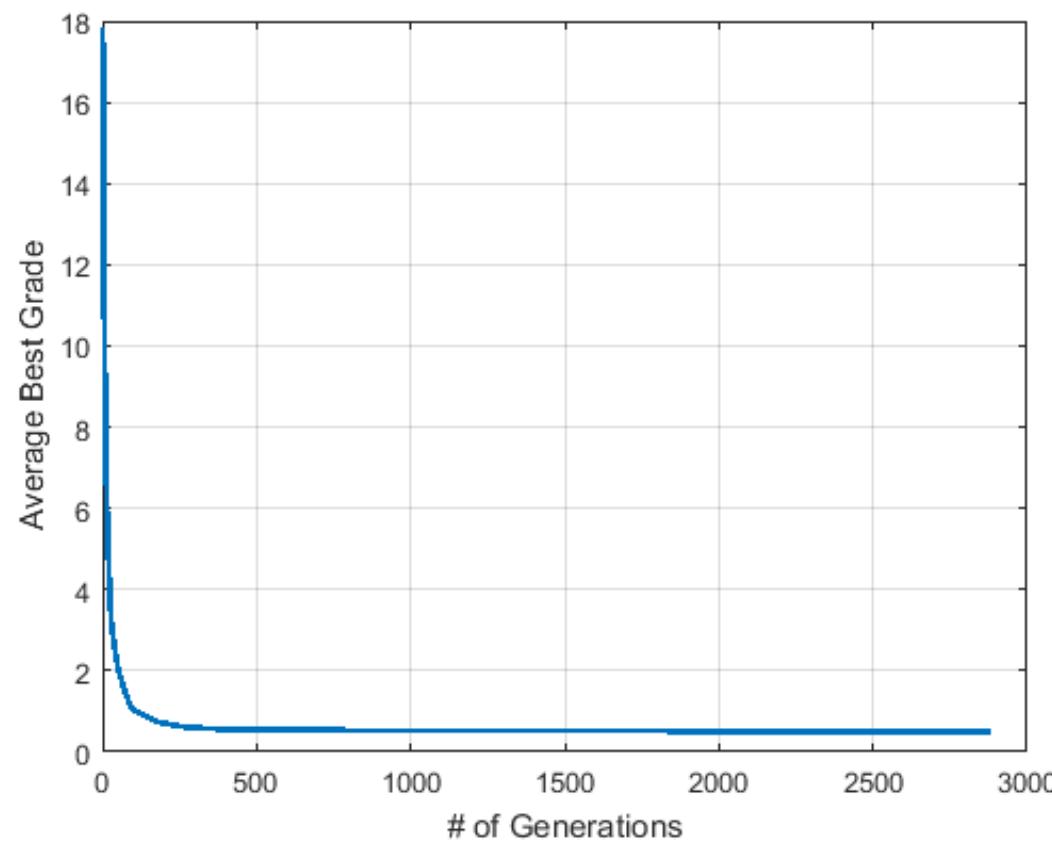
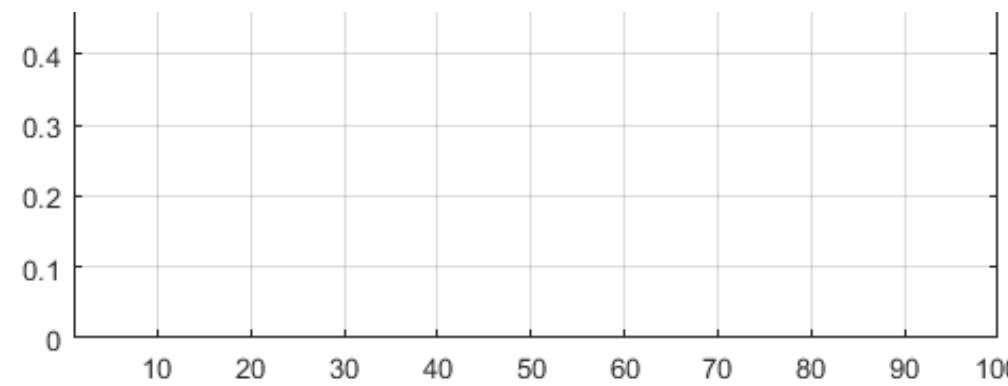
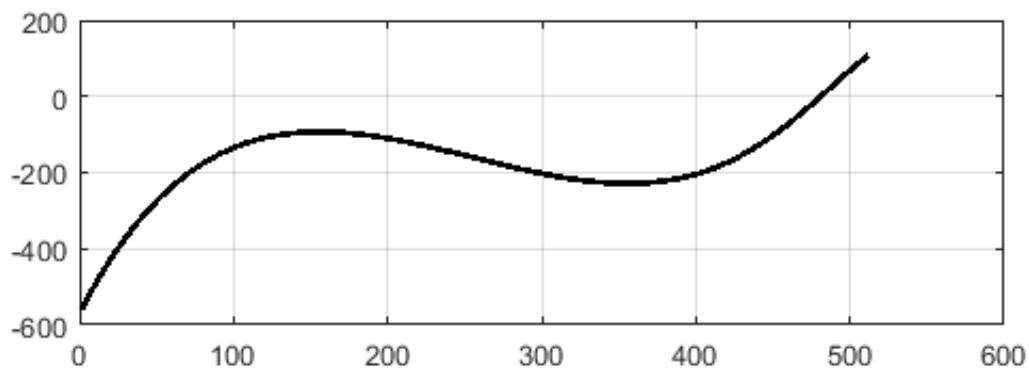


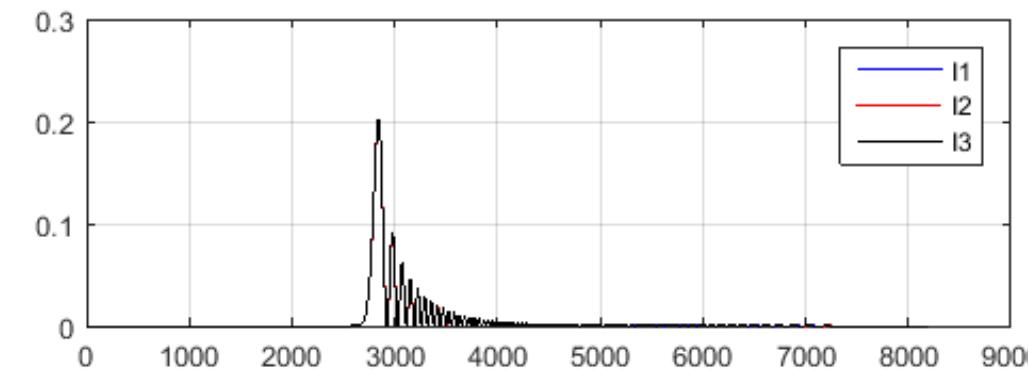
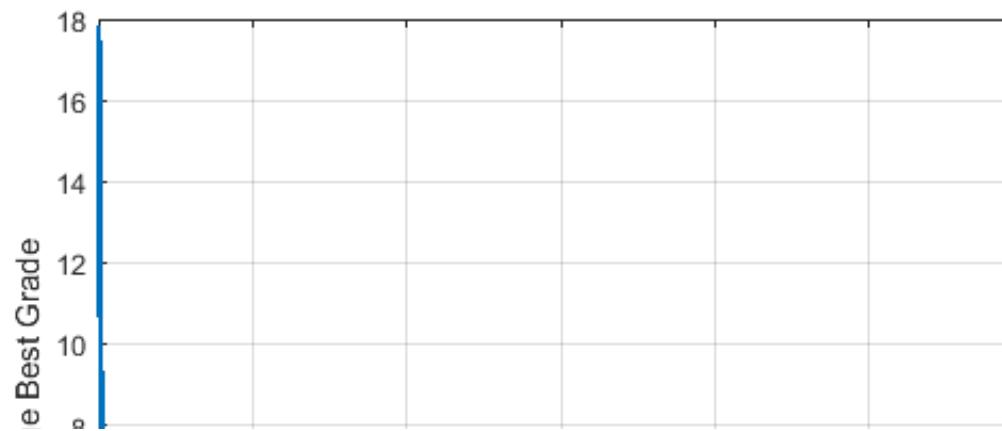
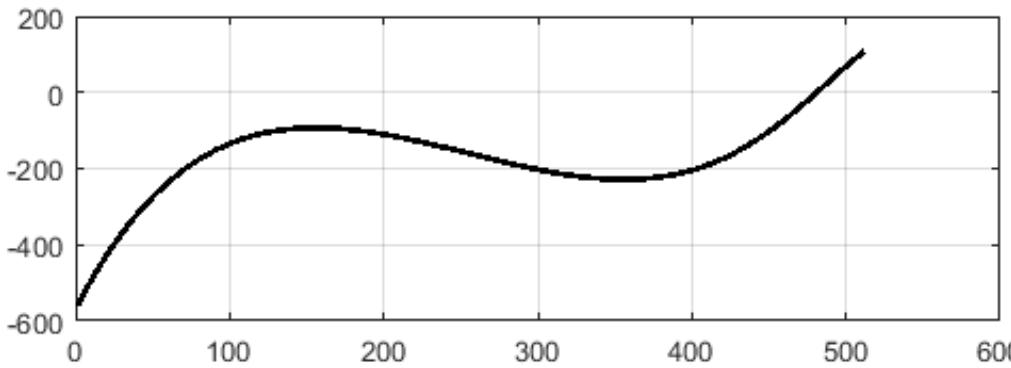
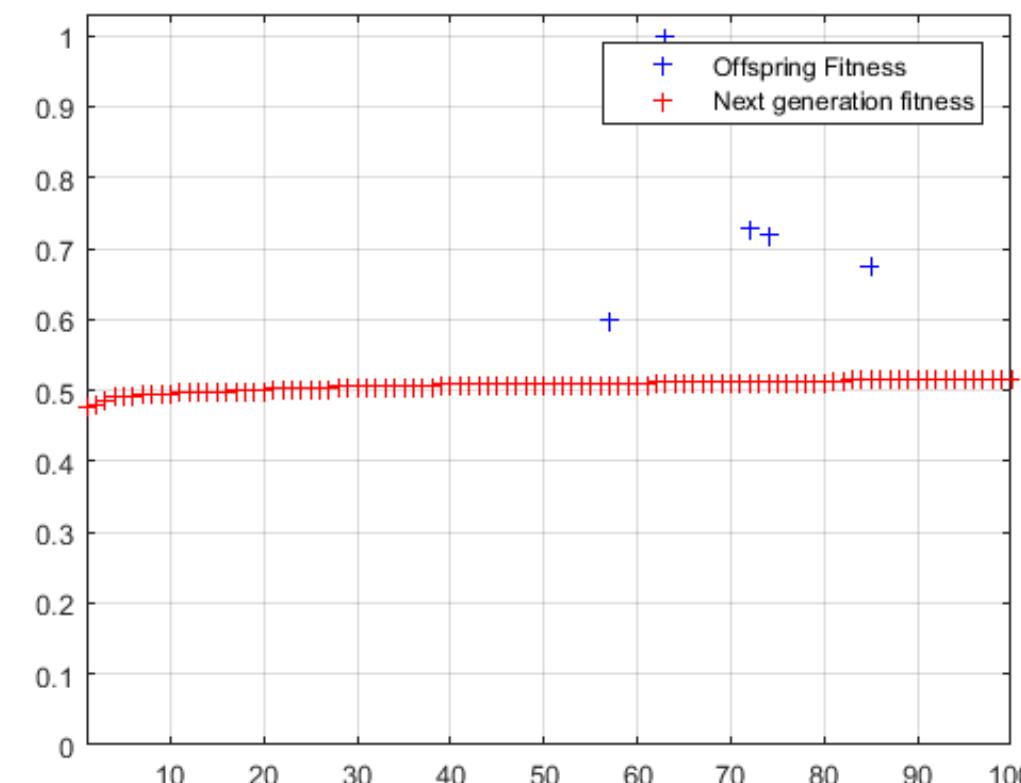
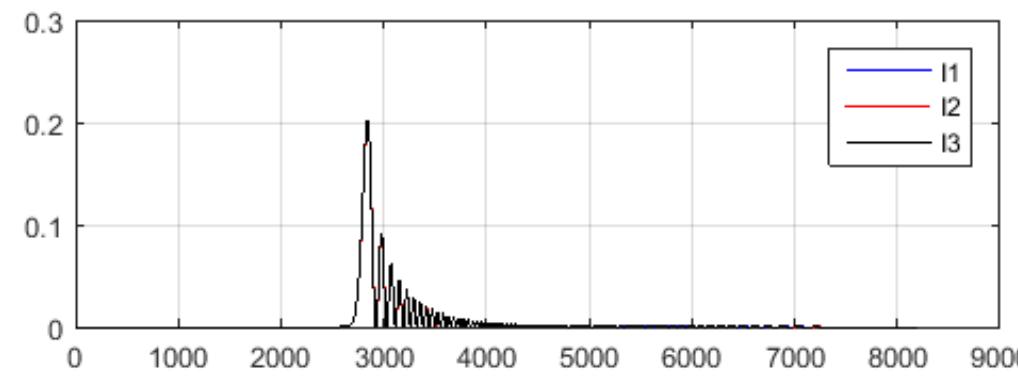
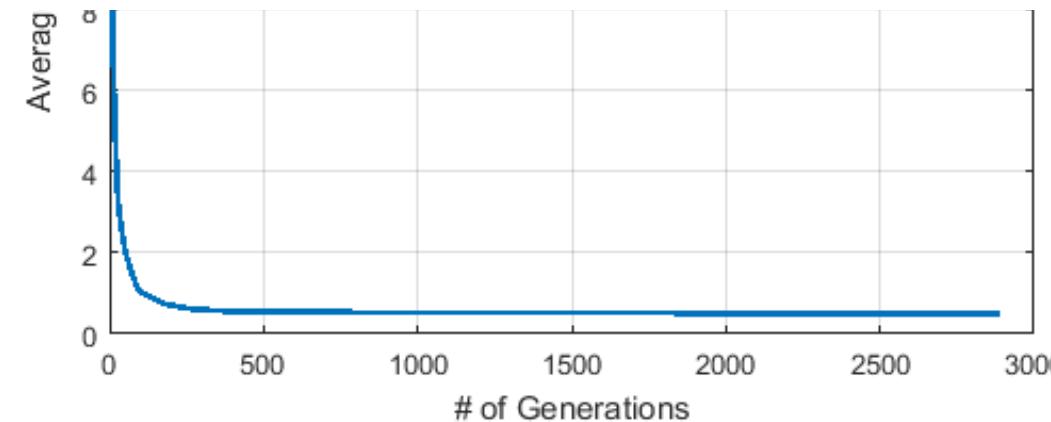
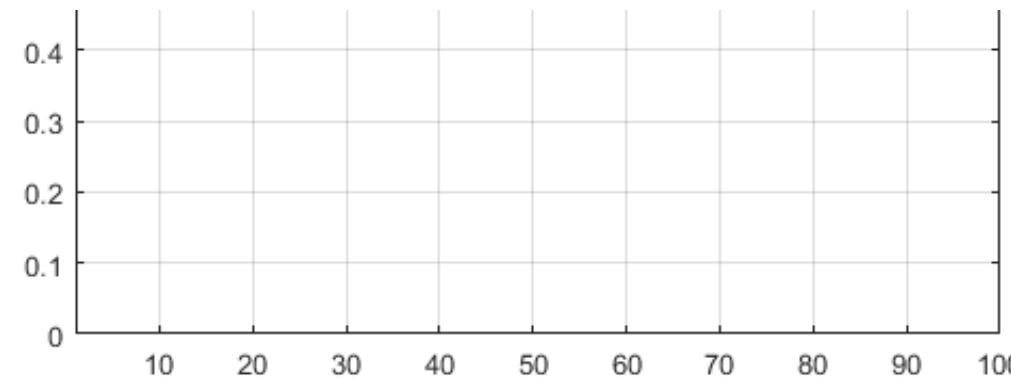


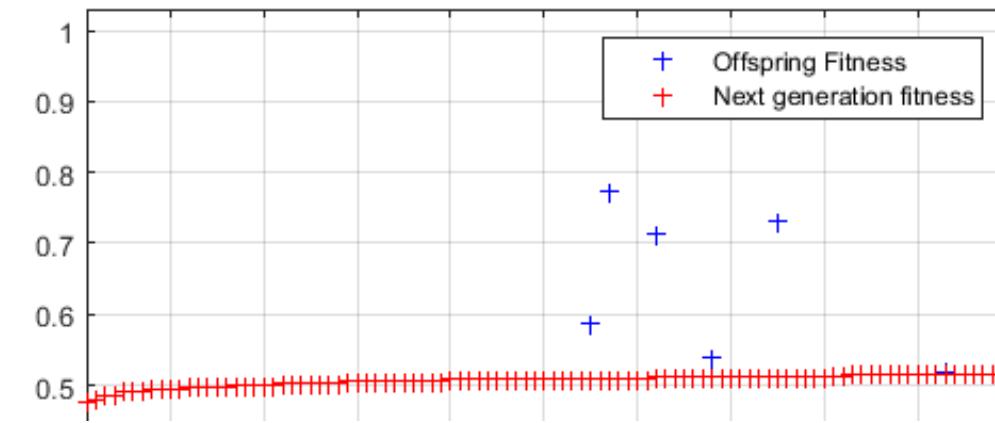
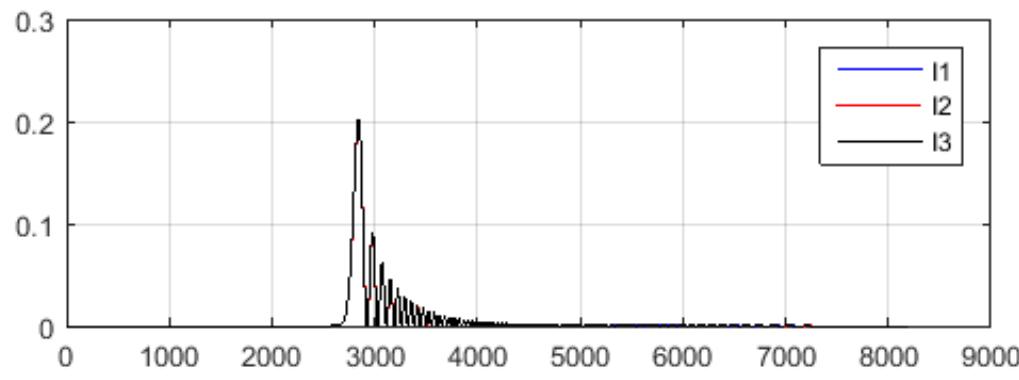
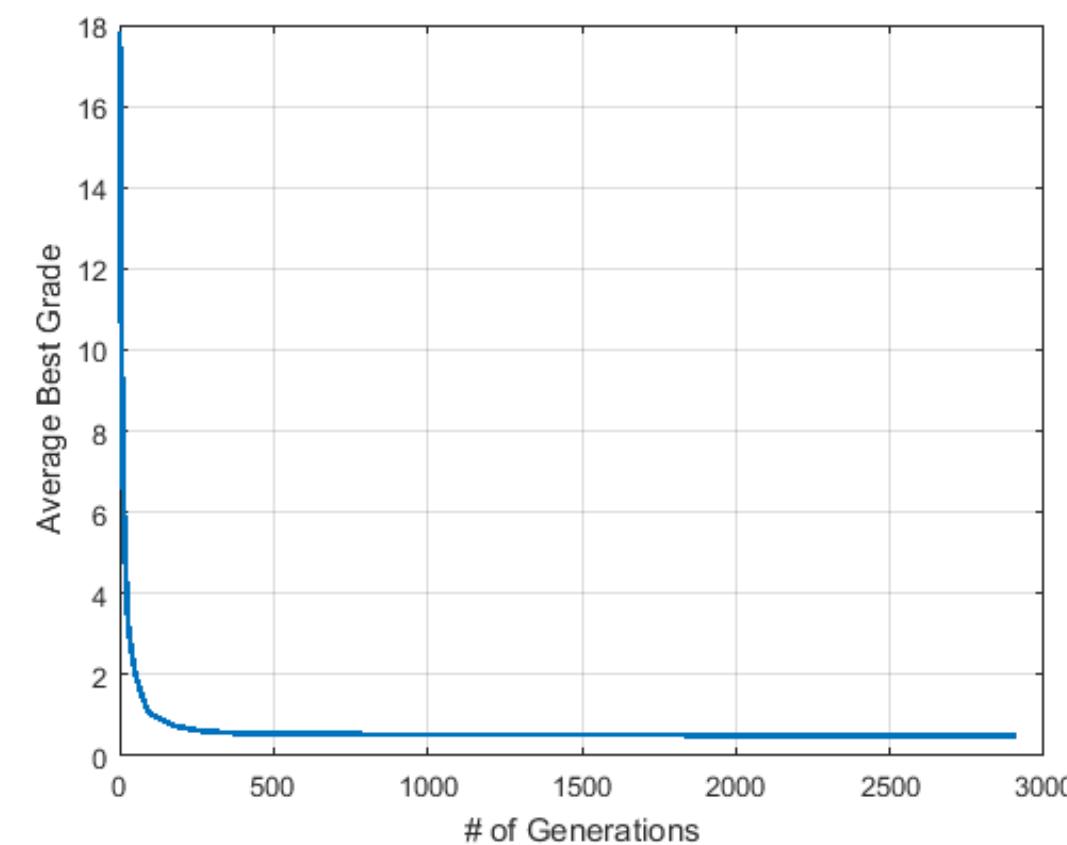
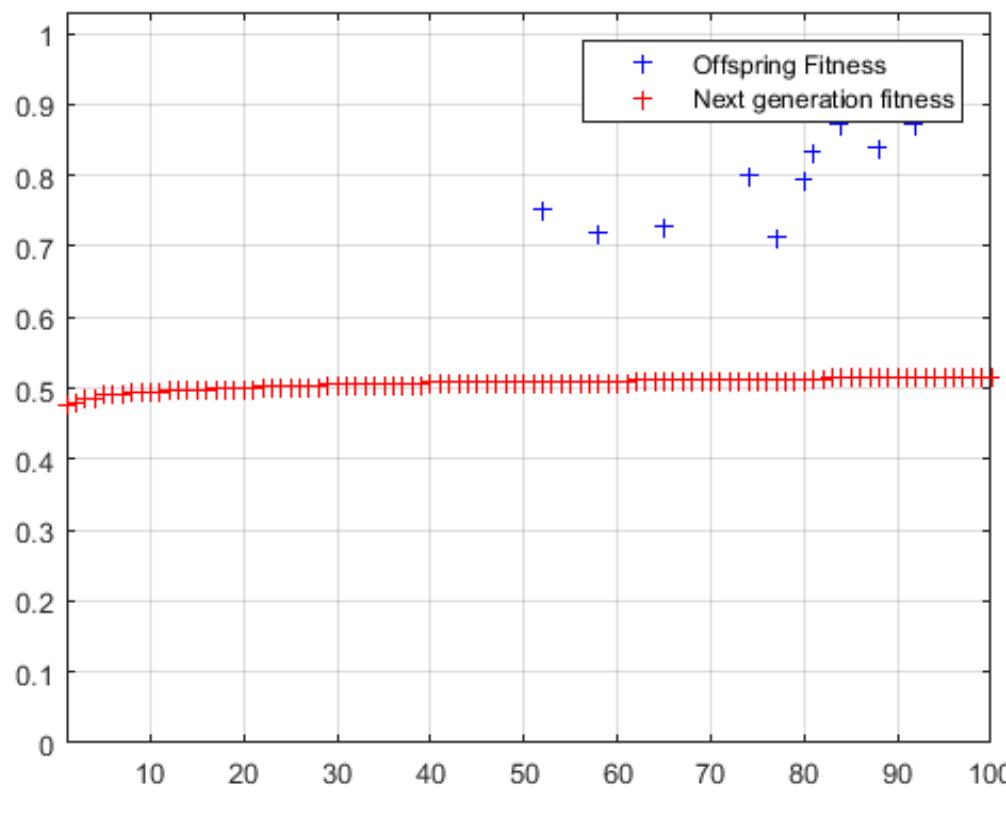
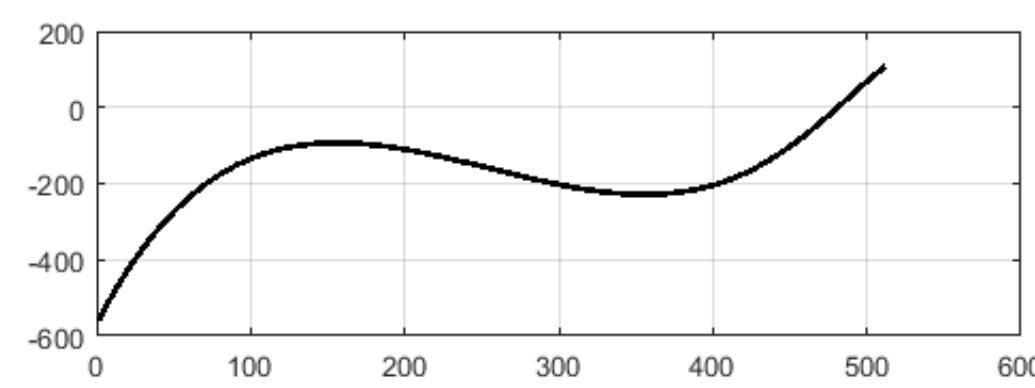
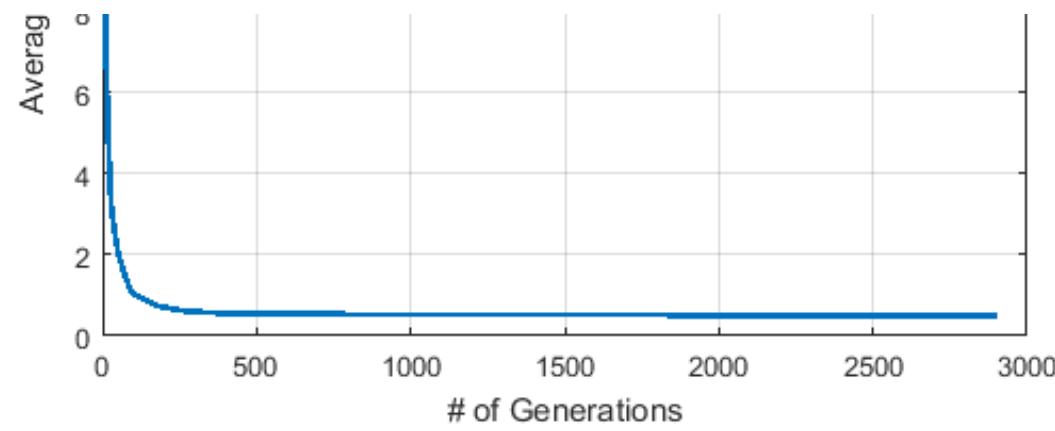


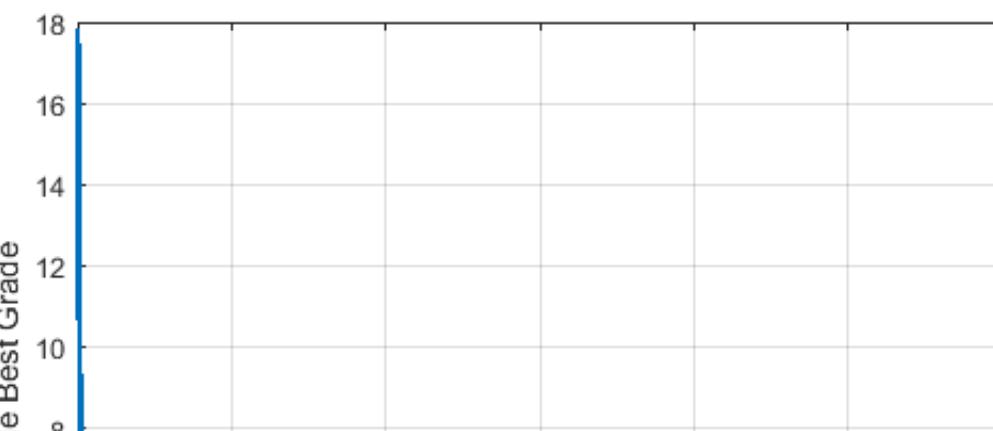
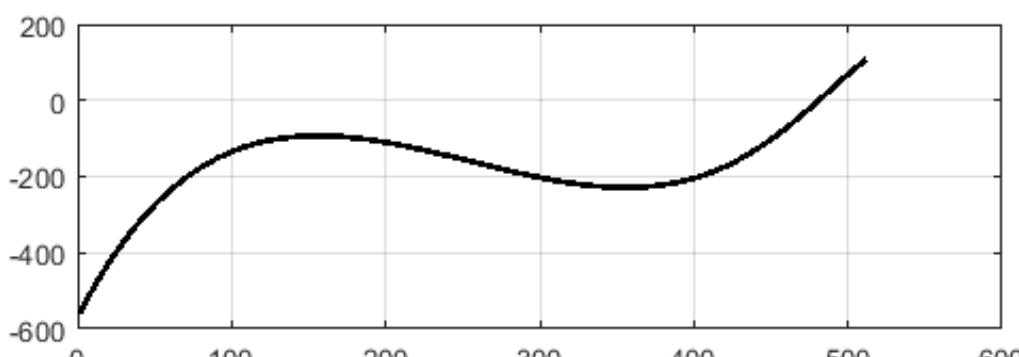
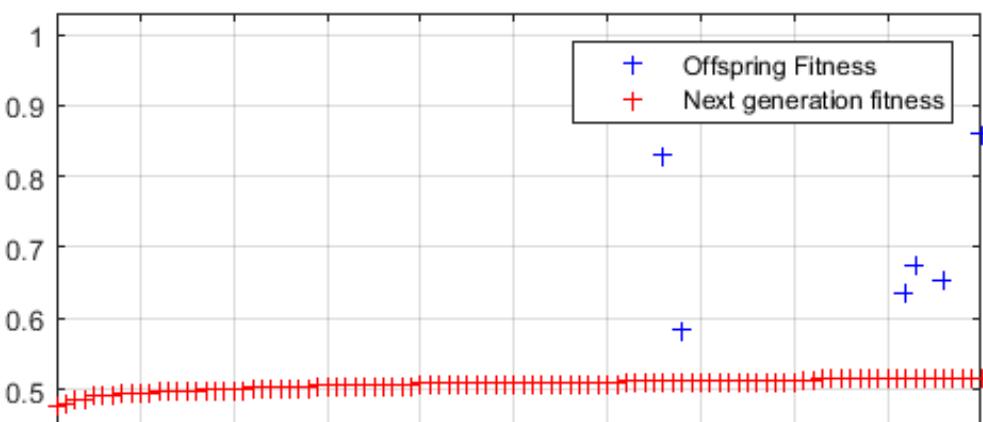
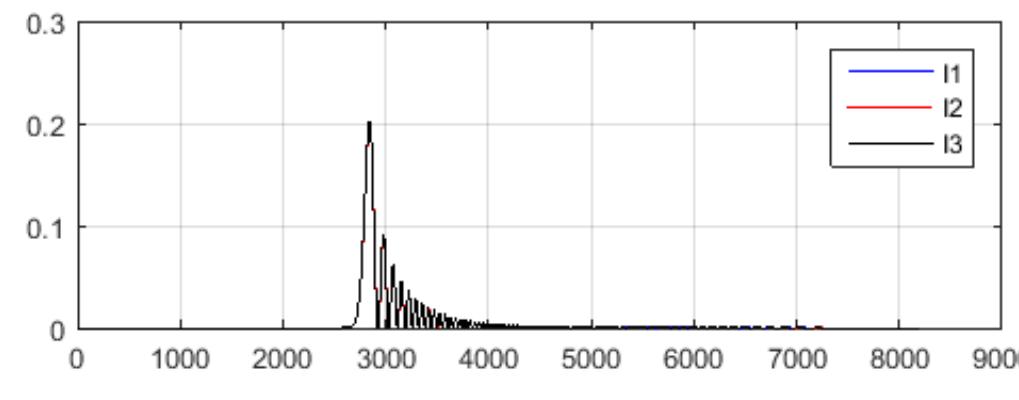
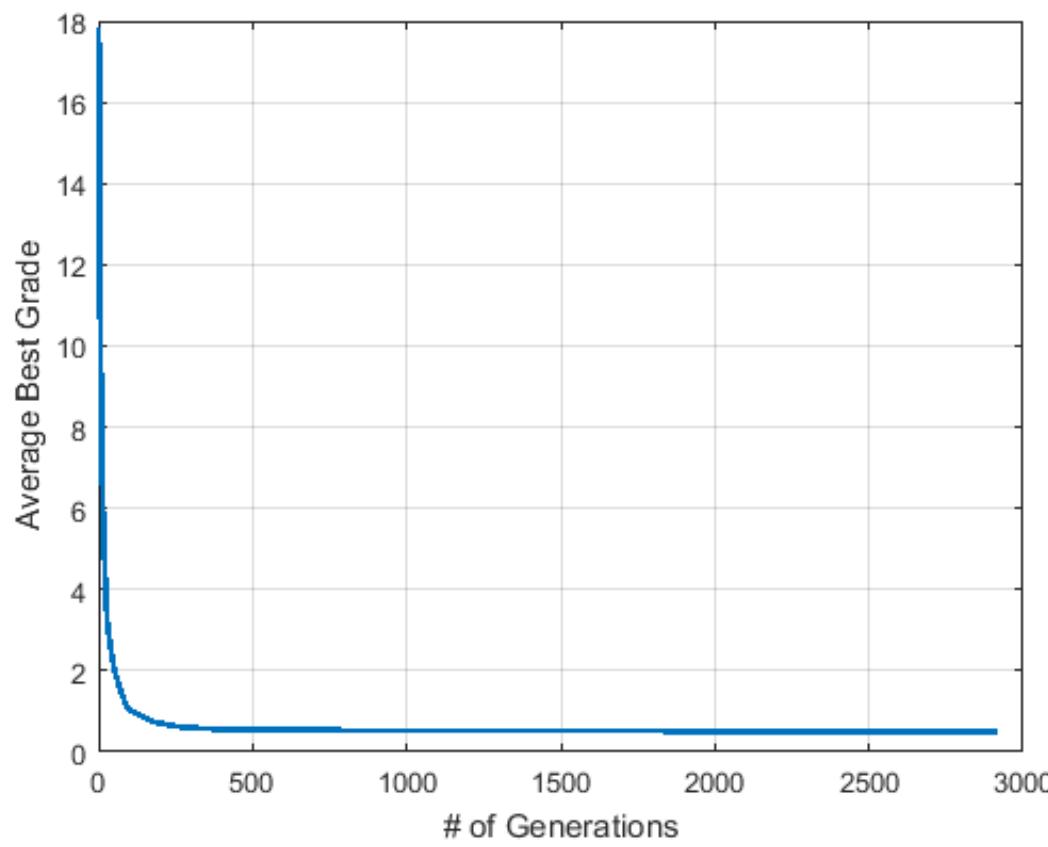
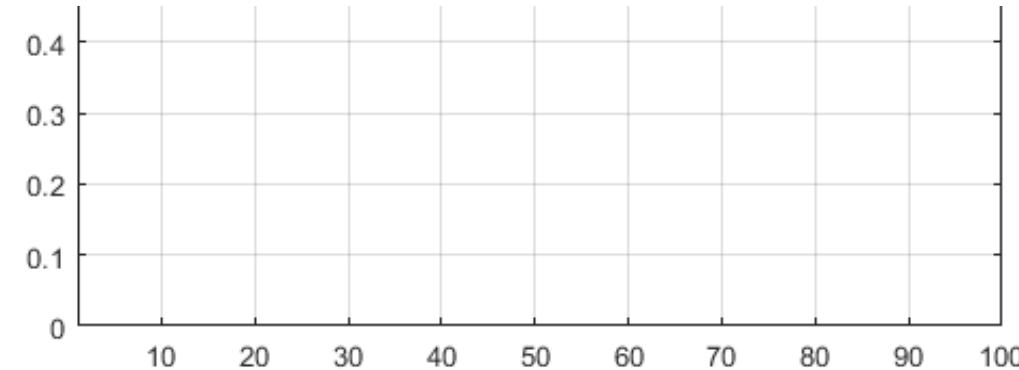
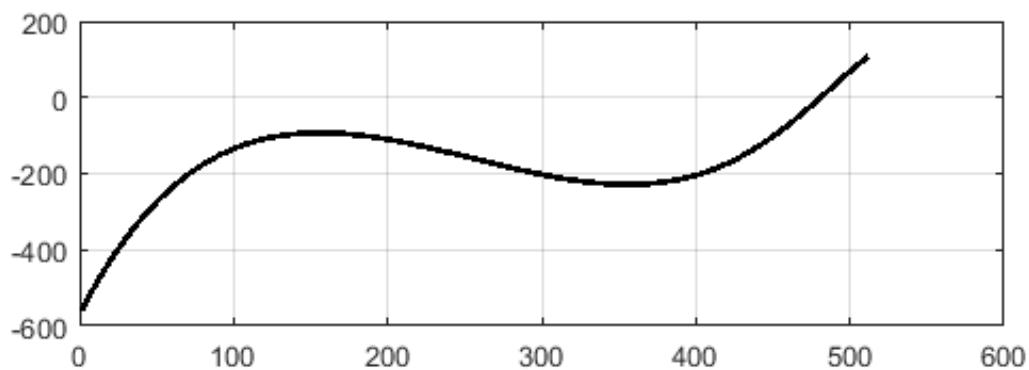


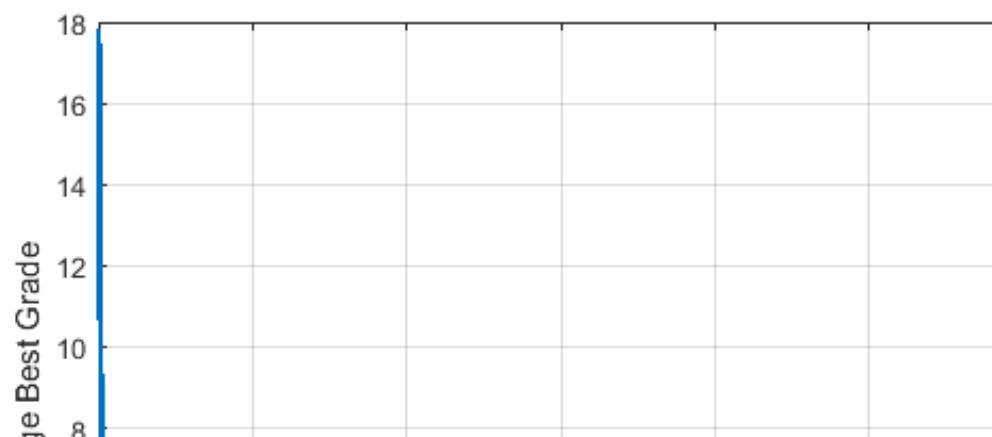
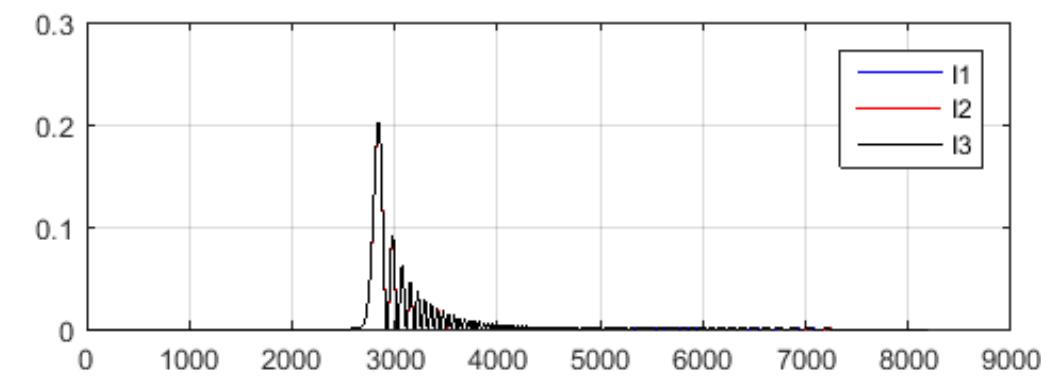
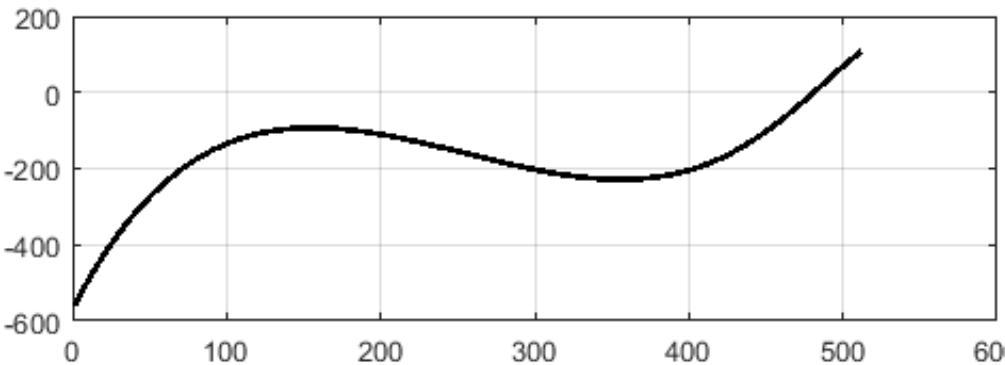
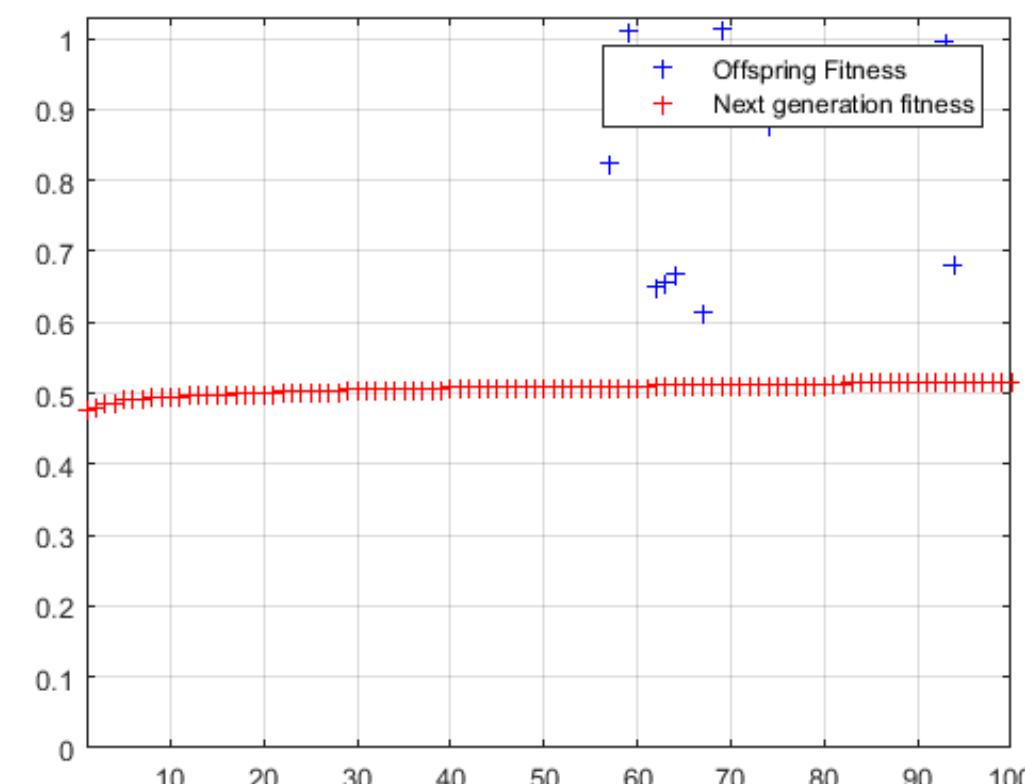
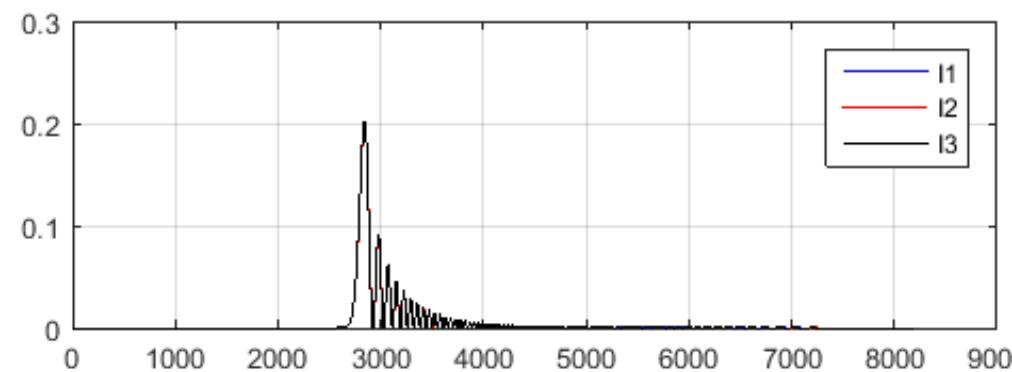
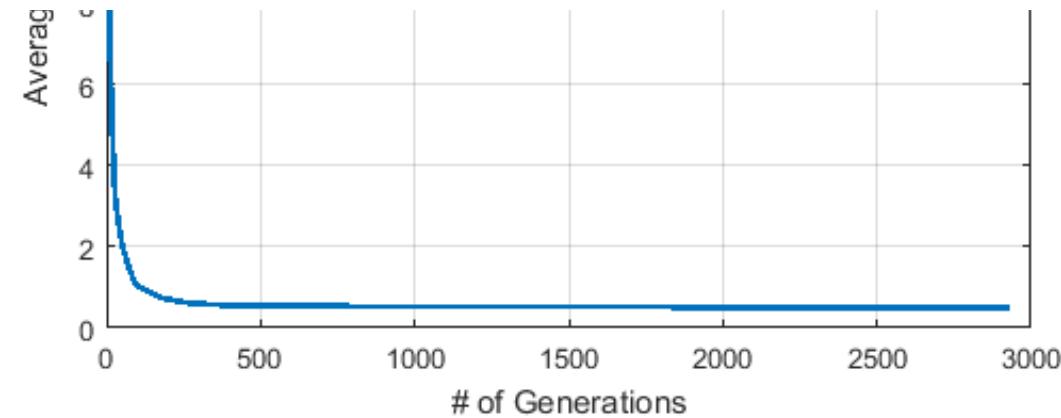
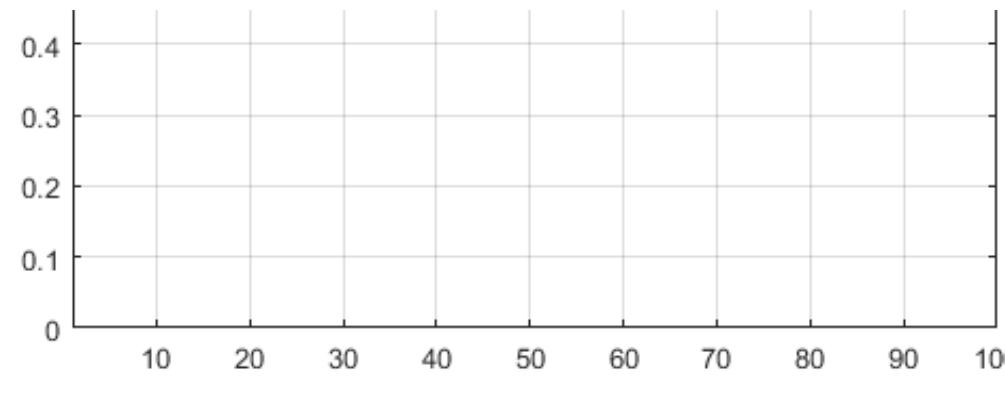


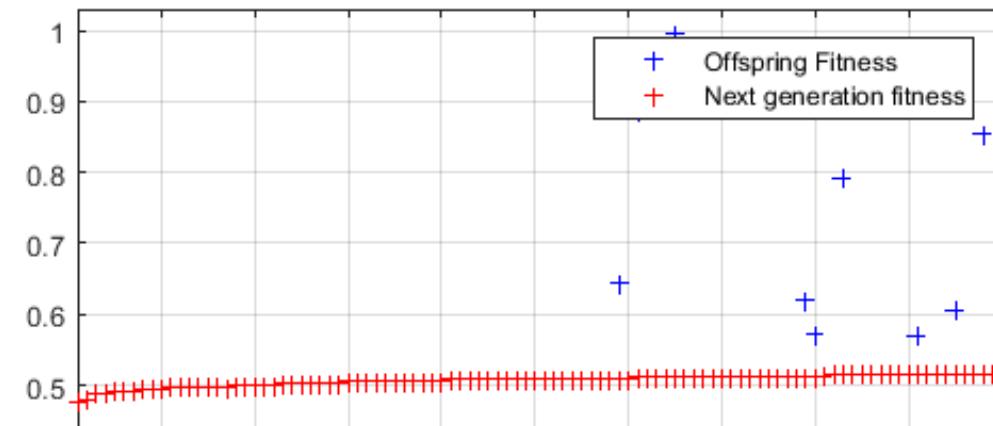
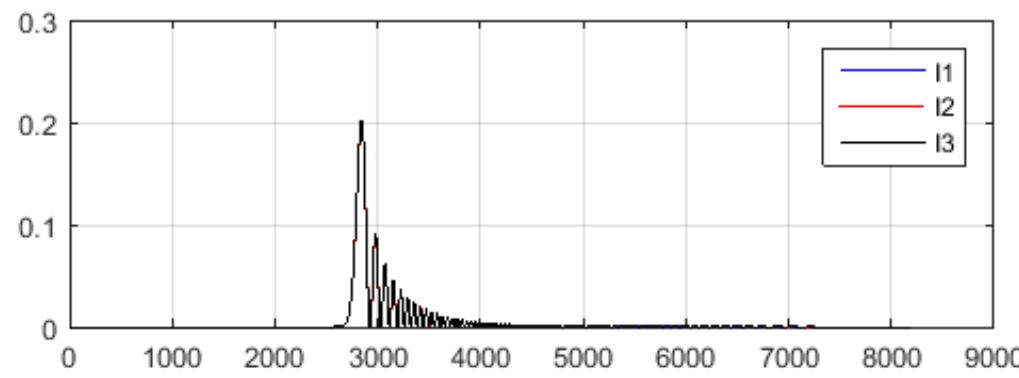
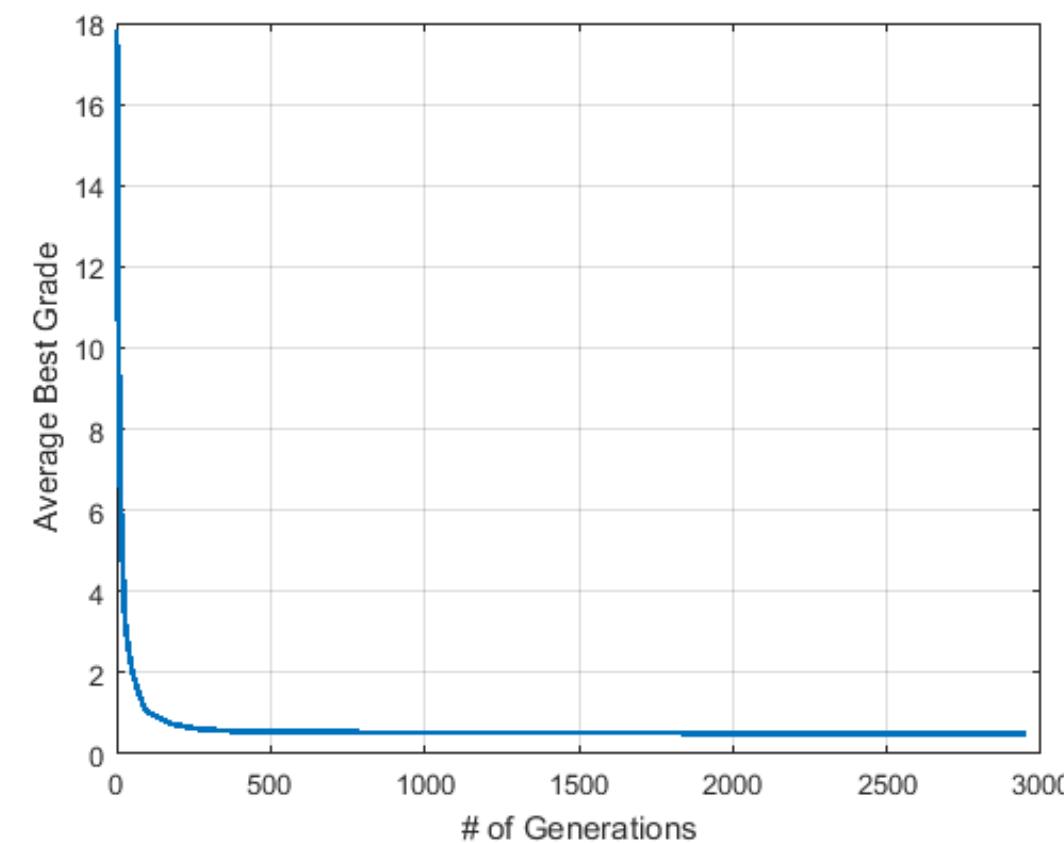
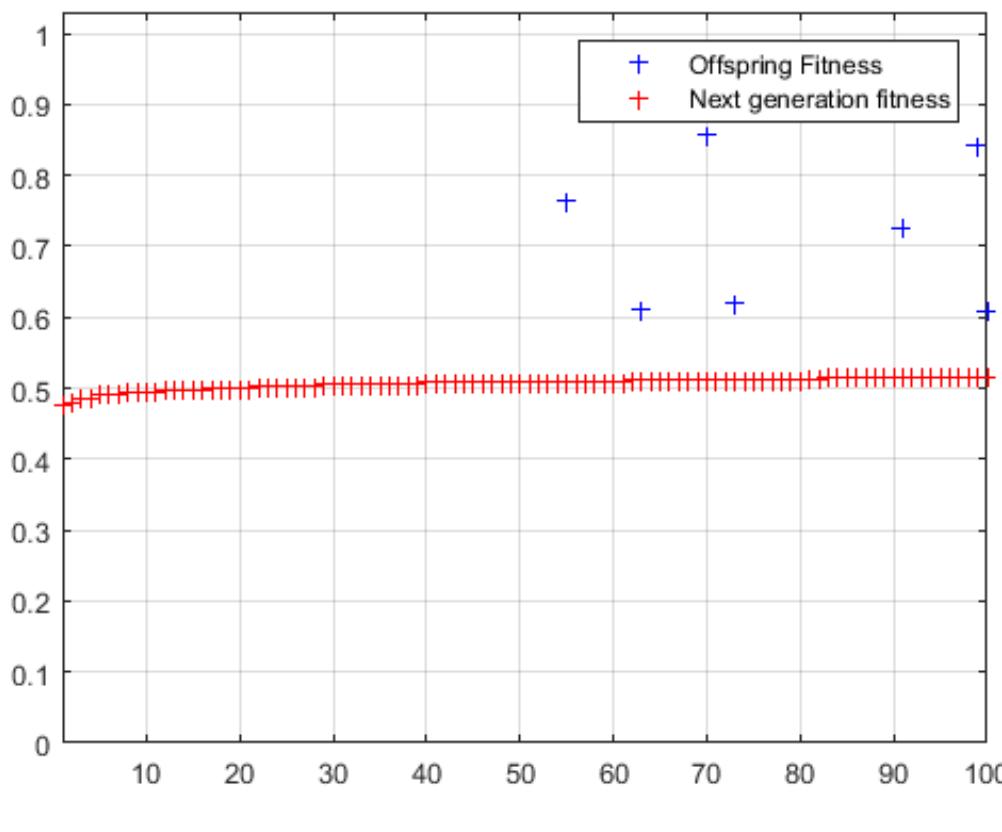
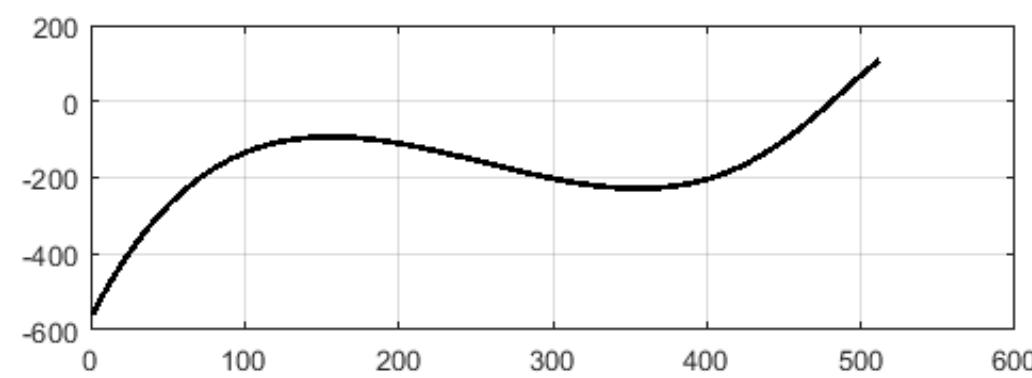
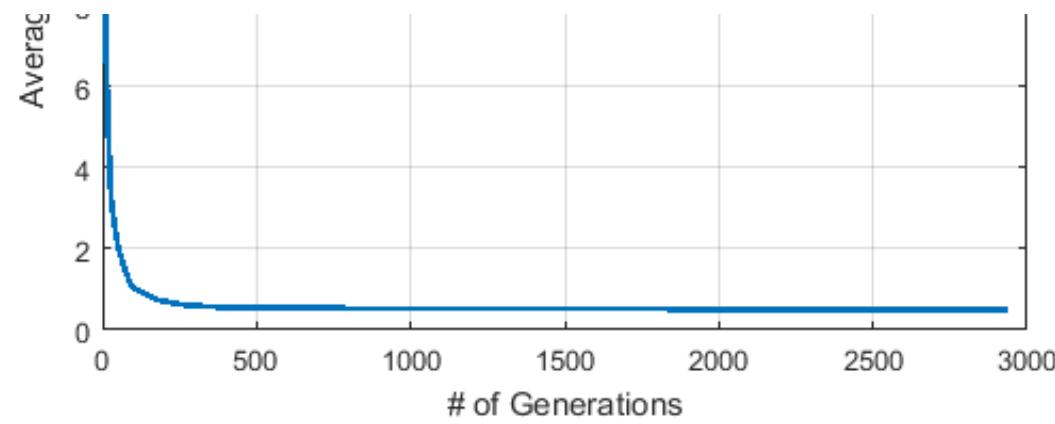


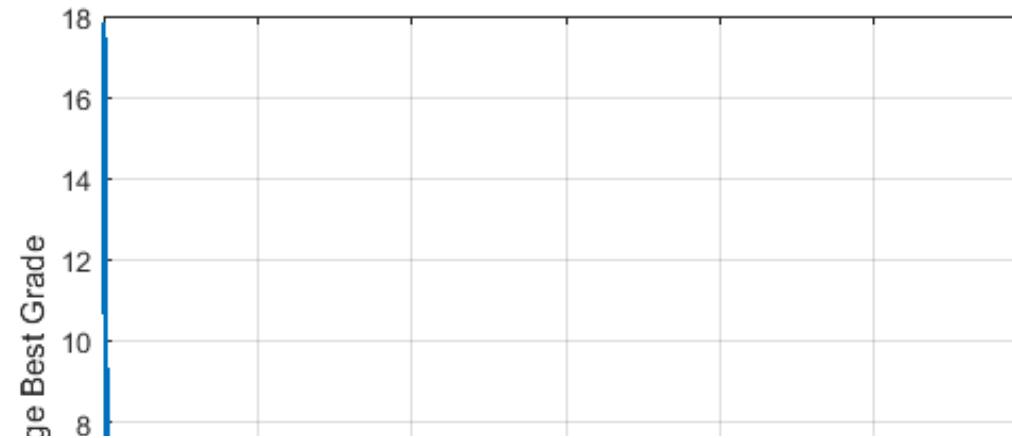
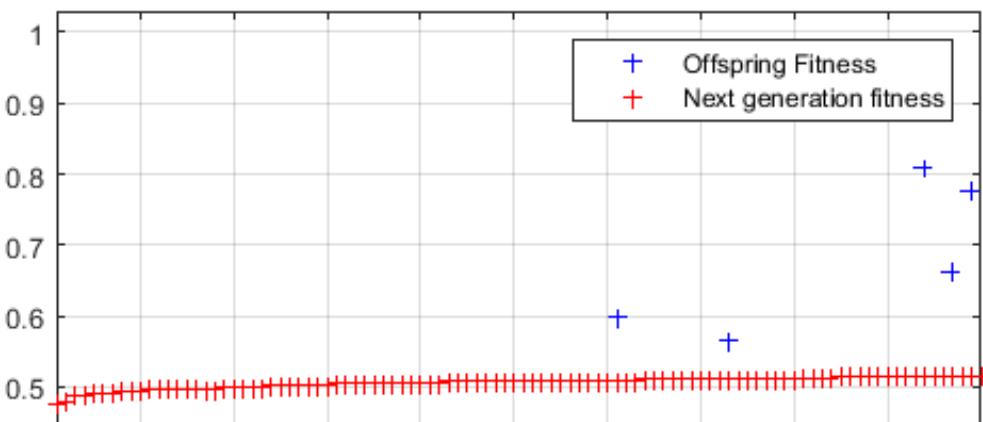
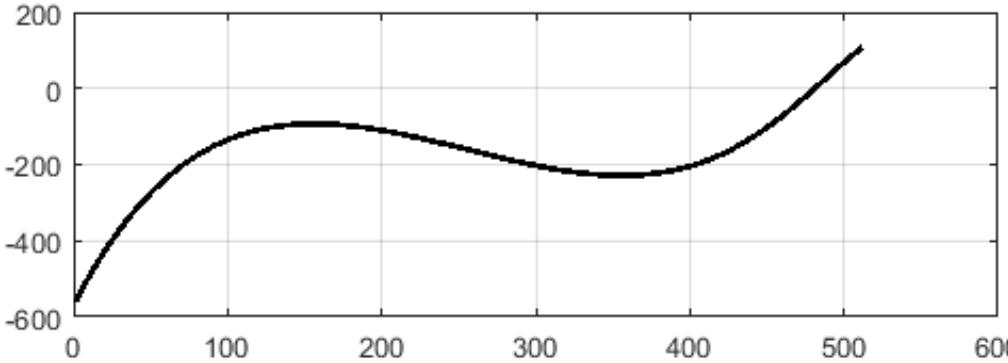
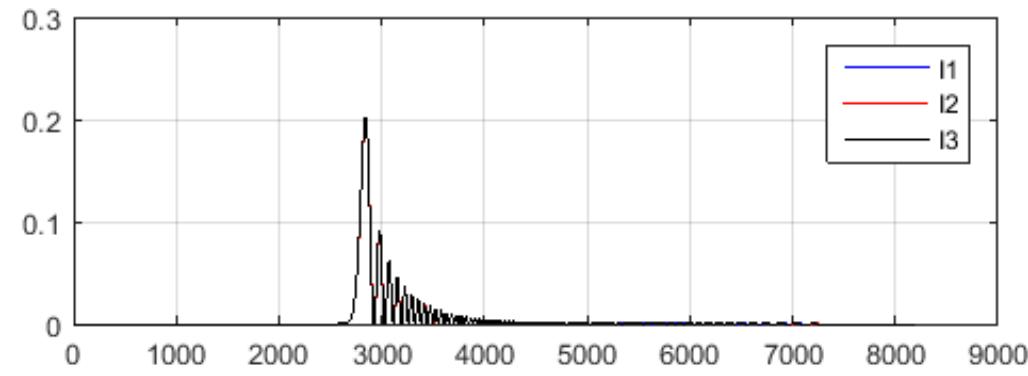
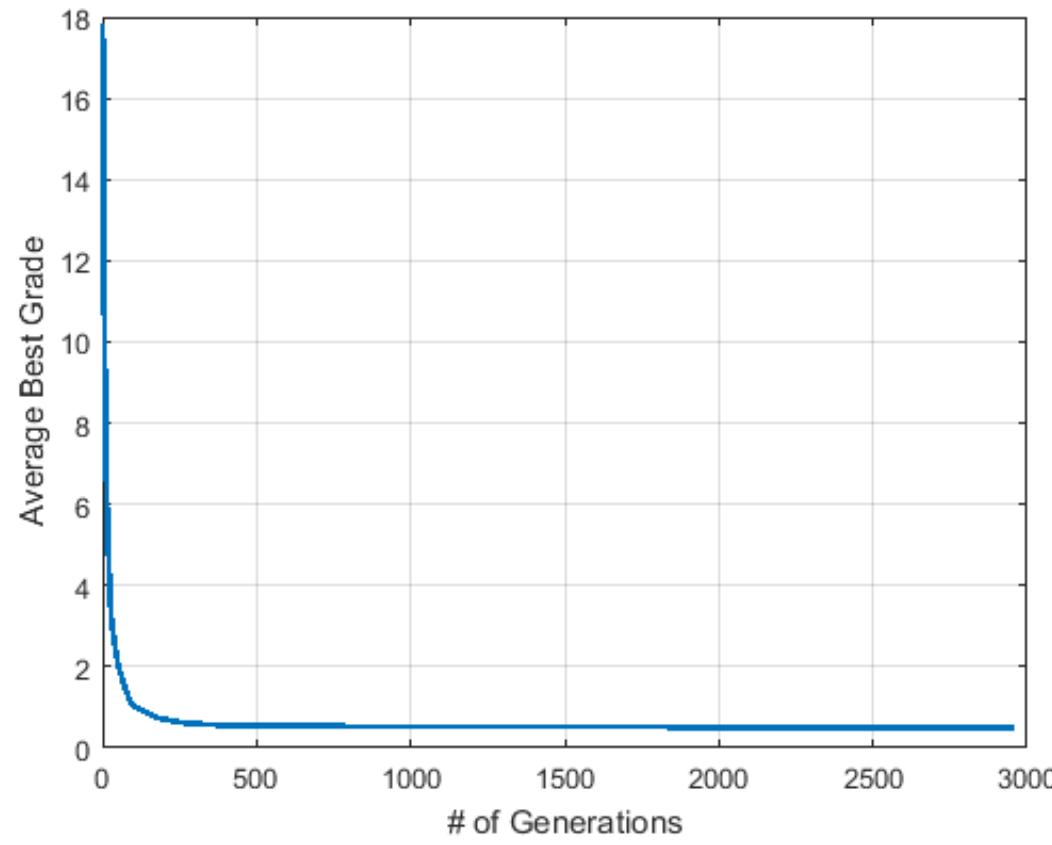
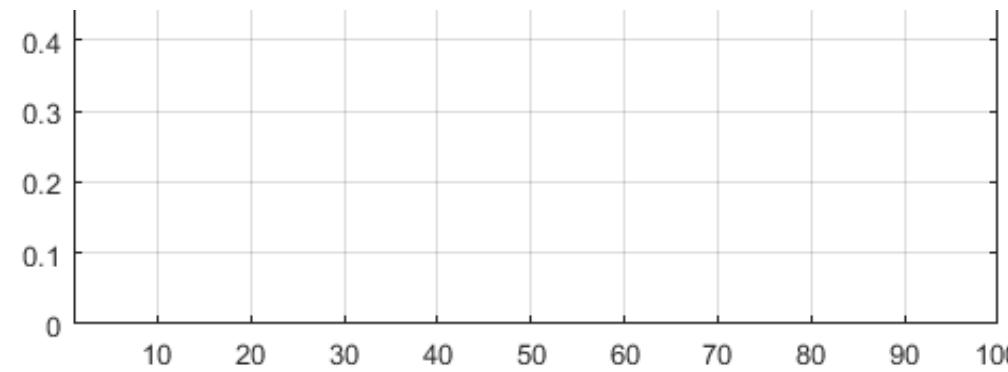
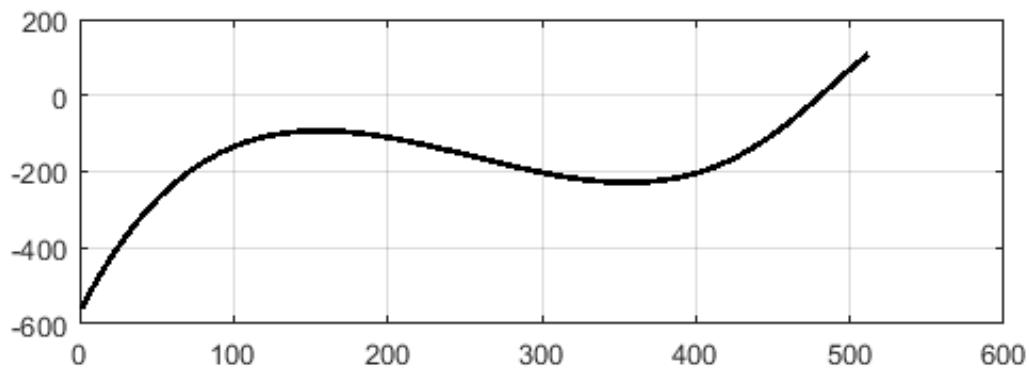


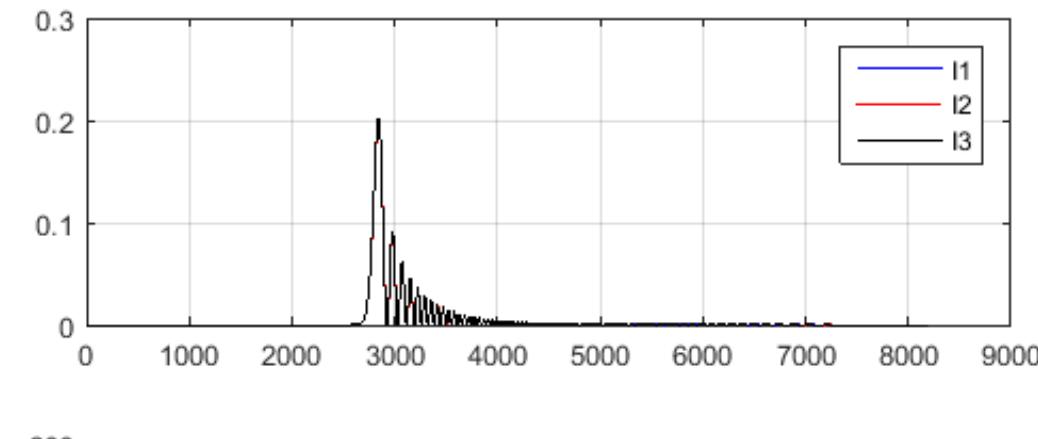
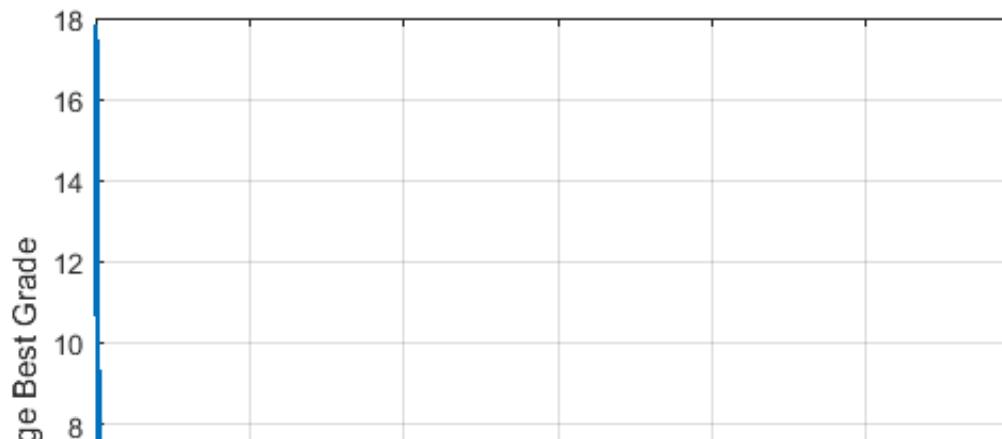
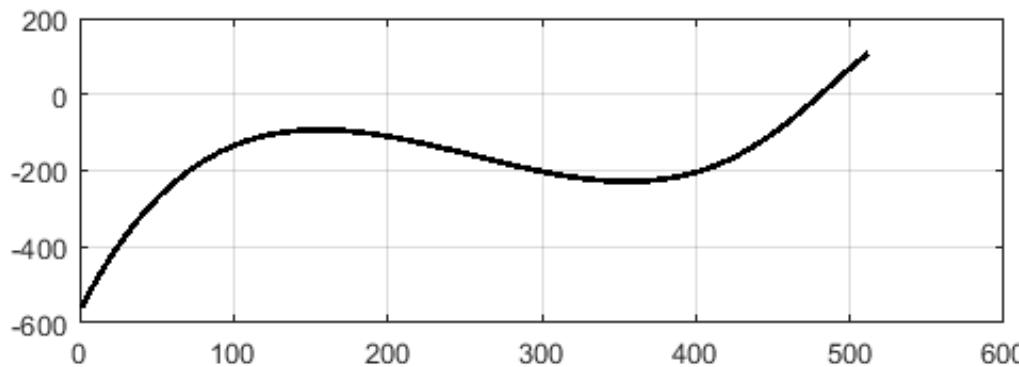
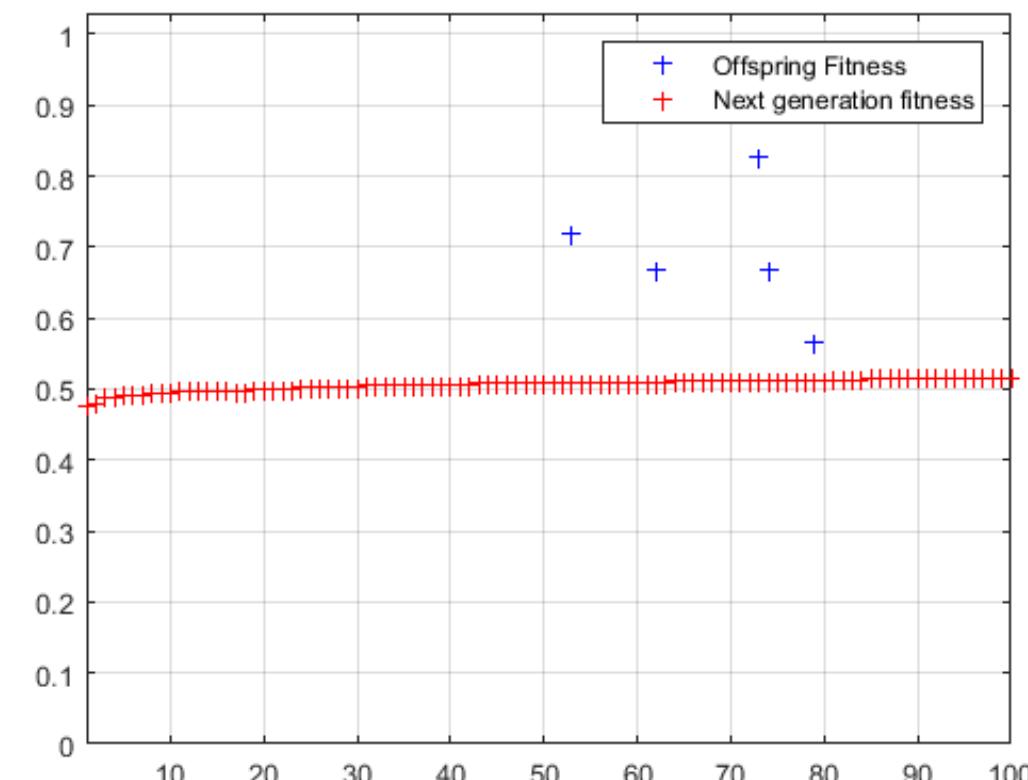
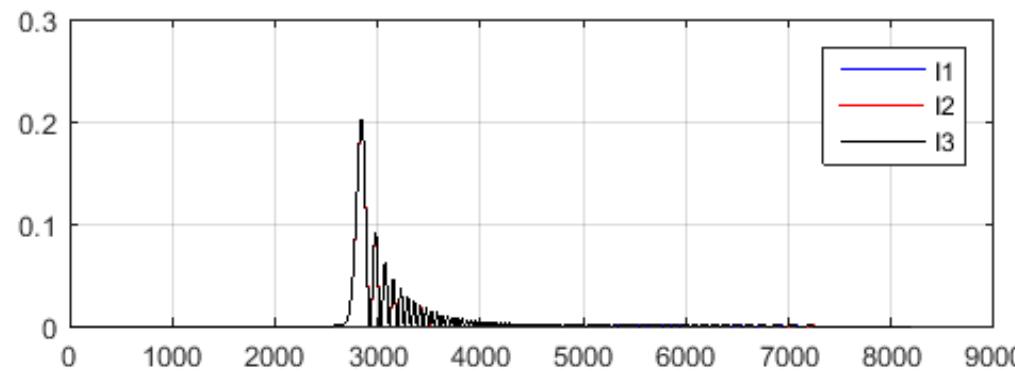
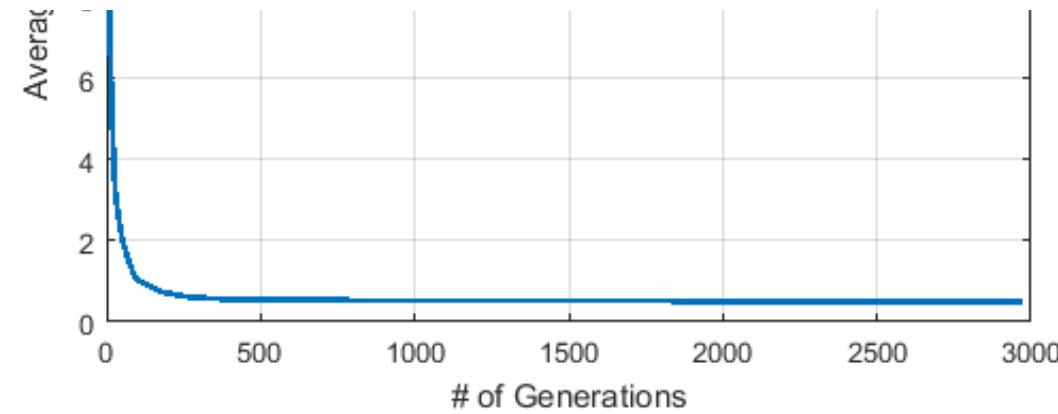
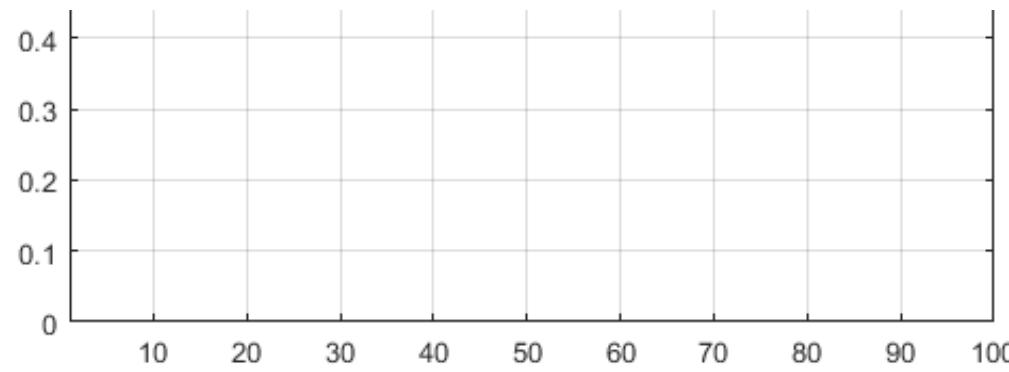


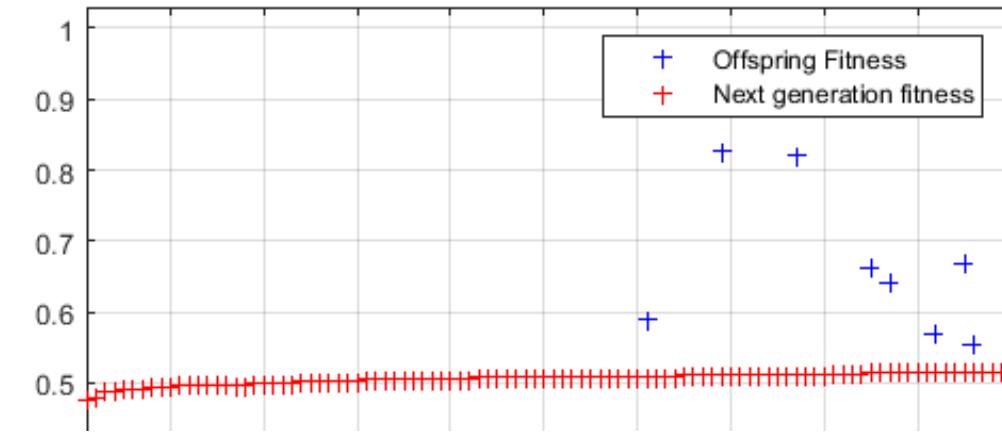
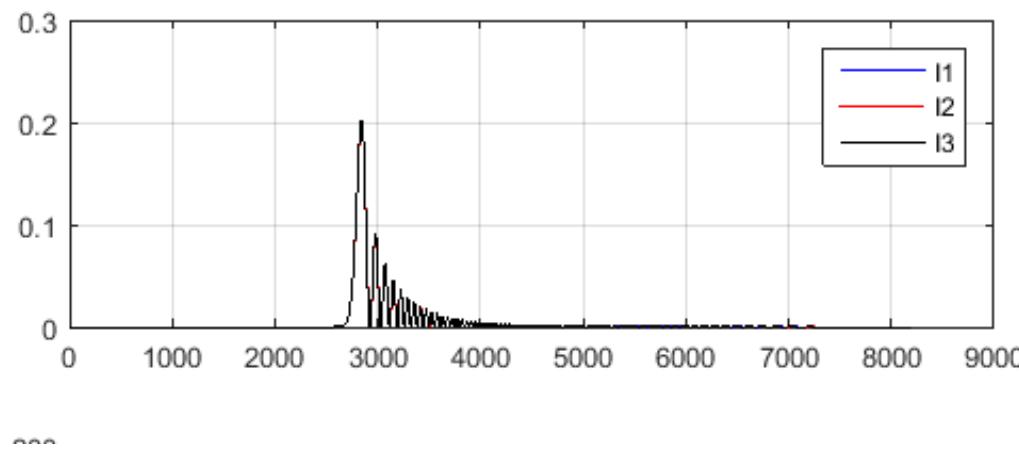
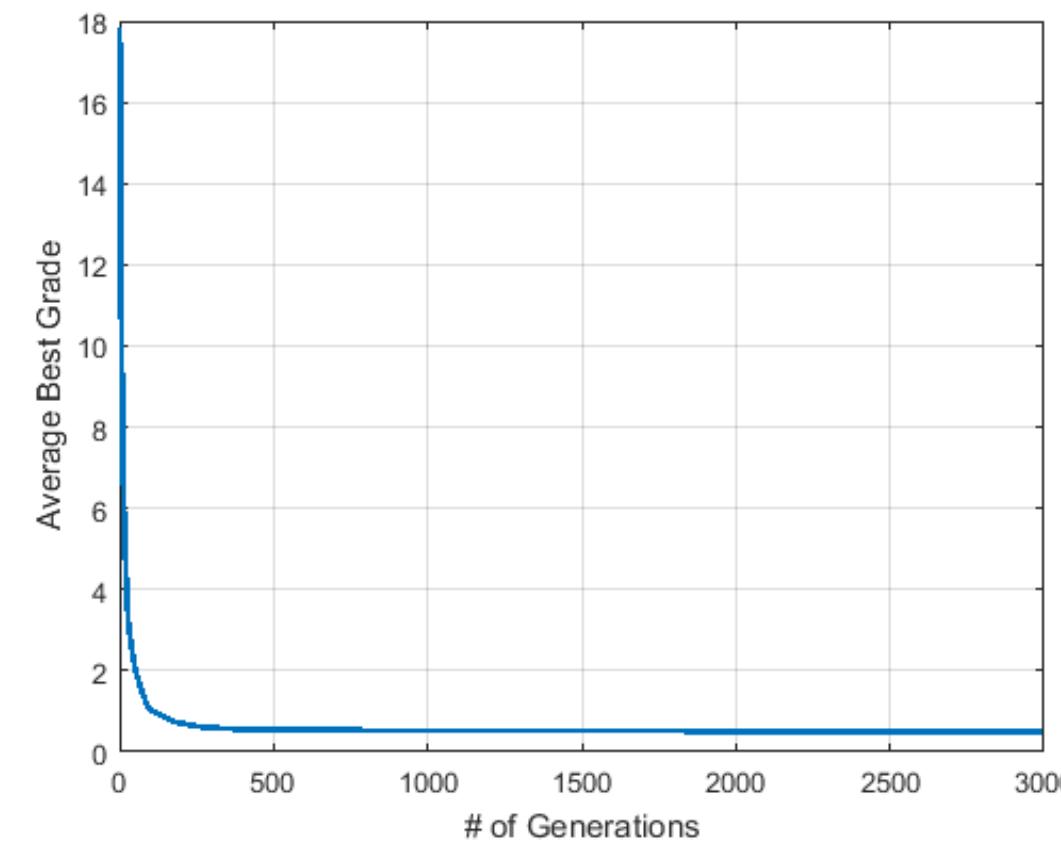
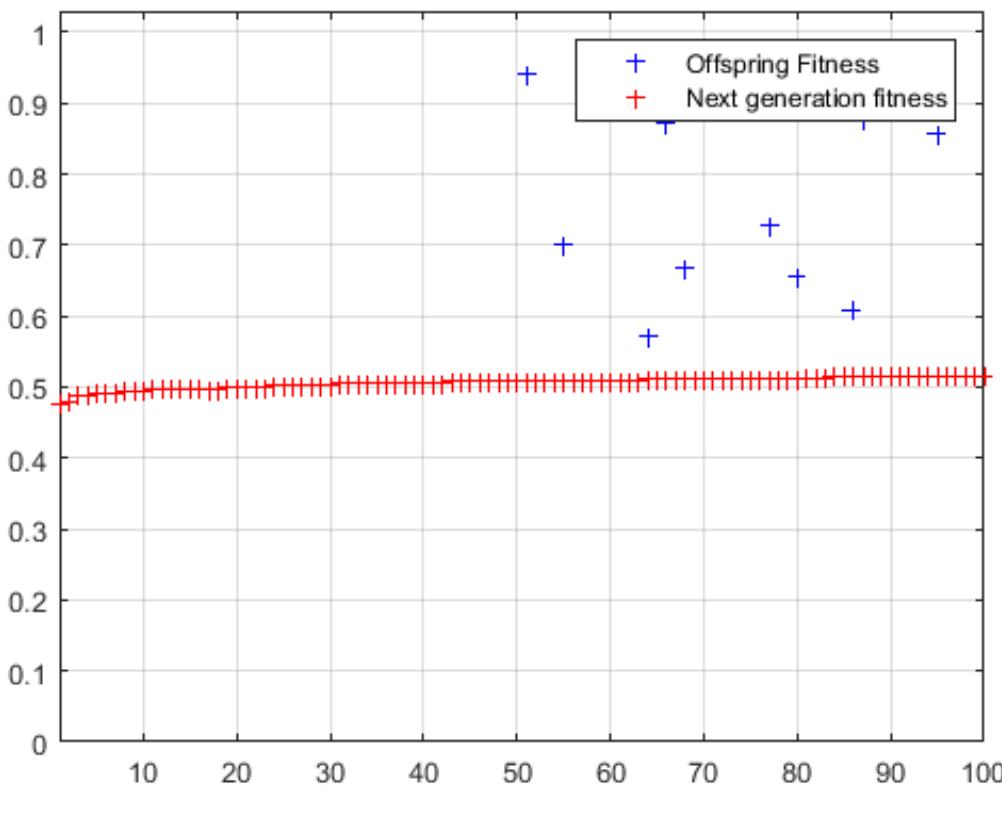
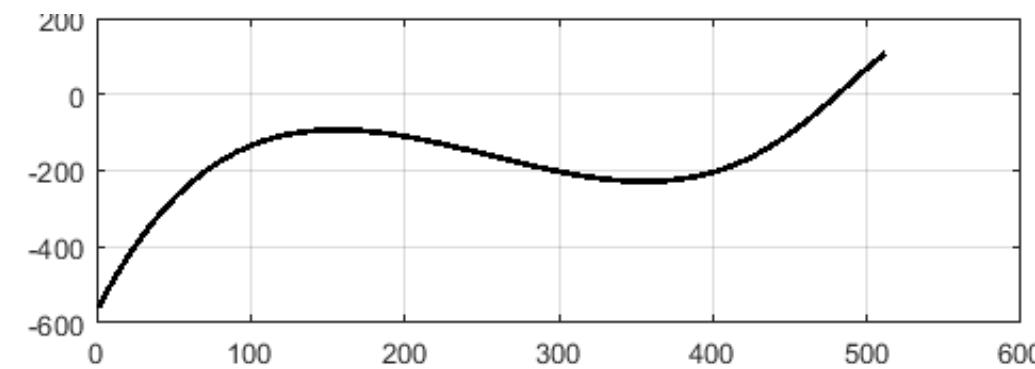
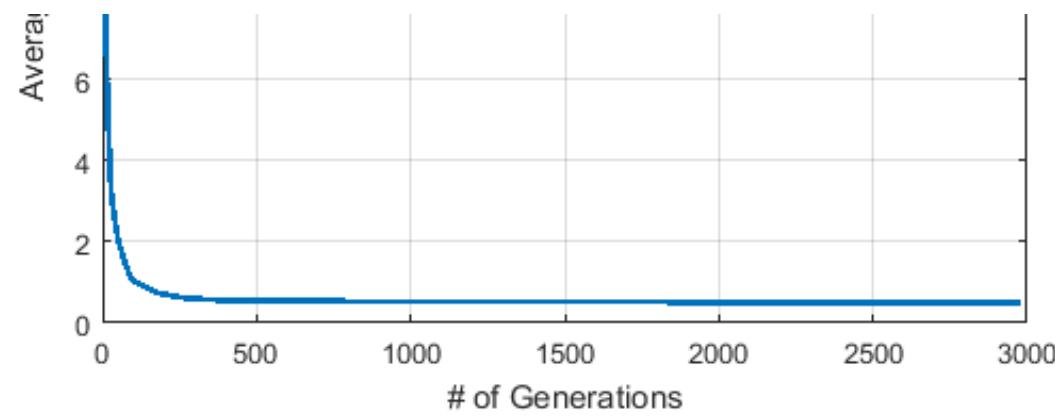


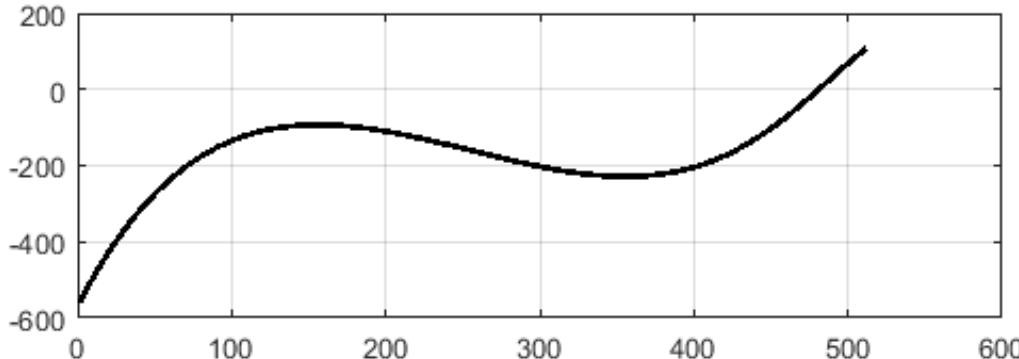
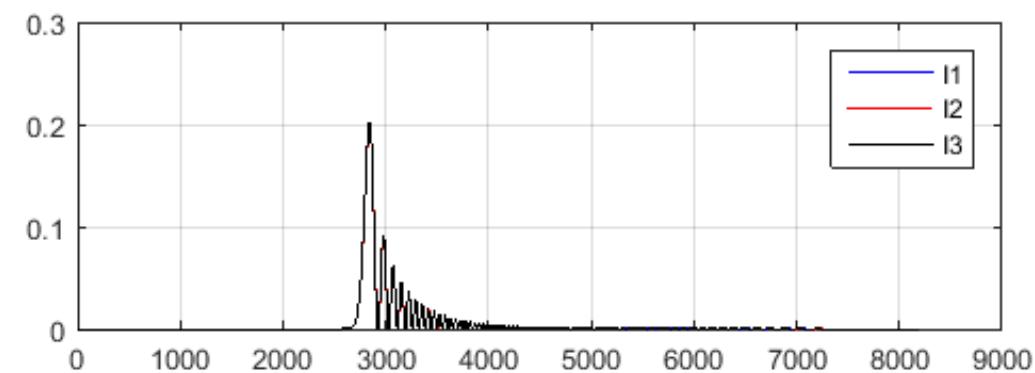
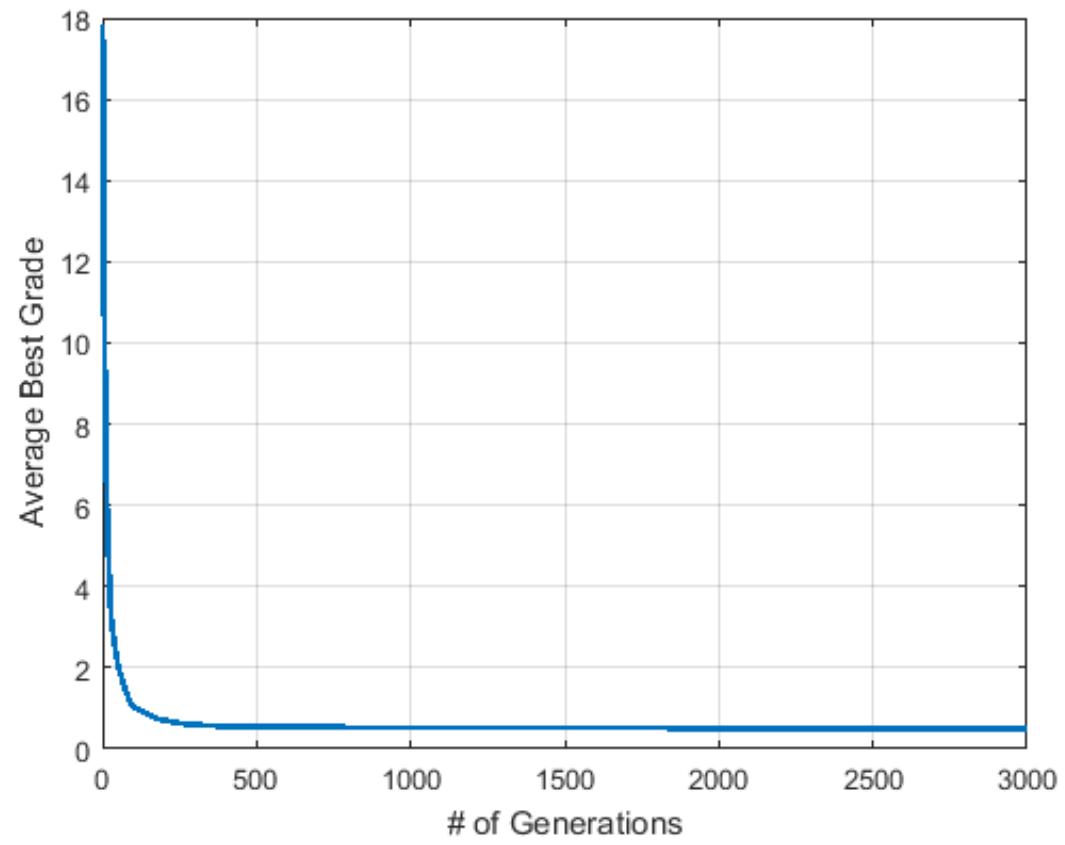
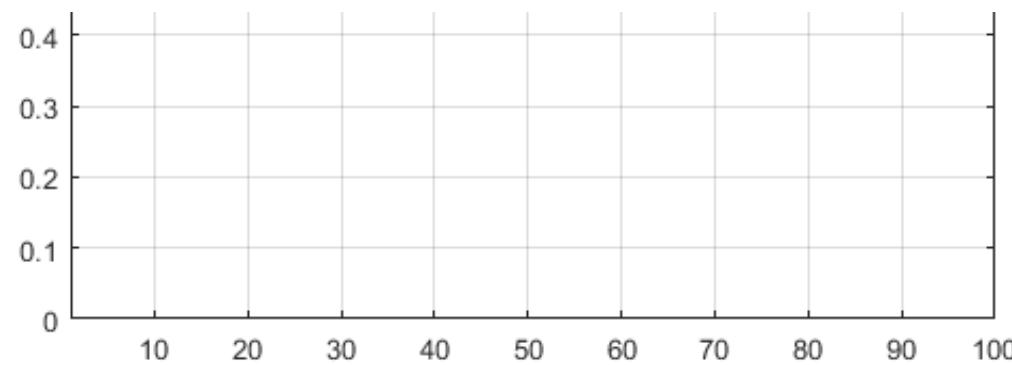
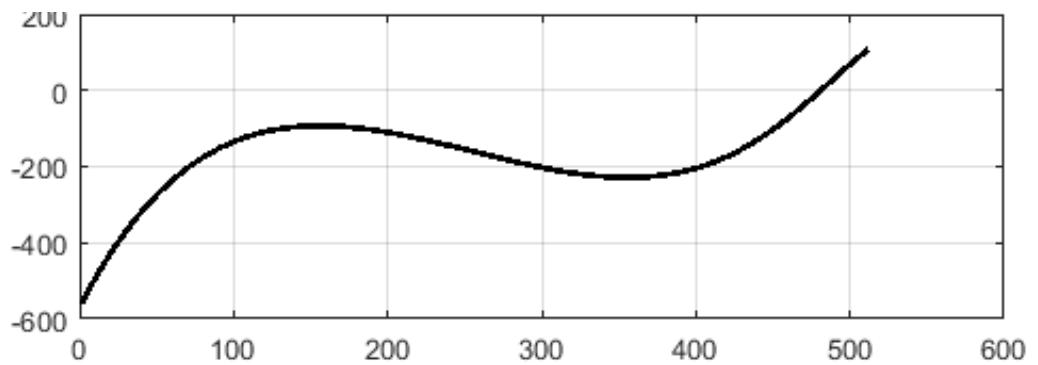












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