

2018

Xcs report

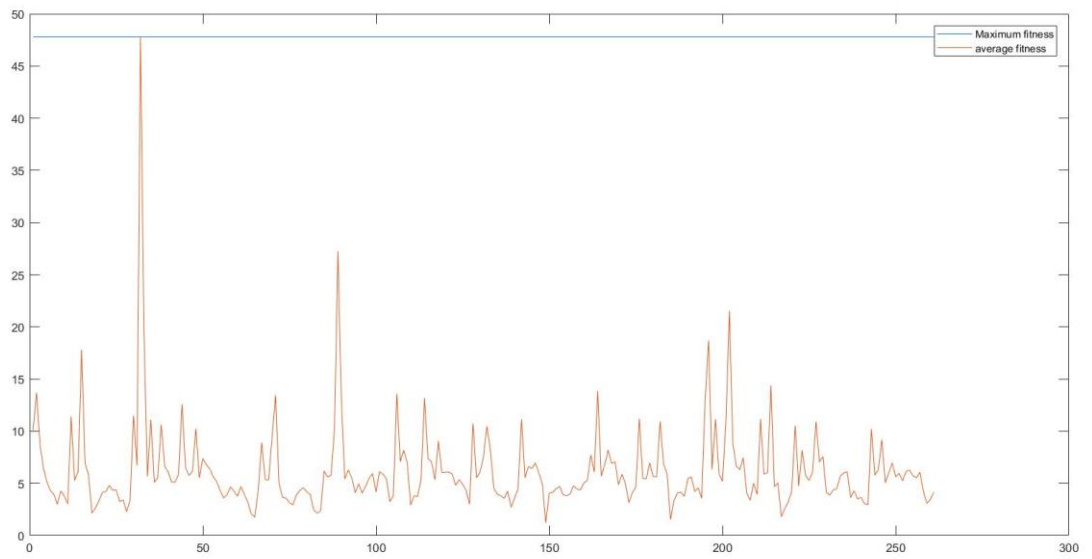
DR.SHARIAT PANAHA | XCS project

BIJAN MEHR ALIZADE-150496288

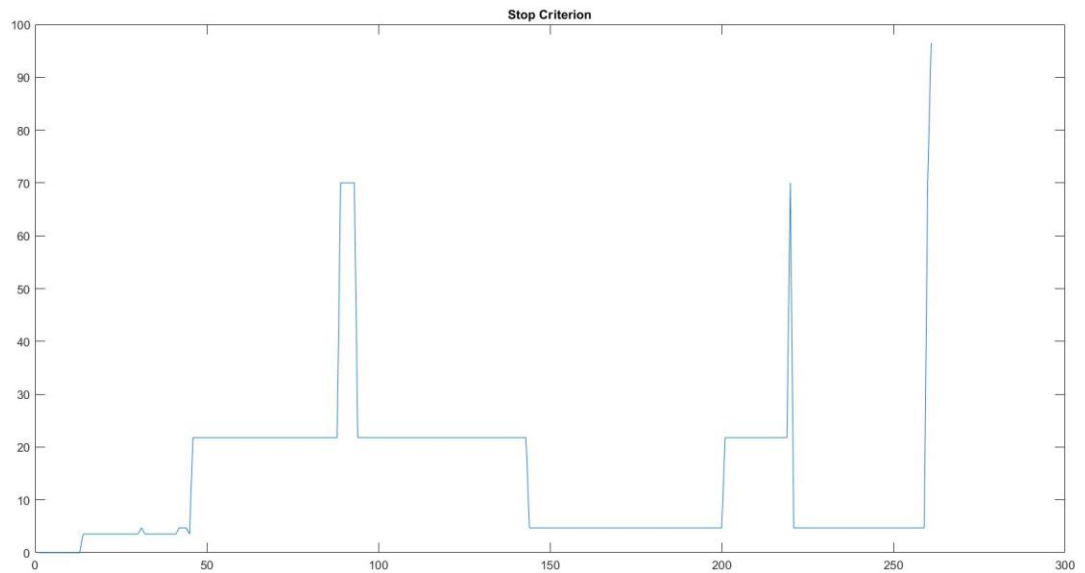
PEYMAN SHARAFIAN-150496162

parameter	value
Population size	500
Train set size	1529
Test set	170
GA threshold " T_{GA} "	23
Crossover rate	0.7
Mutation Probability	0.03
AS_{min}	2
Learning coefficient "beta"	0.6 to 0.1 (**)
Accuracy power "gamma"	5
Minimum prediction error	2.5
initial prediction	a random number of [0-20]
Initial fitness	a random number of [0-20]
Initial error (Prediction error of classifier i)	4* Minimum prediction error
Reward	a random number of [0-20]
stopping criterion	90% coverage of test set

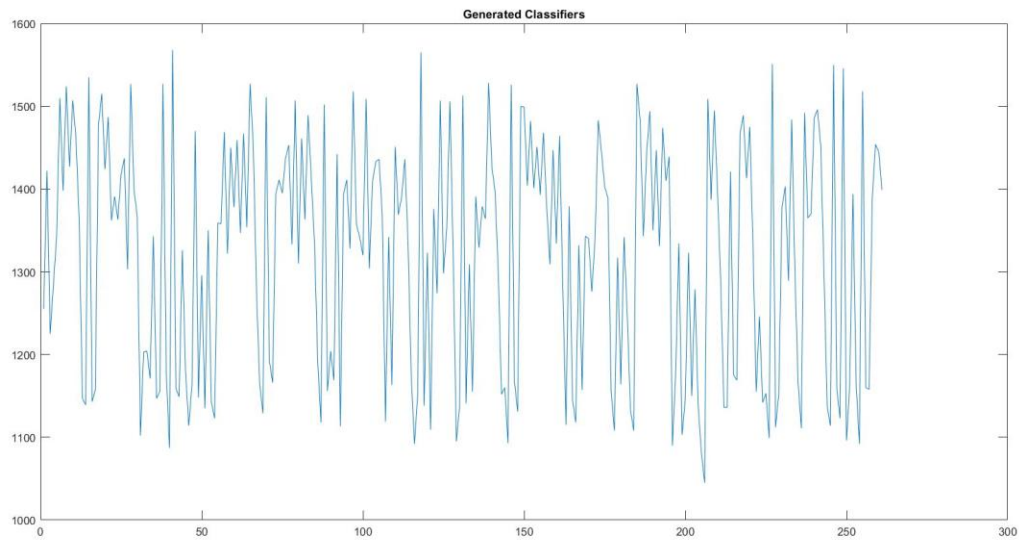
Maximum & average of fitness



Stop criterion



Generated Classifiers



(**): because in primary of epochs our training has low speed and for Improve we use different learning coefficient for the intervals of our epochs between 1 to 800 and above

$0 < \text{Beta} = 0.6 < 250$

$250 < \text{Beta} = 0.6 < 400$

$400 < \text{Beta} = 0.4 < 600$

$600 < \text{Beta} = 0.2 < 800$

$\text{Beta} = 0.1 \text{ for } > 800$