Data Mining & Machine Learning F20DL

November 30, 2020

Contents

1	Variation in performance with size of the training and testing sets	1
2	Variation in performance with change in the learning paradigm (Decision Trees ve Neural Nets)	ersus 2
3	Variation in performance with varying learning parameters in Decision Trees	3
	3.1 J48	3
	3.2 Random Forest	4
4	Variation in performance with varying learning parameters in Neural Networks	5
	4.1 Linear Classifier	5
	4.2 Multilayer Perceptron	6
5	Variation in performance according to different metrics (TP Rate, FP Rate, Preci Recall, F Measure, ROC Area)	${f sion}, \ 7$
$\mathbf{A}_{ m j}$	Appendices	8
\mathbf{A}	A Appendix A	8

1	Variation	in per	formance	with	size of	the	training	and	testing	sets

	Neural No	,		

2 Variation in performance with change in the learning paradigm (De-

- 3 Variation in performance with varying learning parameters in Decision Trees
- 3.1 J48

3.2 Random Forest

4	Variation in performance	with	varying	learning	parameters	in	Neu-
	ral Networks						

4.1 Linear Classifier

1.2 Mainayer I erceptro	4.2	Multilayer Perce	eptron
-------------------------	-----	------------------	--------

5 Variation in performance according to different metrics (TP Rate, FP Rate, Precision, Recall, F Measure, ROC Area)

Appendices

A Appendix A

accuracy v. created + 85.21 02.82 NOW 0.79 0.785 0.78 0.775 0.865 0.855 0.845 0.835 0.815 0.805 0.795 0.87 98.0 0.85 0.84 0.83 0.825 0.81 8.0

Figure 1: Accuracy vs Created - Random Forest

9

Page Lof 2 ⟨ ⟨ ⟩ | ≡ | ⟨ ⟨ ⟨ ⟩ | Parameters | ⟨ ⟨ ⟩ ⟩ Importance ⊕ • Parameter importance with respect to min_weight_fraction_leaf max_features.value_log2 criterion.value_entropy min_samples_split criterion.value_gini max_features_log2 min_samples_leaf criterion_entropy Config parameter criterion_gini n_estimators Q Search

Figure 2: Parameter Importance - Random Forest

