

COMP 5660 Fall 24 (EC)

Mohab Yousef

Id:904154154 & Mey0012@auburn.edu

09/08/24

statistical analysis shows below:

The number of samples, p-value, the mean, and stdv of the datasets are:

Number of samples: 30

data/1a/easy/best_per_run.txt mean: 20.433333333333334

data/1a/easy/best_per_run.txt stdv: 2.0625283000496615

data/1a/easy_mystery_data.txt mean: 37.466666666666667

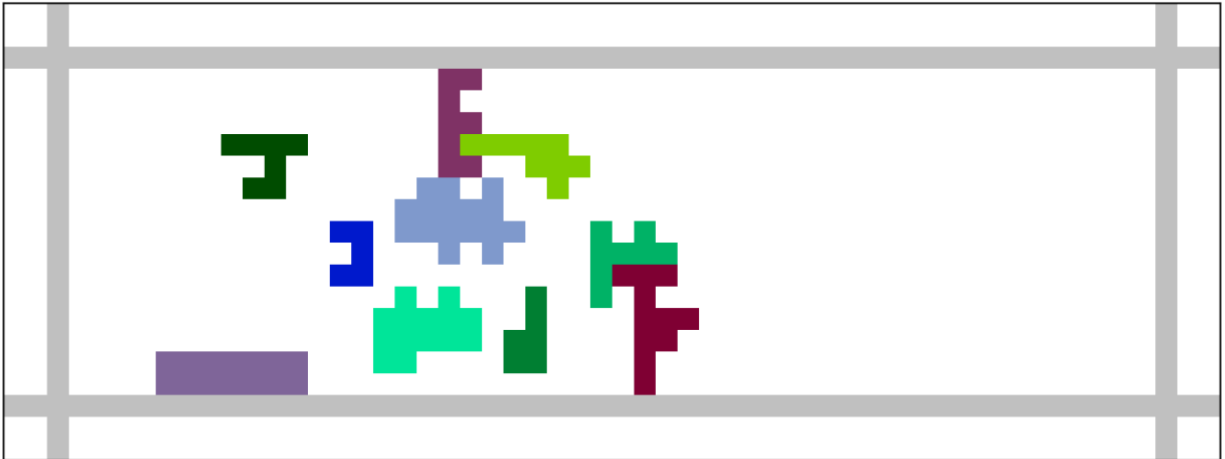
data/1a/easy_mystery_data.txt stdv: 1.0080138659874618

p-value: 2.0567188775943688e-35

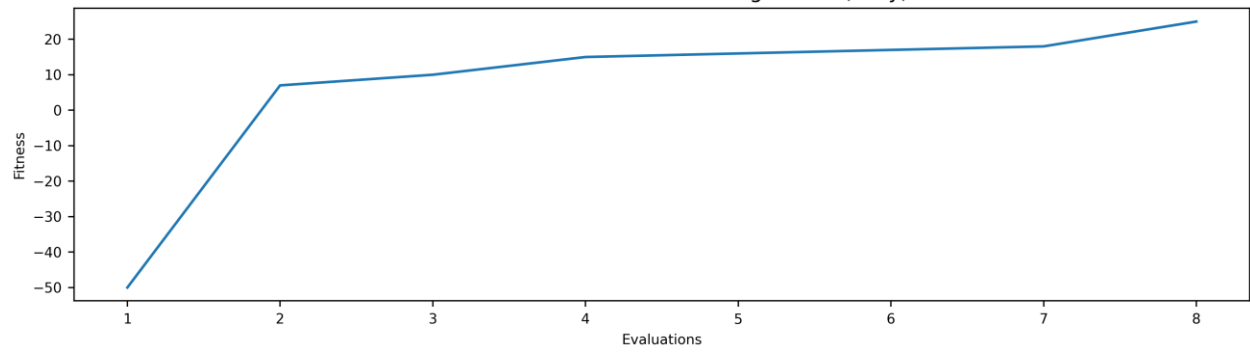
Since the p-value is really small, it means the two datasets are different. The mystery dataset shows different results and better ones, since its average is higher.

StairStep Plot

Bwst Fitness is 20 as shown down below.



Random Search Best Fitness Progression (Easy)



Distribution of Fitnesses Over 30 Runs of Random Search (Easy)

