

Pattern Recognition

Spring 2018

Project 1: Classification

Bonus Results

Notes

- Notice how close the k-d tree and 'other' classifier results are ($< 4\%$ difference)
- We are seeing that the choice of features is the main contributing factor for accuracy in these systems, as the k-d tree with $k=1$ approximates nearest neighbor.
- Notice also that the top systems, and top-3 systems differ when we change classifiers; some models are fitting the feature space better than others. With RFs, this can be partly due to luck when randomly sampling features and training samples. Choice of parameters (e.g., number and depth of trees) are additional factors.
- Some participants submitted incorrectly formatted files. I will update the tables when updated results are received.

Grp.	Members	k-d tree	
		Real	+Junk
7	Victor & Orens	80.36	72.69
5	Pratik & Sanyukta	79.20	
3	Shihting & Wei-yao	76.85	75.17
8	Puneeth & Parag	74.25	76.98
4	Bhavin & Dhaval	72.24	70.58
10	Gavin & Maksim	60.71	67.02
6	Dharmendra & Sanjay	51.47	54.60
1	Tappan & Saurabh	51.08	
14	Sunny	42.67	42.85
9	Mahshad & Sahana		

Grp.	Members	Classifier	Group's Own	
			Real	+Junk
5	Pratik & Sanyukta	RForest	84.19	
8	Puneeth & Parag	RForest	83.93	78.44
7	Victor & Orens	XtraTrees	82.67	76.83
3	Shihiting & Wei-yao	RForest	81.75	76.98
10	Gavin & Maksim	SVM	81.66	75.90
9	Mahshad & Sahana	RForest	74.30	73.43
1	Tappan & Saurabh	RForest	71.87	
14	Sunny	RForest	58.55	60.65
6	Dharmendra & Sanjay	N.Bayes	36.55	32.51
4	Bhavin & Dhaval	RForest		

Grp.	Members	k-d tree		Classifier	Group's Own	
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3	Shihiting & Wei-yao	76.85	75.17	RForest	81.75	76.98
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