

ALGORITHMS AND DESIGN ANALYSIS: COURSE PROJECT

Shahrukh Zarir
Pranav Yadav
Ebrahim Merchant

3D MAPS OF 2 FUNCTIONS PAGES 2-4

PERFORMANCE PLOTS PAGES 5-22

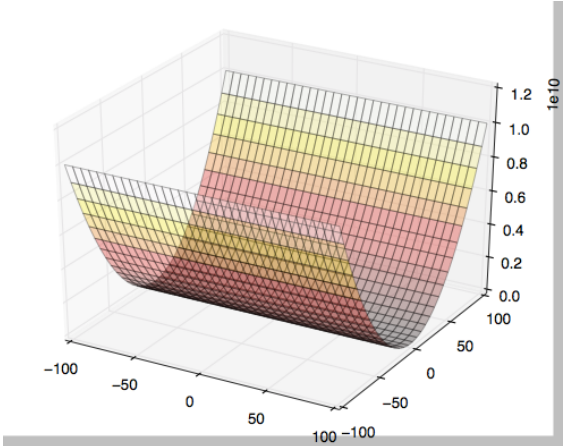
COMPARISION OF DE AND PSO PAGES (WITH SOLUTION) 23-25

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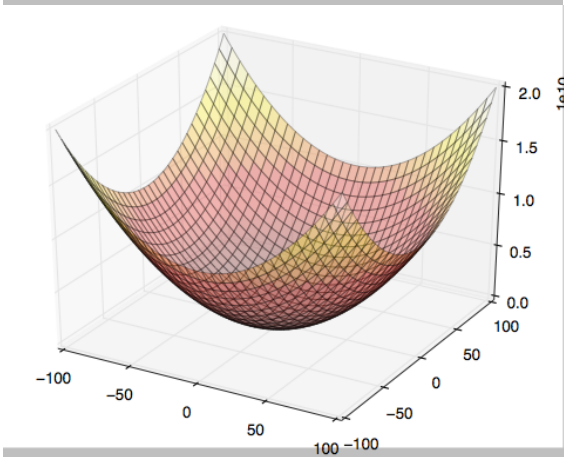
3D Maps of 2D Functions

Benchmark Functions
High Conditioned Elliptic Function

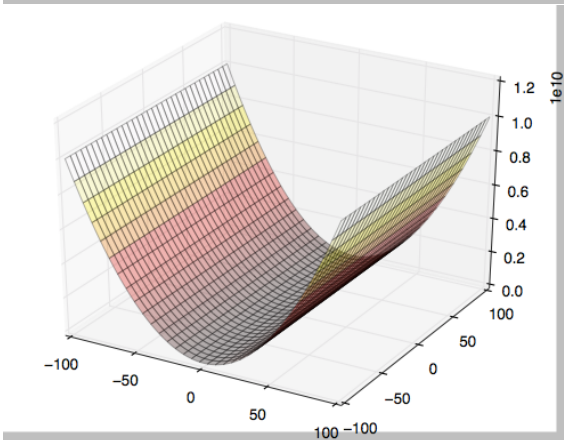
3D Maps



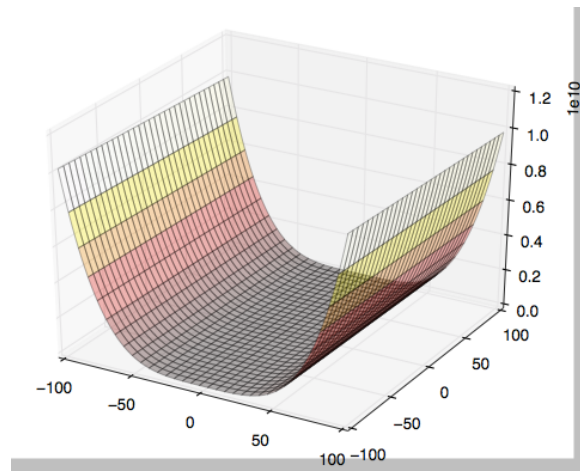
Bent Cigar Function



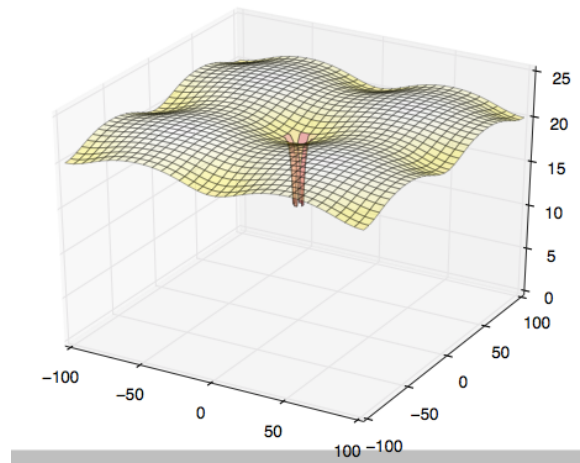
Discus Function



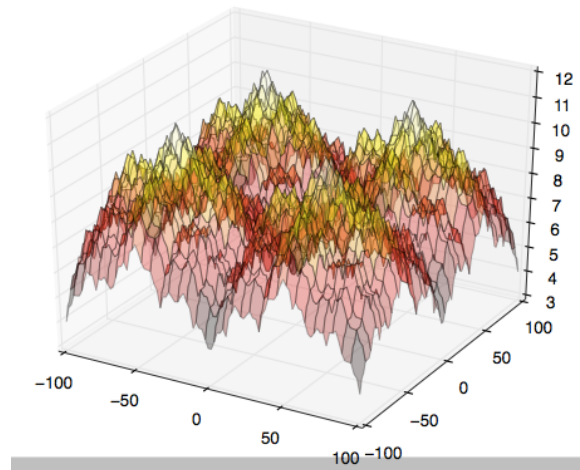
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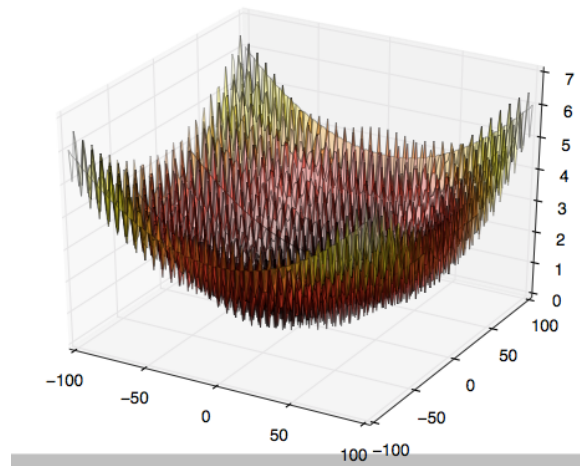
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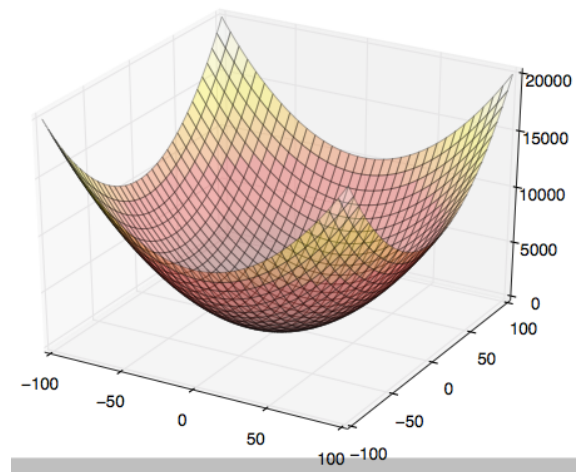
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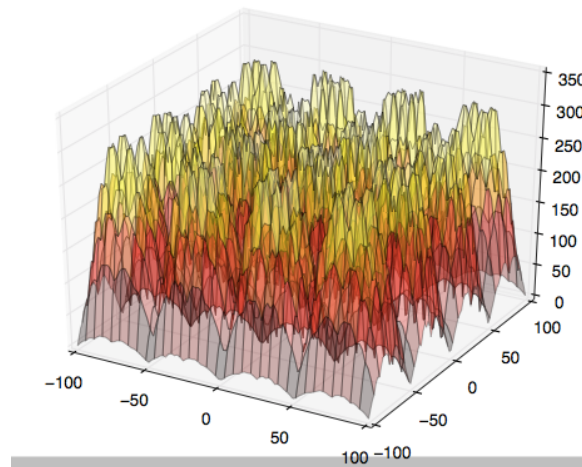
Griewank's Function



Rastrigin's Function



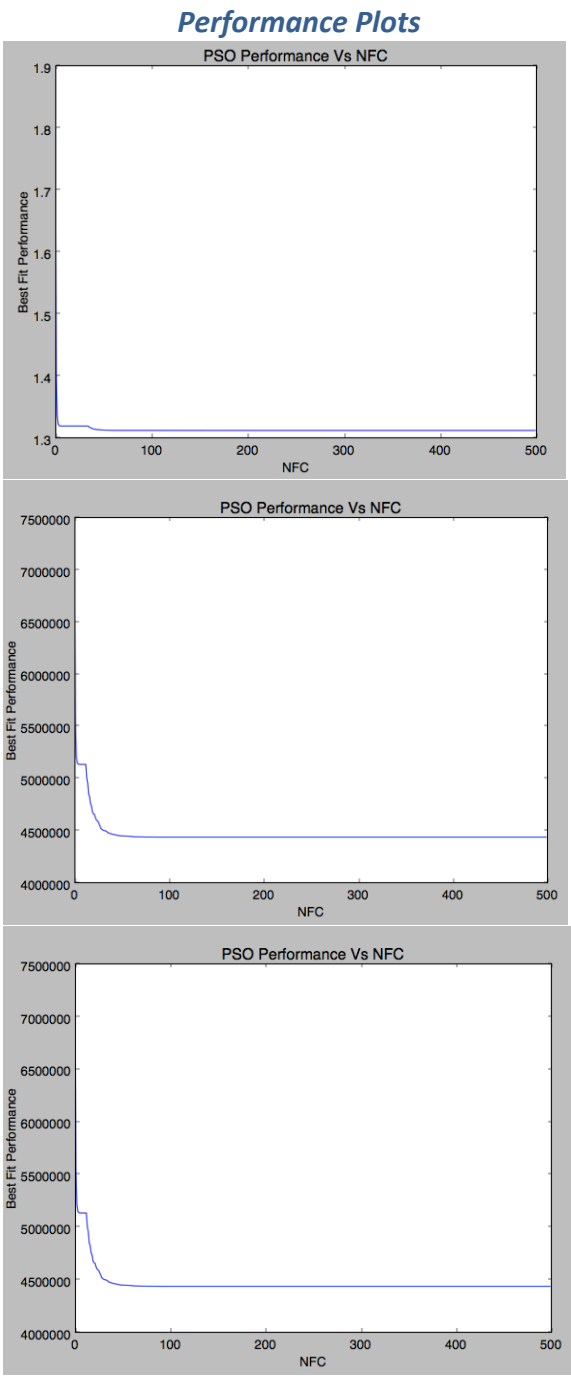
Katsuura Function



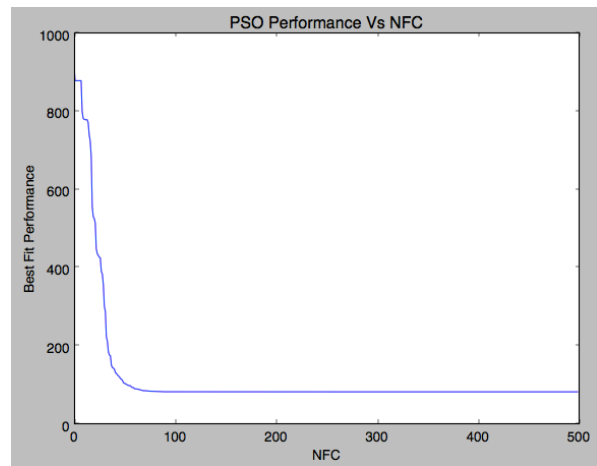
Performance Plots
Particle Swarm Optimization
Function (D=10)
High Conditioned Elliptic Function

Bent Cigar Function

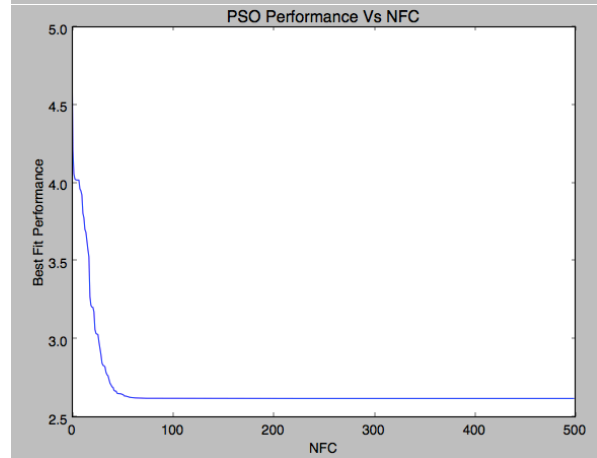
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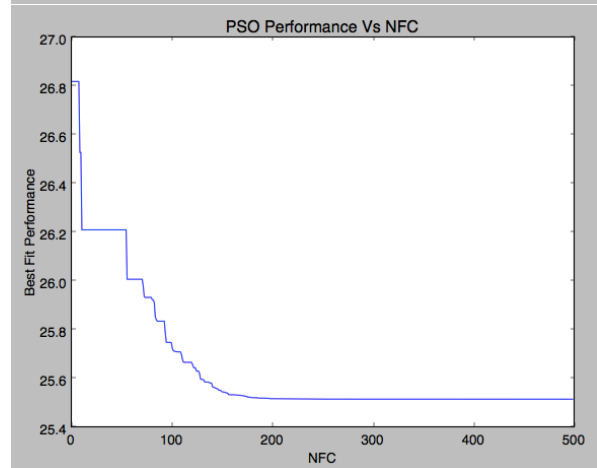
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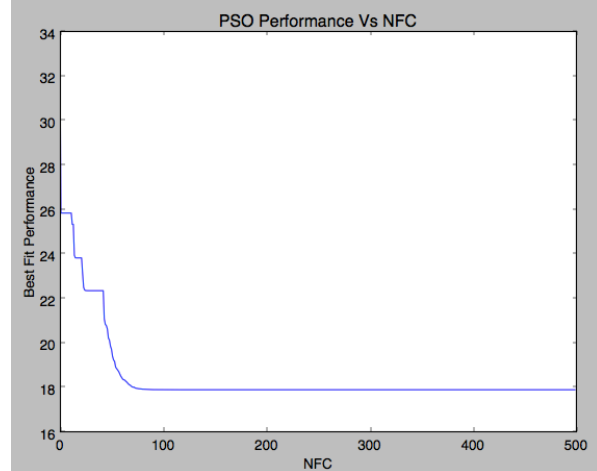
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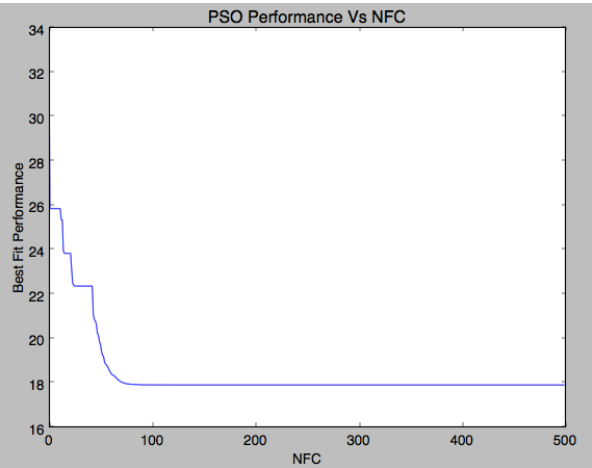
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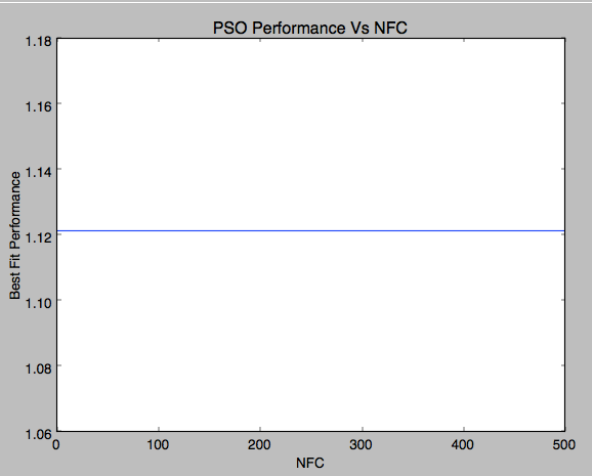
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Rastrigins Function

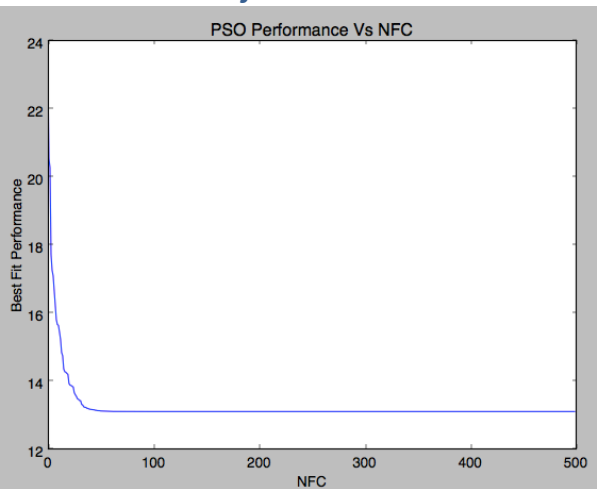


Katsuura Function

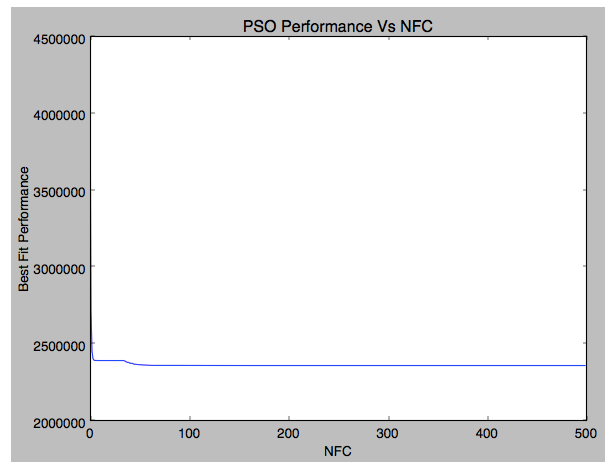


Function (D=30)
High Conditioned Elliptic Function

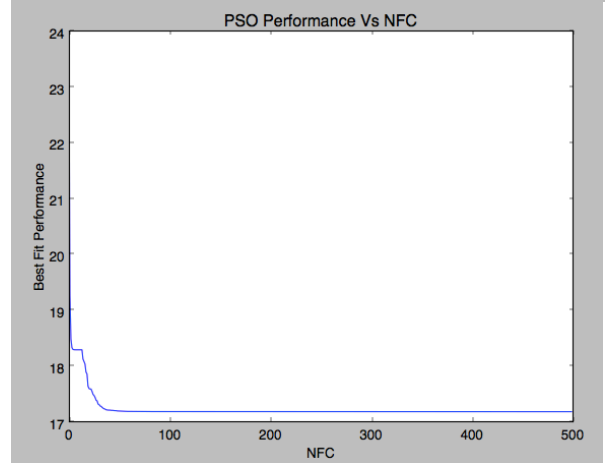
Performance Plots



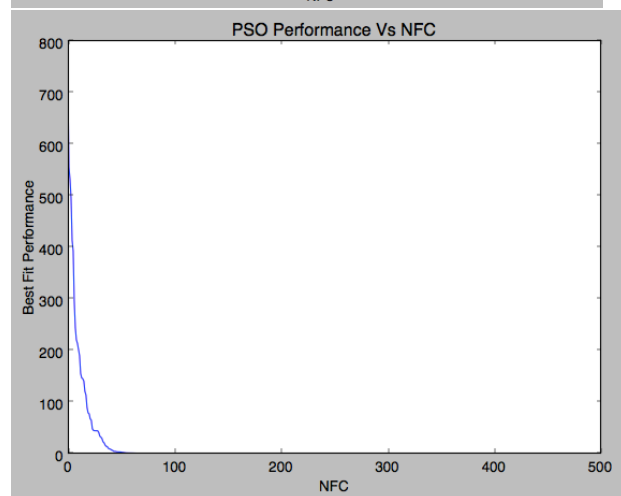
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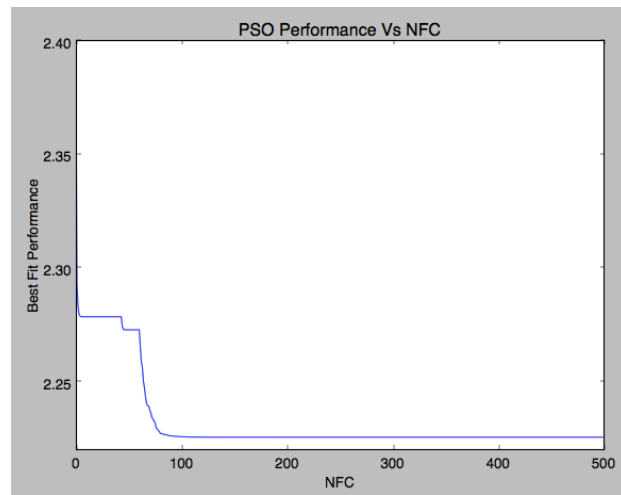
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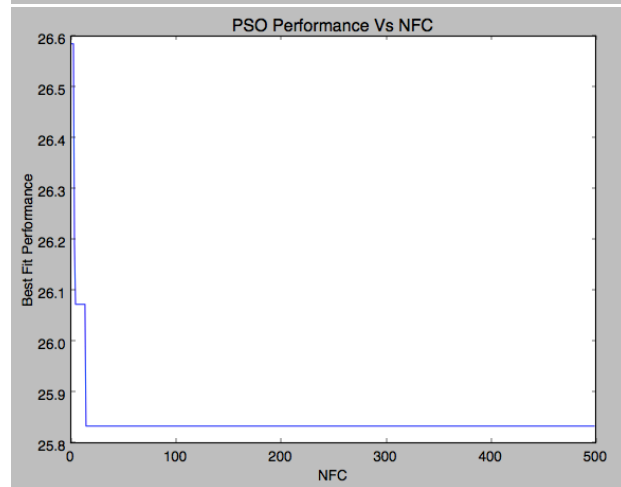
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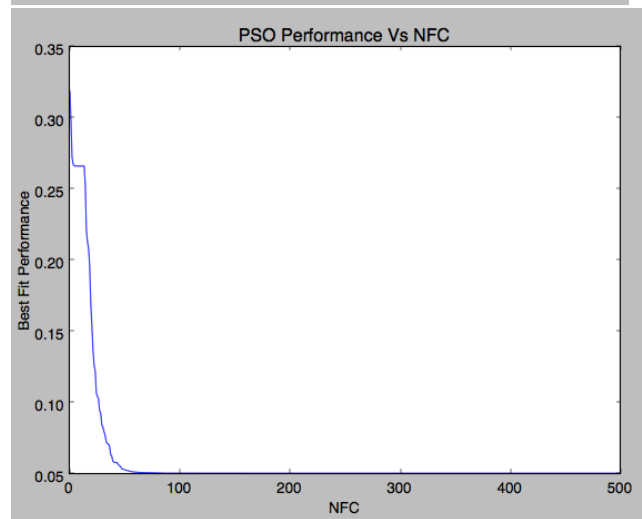
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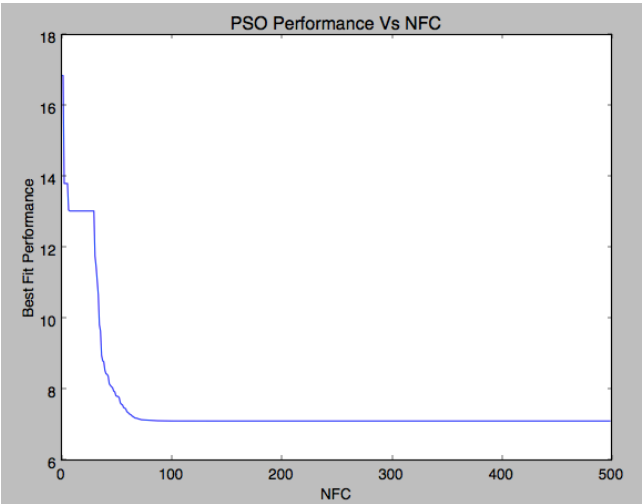
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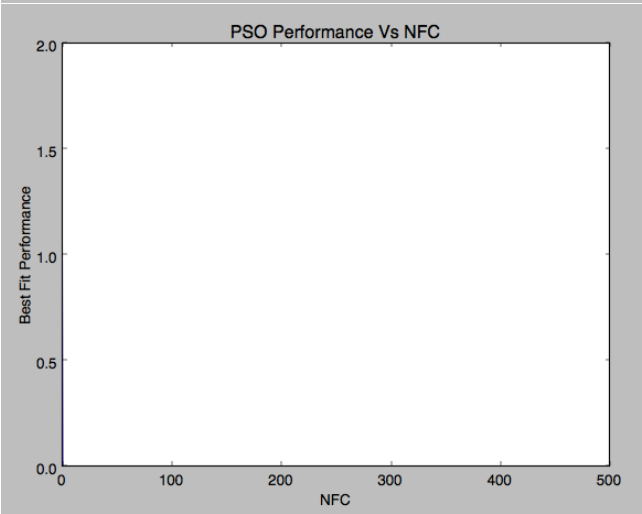
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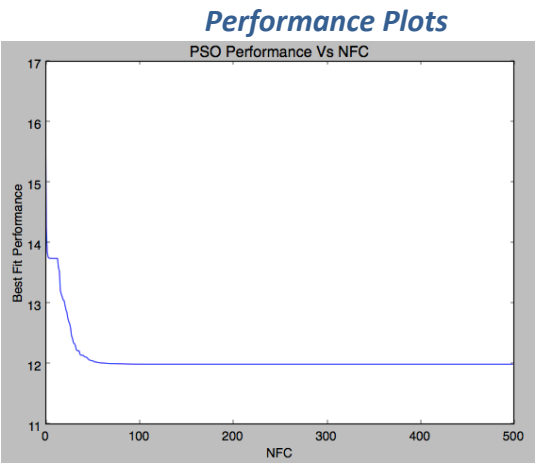
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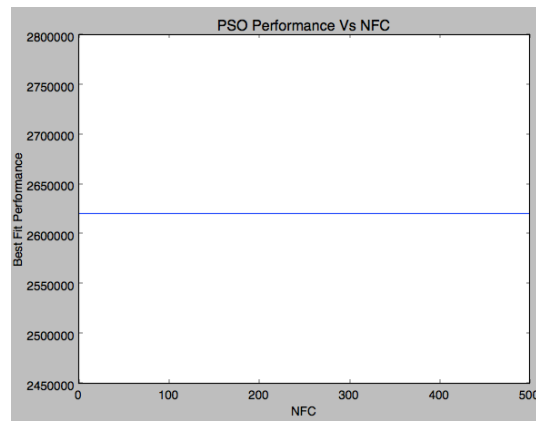
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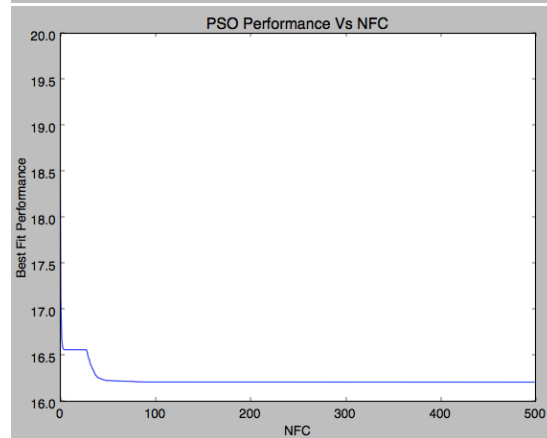
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High Conditioned Elliptic Function



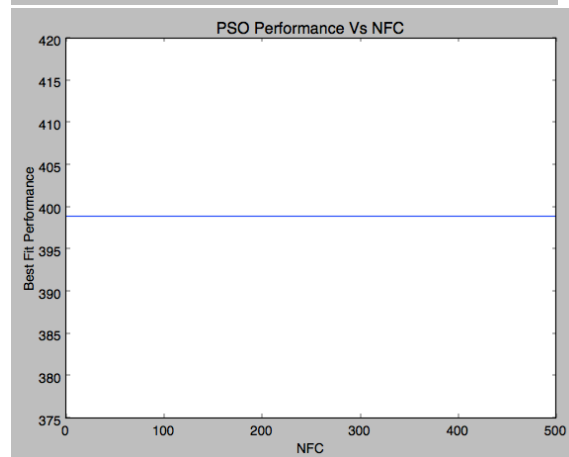
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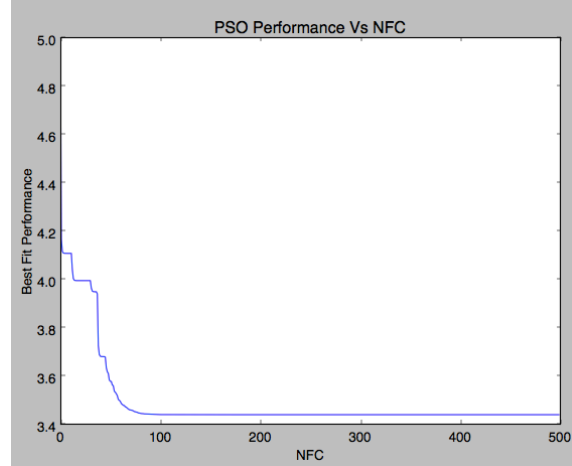
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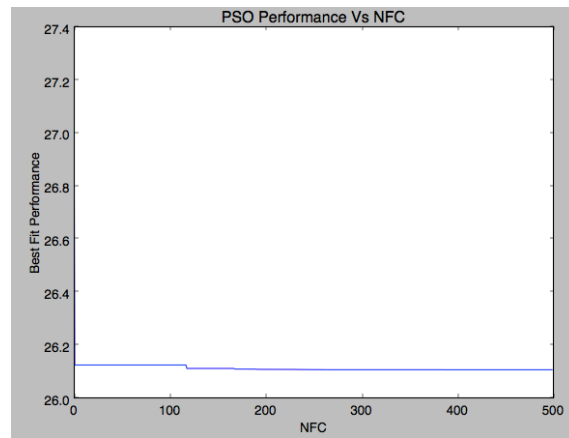
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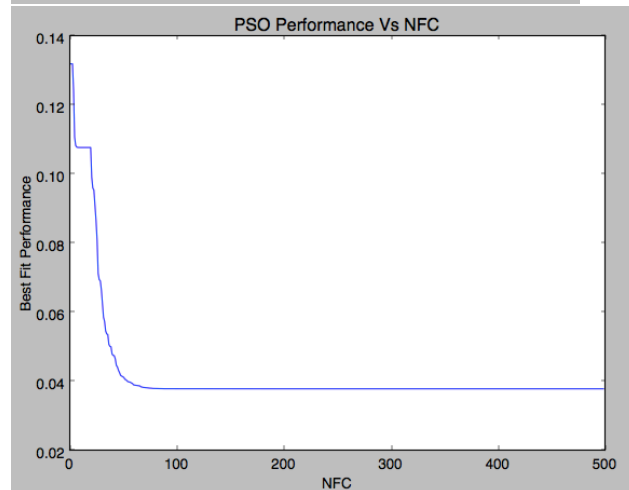
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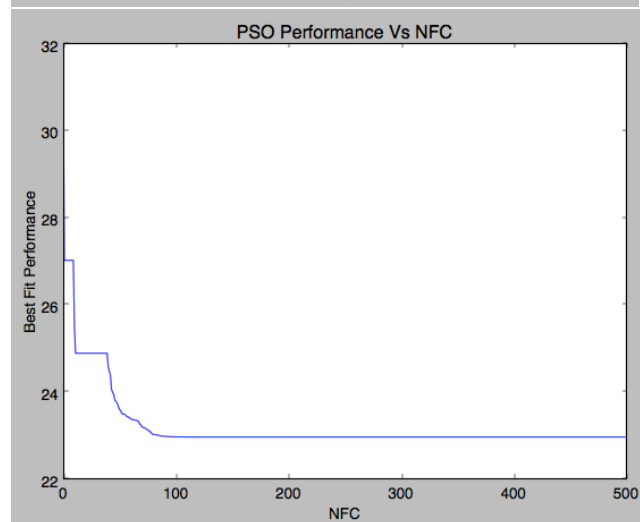
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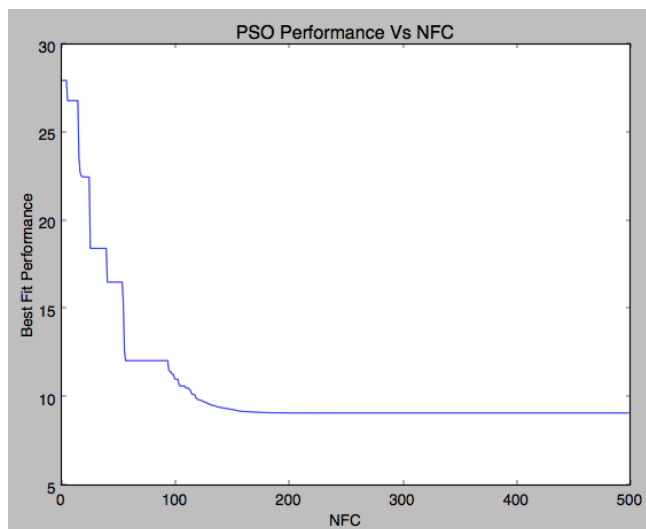
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Rastrigins Function



Katsuura Function

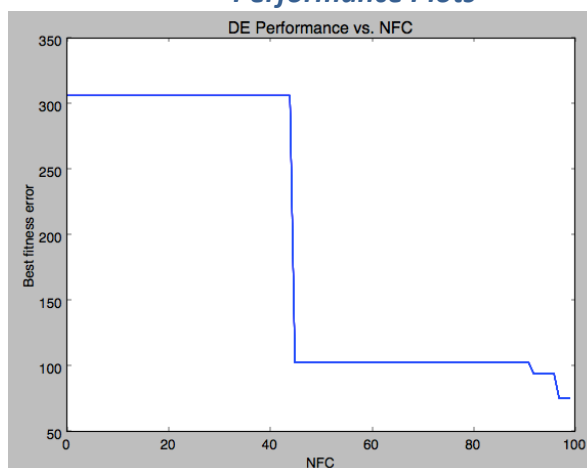


Differential Evolution

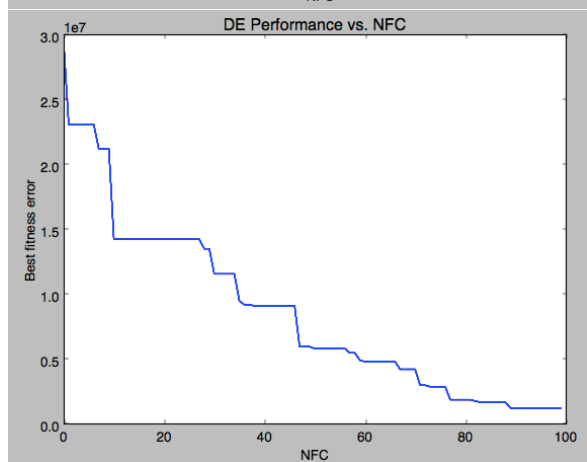
Function (D=10)

High Conditioned Elliptic Function

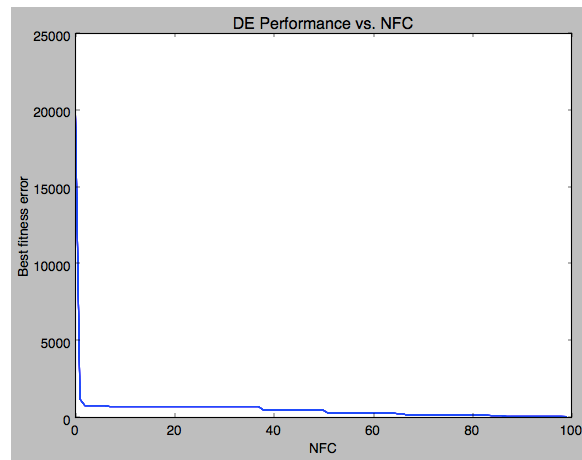
Performance Plots



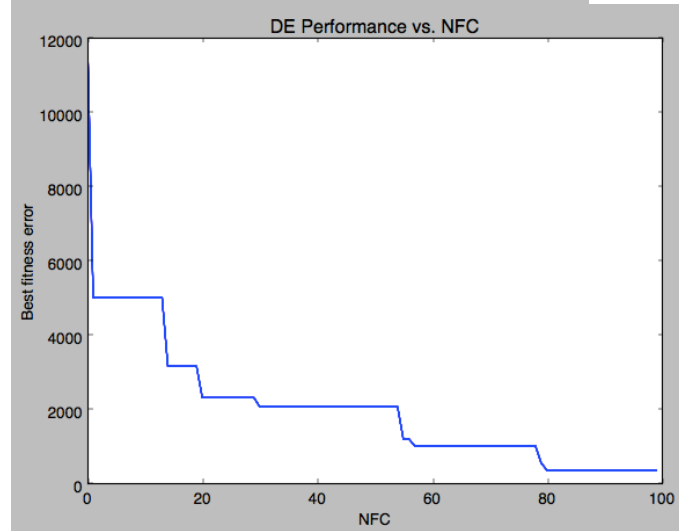
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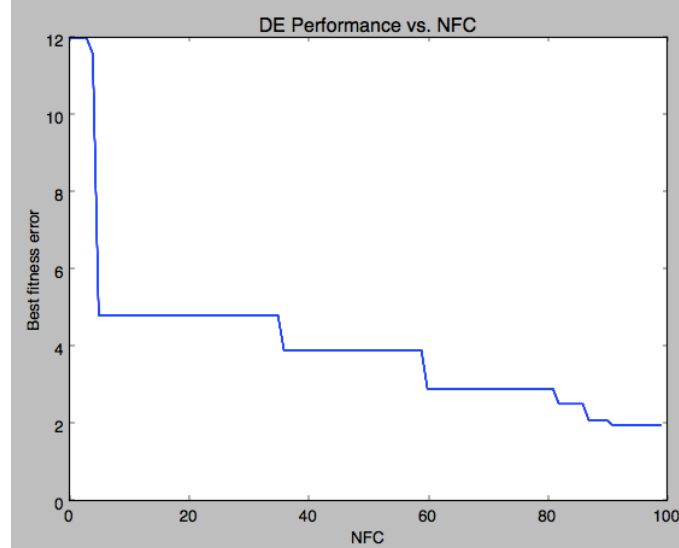
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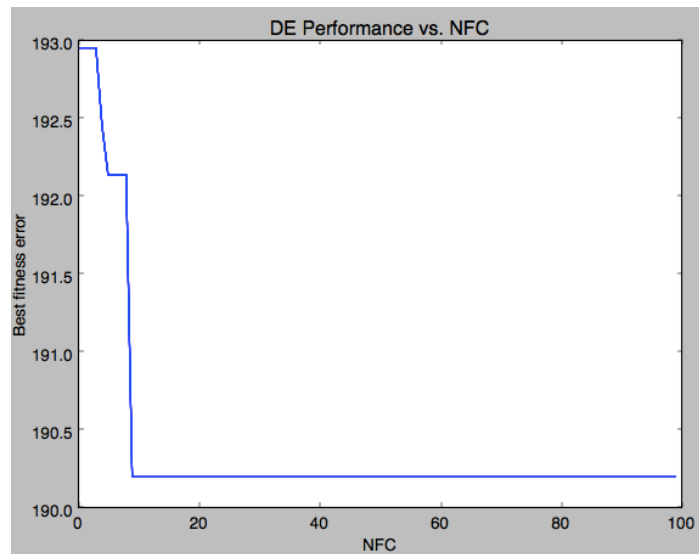
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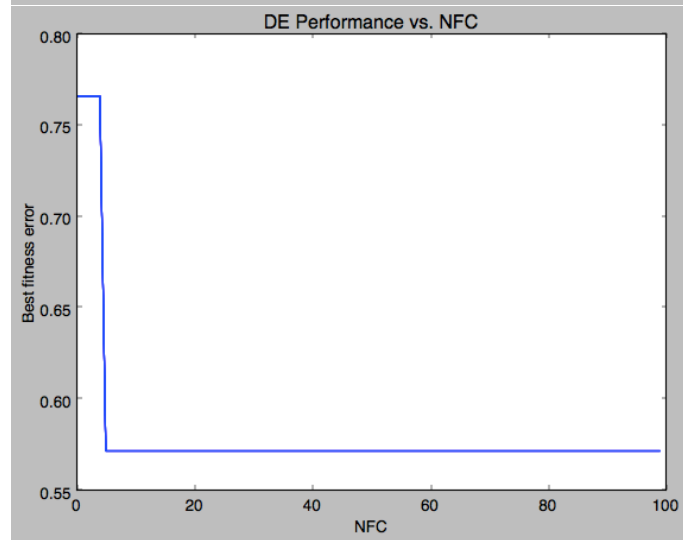
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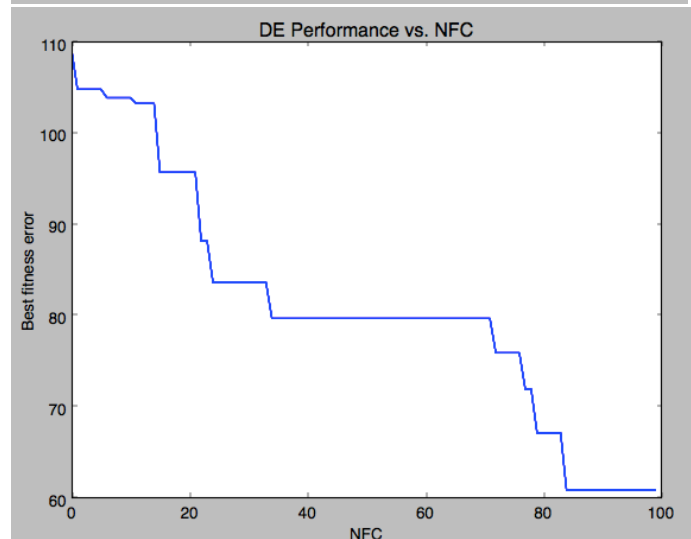
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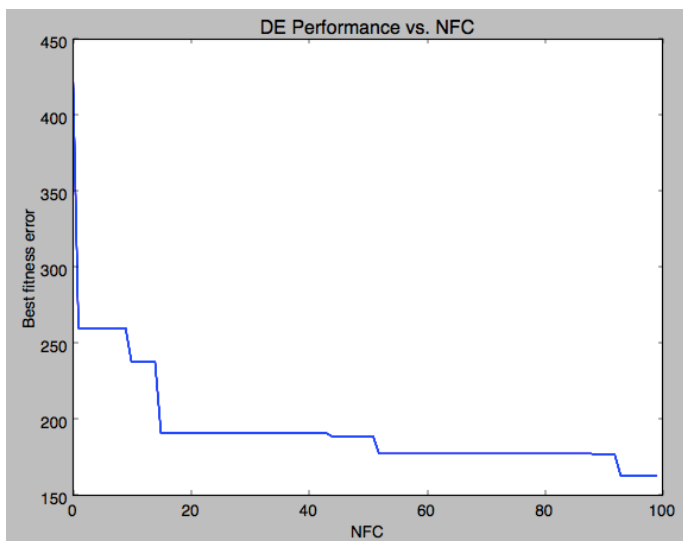
Griewank's Function



Rastrigin's Function

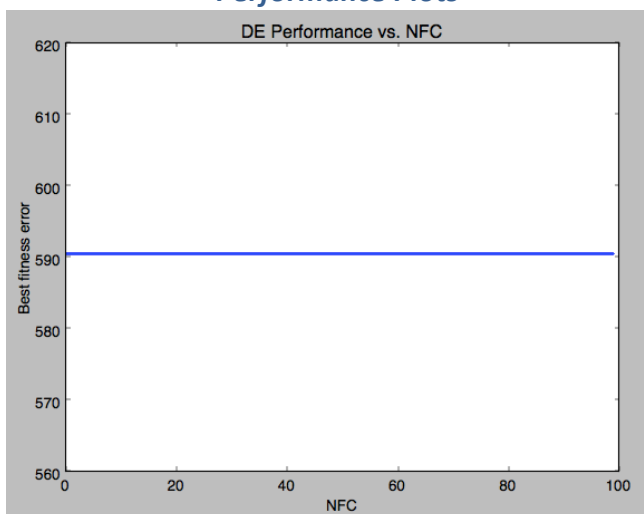


Katsuura Function

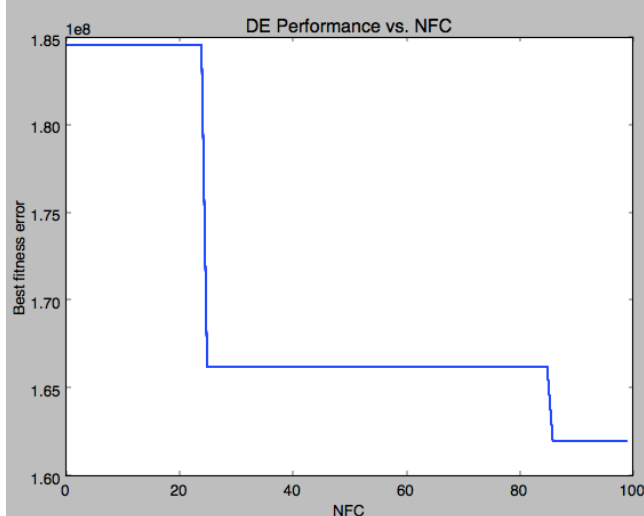


Function (D=30) High Conditioned Elliptic Function

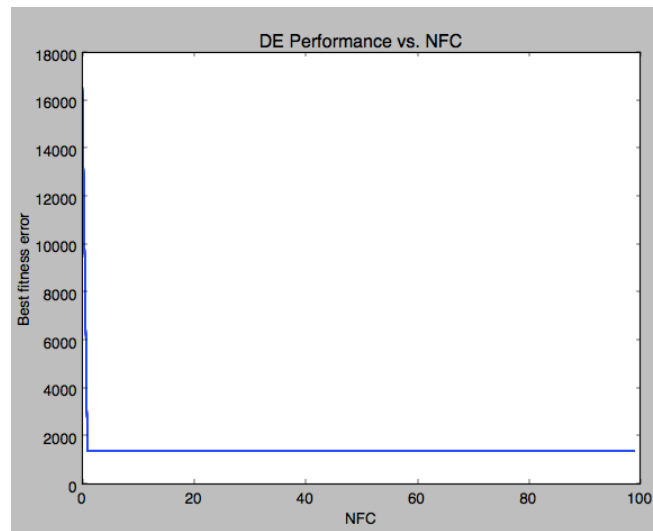
Performance Plots



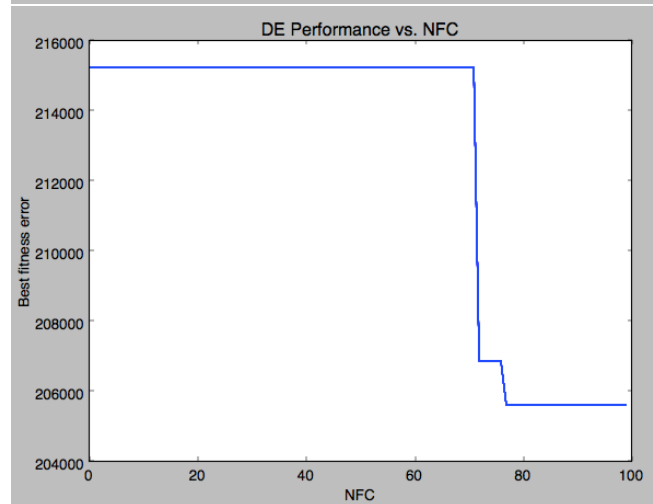
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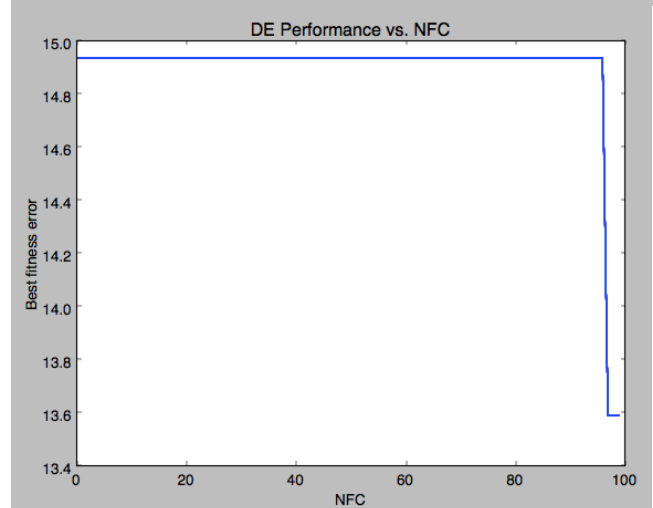
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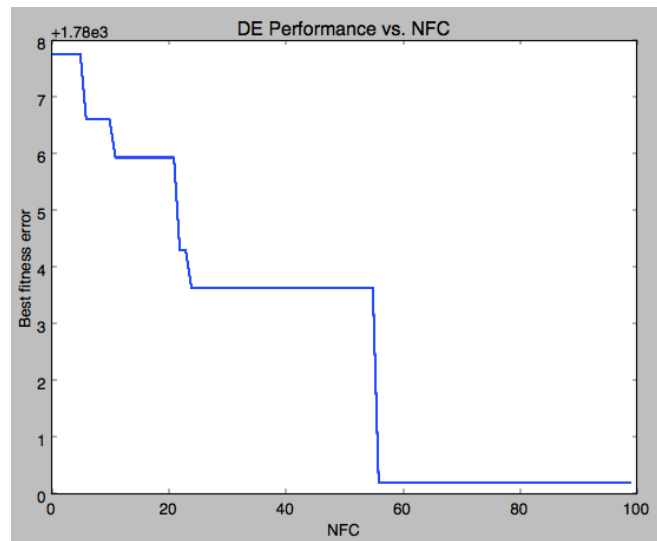
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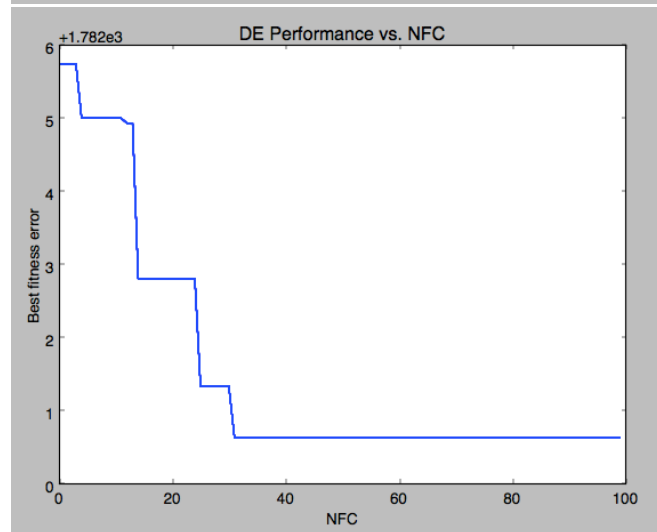
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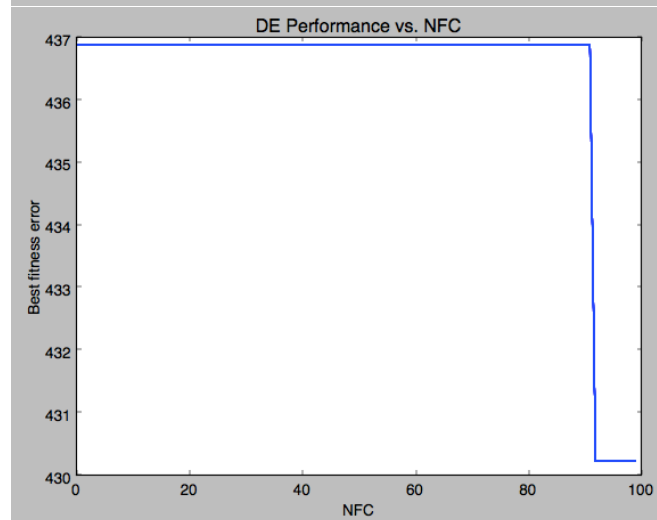
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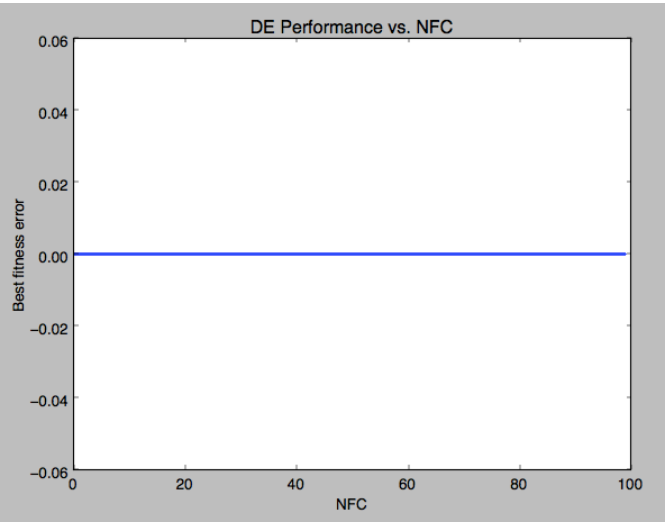
Griewank's Function



Rastrigin's Function

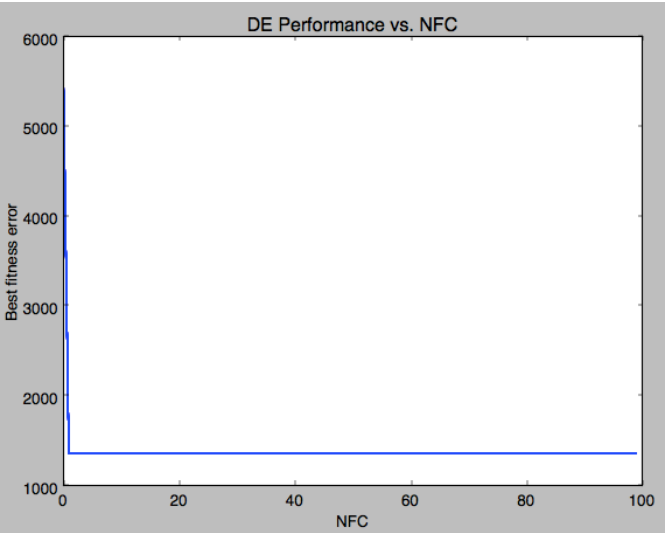


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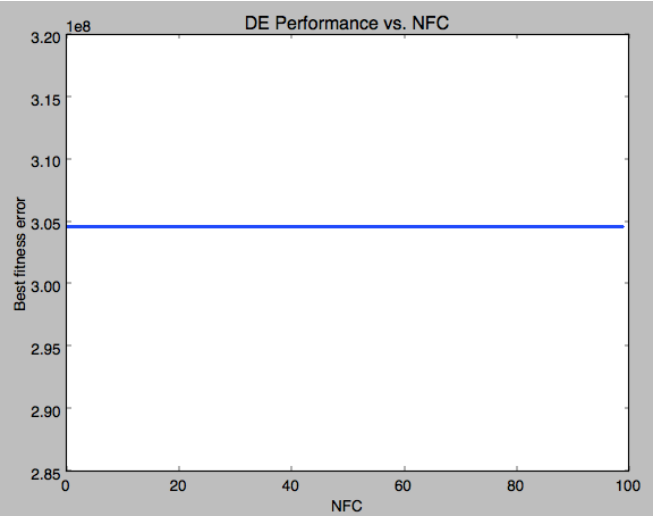


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High Conditioned Elliptic Function

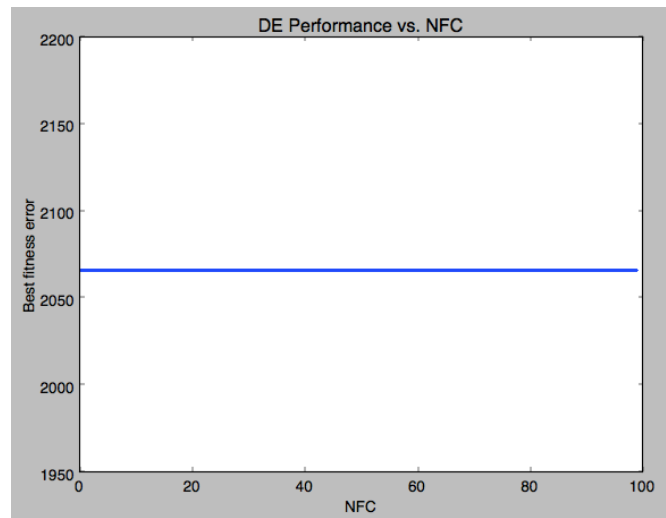
Performance Plots



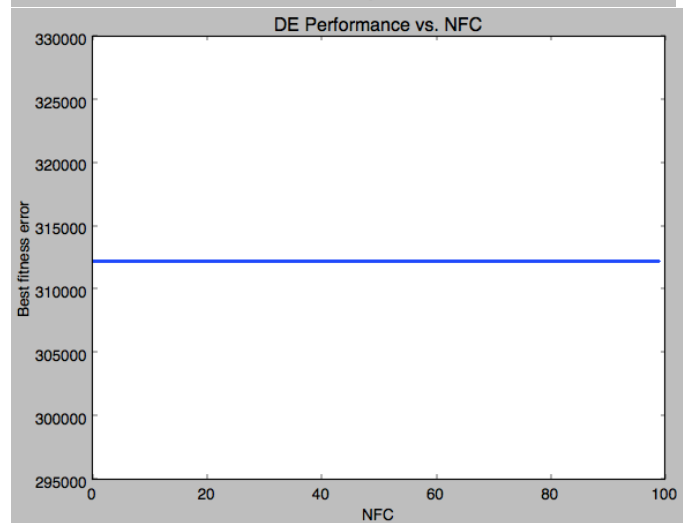
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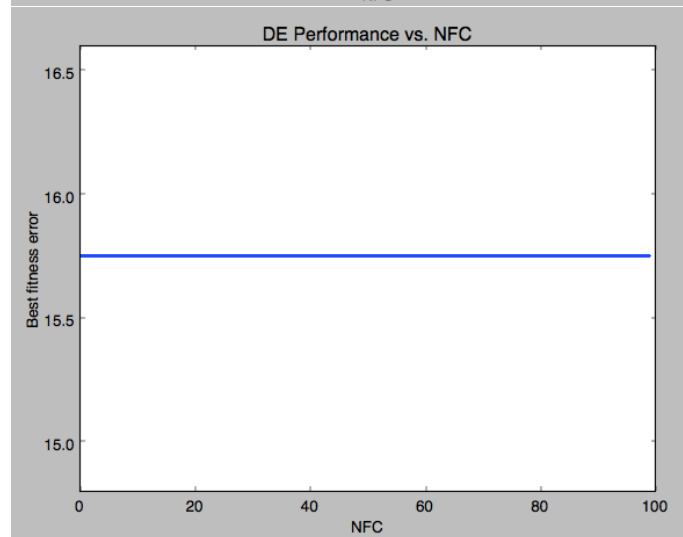
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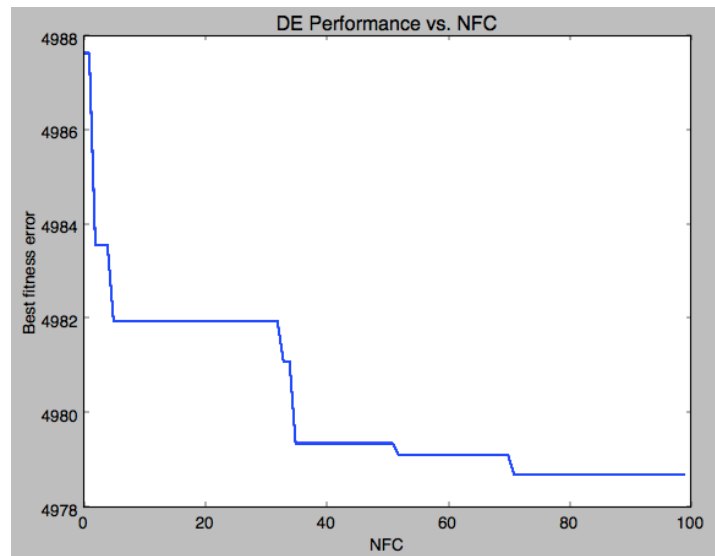
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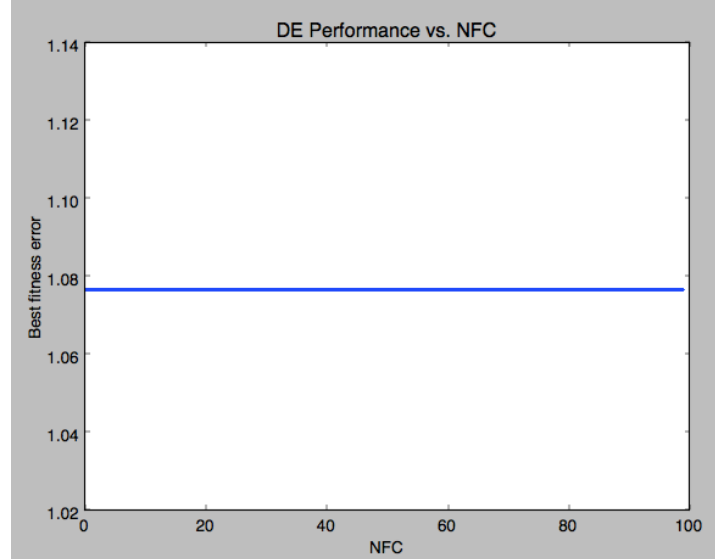
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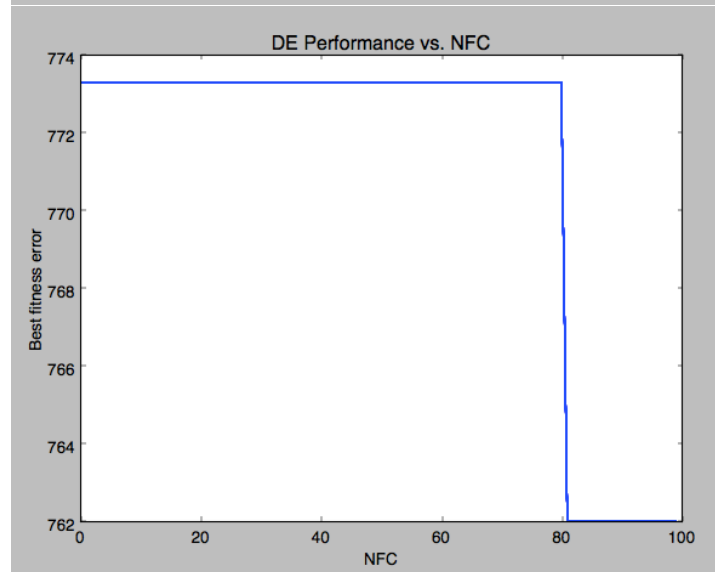
Weierstrass Function



Griewank's Function



Rastrigin's Function



Katsuura Function

