

Name Mikhail Nazarevich (Михаил Назаревич)

Chromosome size – 100

Capacity – 20;

Epoch – 50;

With mutation;

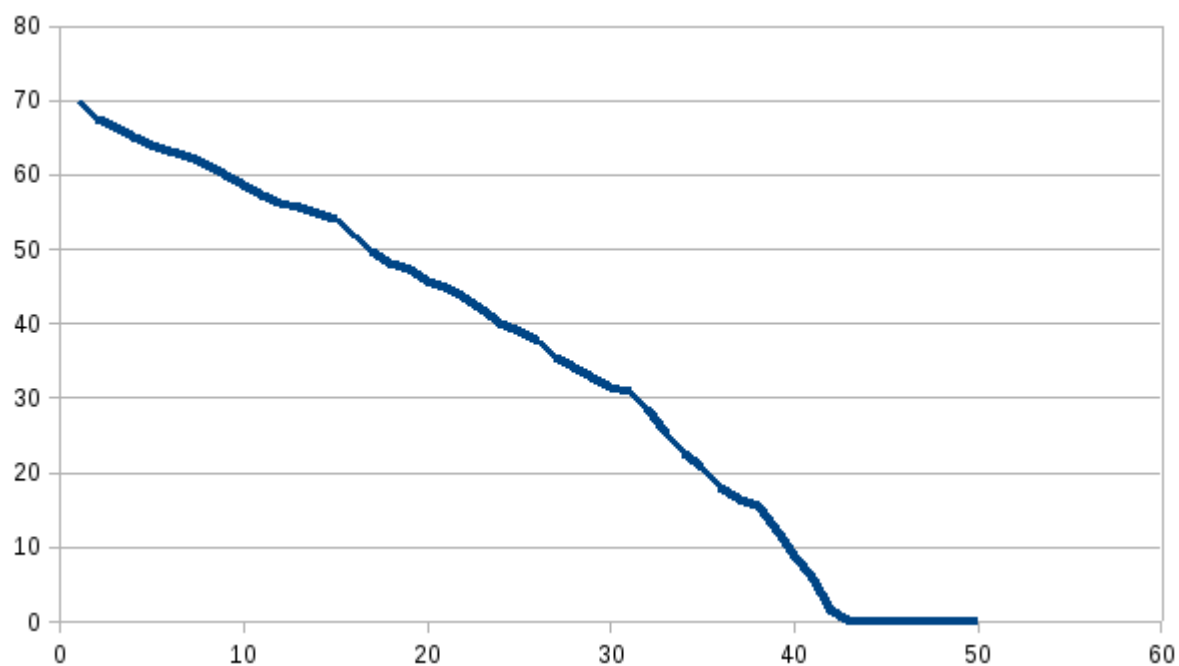
Onepoint crossover;

Truncle selection;

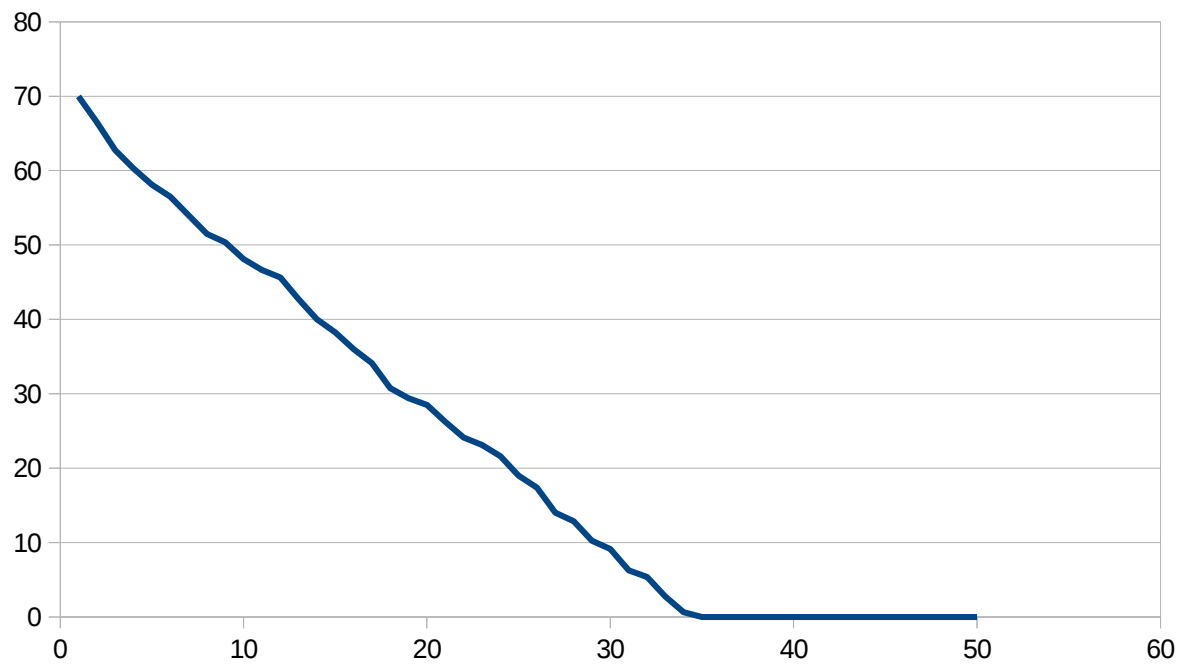
Y — fitness. If less – better

X – generations

original FITNESS



best shared fitness



Start

Population	Location	Original fitness	Shared fitness
1	830.82	748	748
2	880.554	326	326
3	764, 116	648	648
4	131, 857	726	726
5	164, 609	445	445
6	672, 772	156	156
7	573, 819	246	246
8	377, 86	291	291

Medium

Population	Location	Original fitness	Shared fitness
1	420, 620	248	350
2	330, 100	400	512
3	623, 210	548	632
4	232, 863	426	441
5	264, 619	335	450
6	433, 53	342	436
7	562, 532	234	368
8	632, 54	302	423

Finish

Population	Location	Original fitness	Shared fitness
1	459.23	648	730
2	300.554	202	432
3	200, 200	0	0
4	231, 857	526	631
5	100, 402	304	402
6	350, 772	156	262
7	800, 800	0	0
8	330, 22	280	382

Best road:

24411212341234131342444122441312132134121314411432323233223211422331441432133
11414341121334414422133124212441422324123422431241344213233224312222321322232
43211311343444333434142444243111343324134444223433341431421344144132413334122
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Conclusion: fitness sharing can help us to achieve multiple aims using genetic algorithm.