

PS10 Mozaffar

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1 5 Tribes Table

	Tree	Log Regress	Neural Net	Naive Bayes	KNN	SVM
Optimal Parameters	Split: 47 Bucket: 9 cp:.0102	lambda: 0.181 alpha: 0.027	size: 8 decay: 0.362	N/A	k: 30	cost: 2 Gamma: 0.25
Out of Sam- ple F1	0.895	0.576	0.606	0.624	0.648	0.903
Out of Sam- ple G Mean	0.665	0.665	0.696	0.734	0.741	0.742

2 Model Comparison

For both F1 and G-Means, a higher score represents a more accurate model. Therefore, we can see that, if evaluating off of F1, the models rank as follows:

- 1: SVM
- 2: Tree Model
- 3: K Nearest Neighbors
- 4: Naive Bayes
- 5: Neural Network
- 6: Logistic Regression

space
Using G means, the models rank this way:

- 1: SVM
- 2: KNN
- 3: Naive Bayes
- 4: Neural Network
- 5: Logistic Regression
- 5: Tree Model