

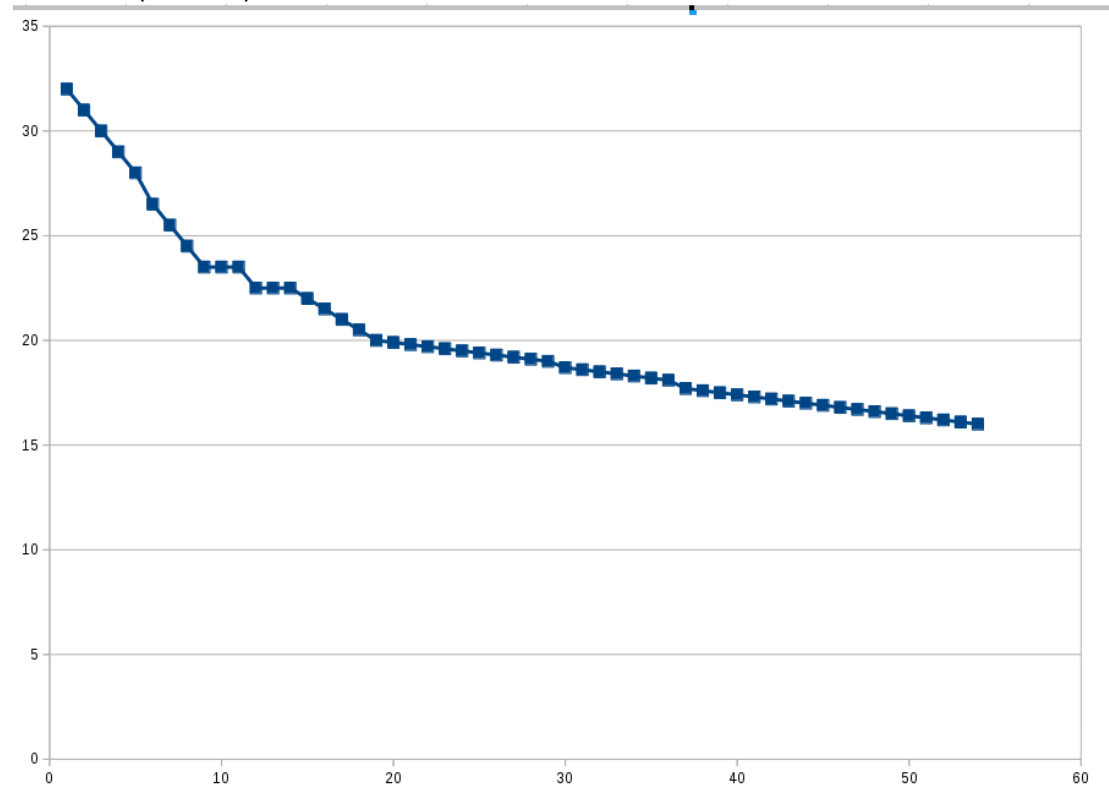
Blashuk Siarhei
Neural network learning via genetic algorithms

Size of chromosome: 30
Capacity of population: 100
Epoch (generations): 50
Mutation: 0.001
Crossover: one point
Selection: truncate

Result:

X - generations

Y - Error (misses). Then less then better



Best network first iteration:

0.8530663 0.4761082 0.41899335 0.81153756 0.24471569 0.5666825
0.69579864 0.7536532 0.76145154 0.49079472 0.028656542 0.43274075
0.8720762 0.16530687 0.75052106 0.26856112 0.1316083 0.73621255
0.12580484 0.4076637 0.23684704 0.55459726 0.7326681 0.6567558
0.61432415 0.40004617 8.188486E-4 0.33004087 0.5386001 0.65207934

0.96147645 0.5609953 0.25930452 0.9061157 0.64420587 0.74921596
0.13342124 0.77492785 0.29379952 0.31186515 0.7769912 0.15819883

Best network 10 generation:

0.17105371 0.9504347 0.65765876 0.84522563 0.9669136 0.92818654
0.91094583 0.69821864 0.6283649 0.7468279 0.2856543 0.5060072
0.8078025 0.9810648 0.74661887 0.40662366 0.7473331 0.15667313
0.27744466 0.019762993 0.7218695 0.29374993 0.9902383 0.9512133
0.15773547 0.9392897 0.18920285 0.6932786 0.2680384 0.6117037
0.84143335 0.1960234 0.8452529 0.57950604 0.7306548 0.33705372
0.56549335 0.33404714 0.48317873 0.87186253 0.7224221 0.3600455

Best network last generation: 0.3316266 0.62650245 0.2889467 0.88523906
0.67026025 0.9712524 0.40300035 0.9314183 0.39829344 0.9775874
0.9254043 0.30976856 0.22317857 0.020546317 0.19019228 0.2698782
0.18537742 0.75043935 0.061603844 0.86172885 0.6572789 0.266378
0.43180507 0.90664464 0.7590116 0.6304671 0.33543515 0.55110824
0.95917124 0.1931588 0.9565931 0.78656065 0.87183475 0.23138565
0.3342468 0.2437321 0.69409895 0.68299896 0.15765423 0.8600514
0.36736053 0.6033135

Conclusion: Algorithm can achieve only 50% accuracy (in my case). If i try to create 1000+ generation it will not helps. 16 right answers is my best result.