

Parameters for “A comparison of three machine learning algorithms in predicting model smells at the class level for object-oriented software” paper

MLP Parameters	
Number of Network Layers	4
Number of Hidden Layers	2
Hidden Layer Activation Function	Logistic
Output Layer Activation Function	Linear
Maximum Iteration	10000
Iteration without Improvement	1000
Optimizing Hidden Layer	1
Minimum of Neurons in the optimizing Hidden Layer	2
Maximum of Neurons in the optimizing Hidden Layer	20
Step	1
Maximum Steps without Change	4
Cross validation for the optimizing hidden layer	4 folds

GEP Parameters	
Population Size	1000
Maximum Generation	2000
Generation without Improvement	1000
Simplification Generation	500
Generation without improvement in Simplification	200
Functions to use in Expression	Addition, Subtraction, Multiplication, Division, SQRT
Mutation Rate	0.044
Crossover one-point rate	0.3
Crossover two-point rate	0.3

SVM Parameters	
Type of SVM Model	Epsilon SVR
Stopping Criteria	0.00100
Interval of Grid Search for optimal parameters	10
Interval of Pattern Search for optimal parameters	10
Tolerance	1e-008
Range of searching for C parameter	0.1 - 50000
Range of searching for Gamma parameter	0.001 - 20
Range of searching for P parameter	0.0001 - 100