

1) Minimization $y=(x_1)^2+(x_2)^2+(x_3)^2+(x_4)^2+\dots+(x_{20})^2$ [-1.1]

a) Size of population – 100;

Size of chromosome – 20;

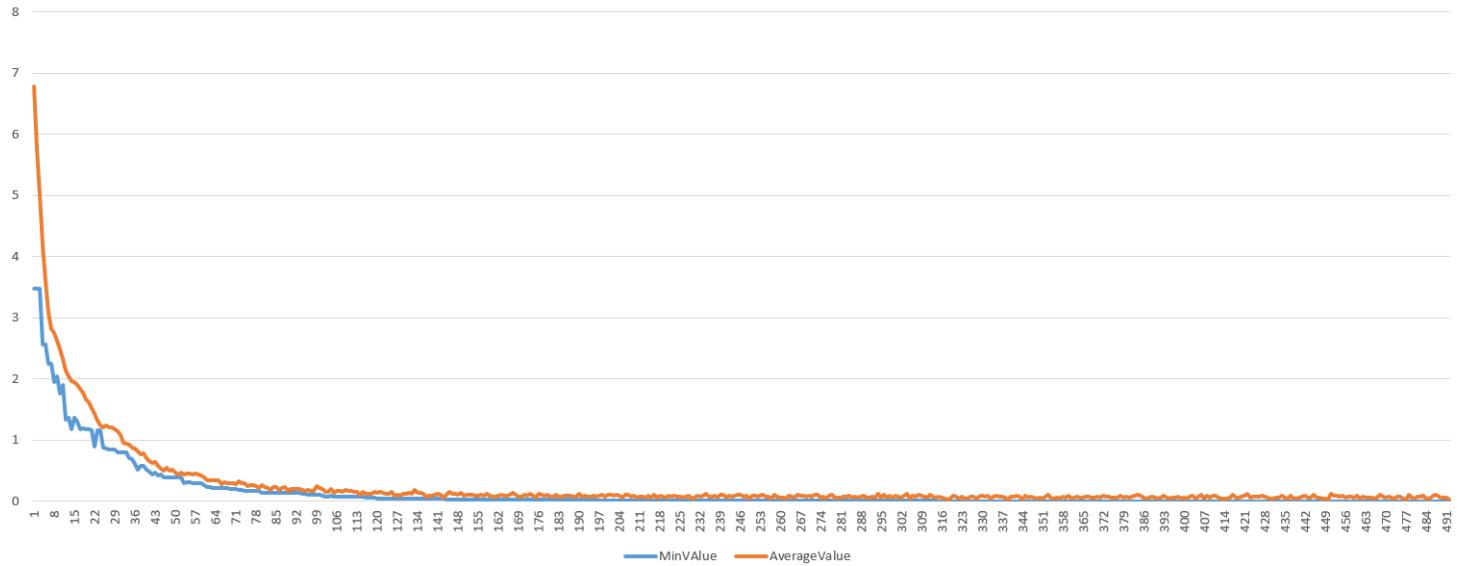
Mutation percent – 0.01;

One-point crossover with crossover point at 10;

Truncate selection mode;

Graphic:

One-point



b) Size of population – 100;

Size of chromosome – 20;

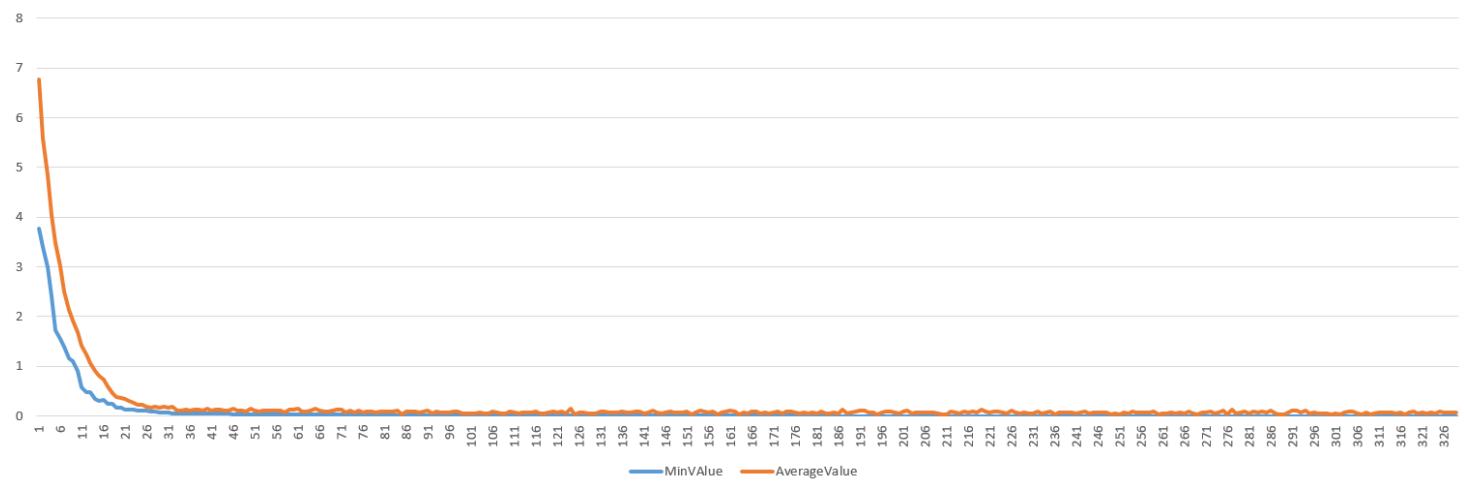
Mutation percent – 0.01;

Uniform crossover;

Truncate selection mode;

Graphic:

Uniform



2) Minimization $y=3+x^2+3\cos(2\pi x)$ $[-1,1]$

a) Size of population – 10;

Size of chromosome – 20;

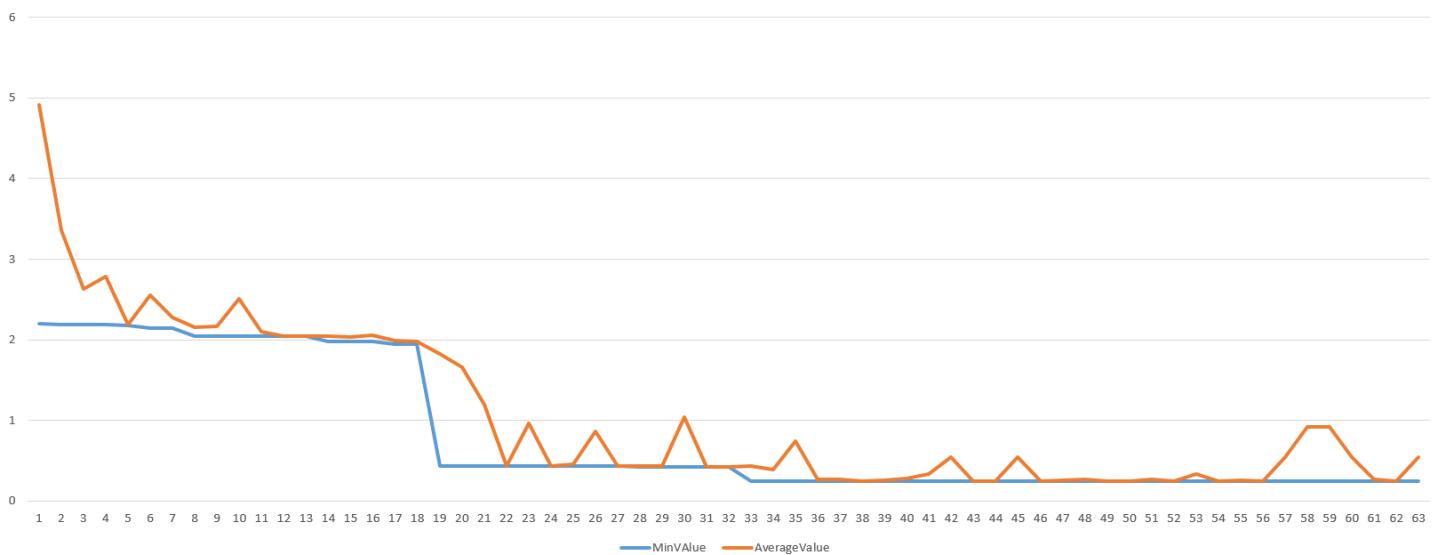
Mutation percent – 0.01;

One-point crossover with crossover point at 5;

Truncate selection mode;

Graphic:

One-point



b) Size of population – 8;

Size of chromosome – 20;

Mutation percent – 0.01;

Uniform crossover;

Truncate selection mode;

Graphic:

Uniform

