

## Machine Learning Class

### Project 2

### Experiment Results

#### Decision Tree

Criterion	Max Depth	Accuracy	Precision	Recall	F1
gini	3	0.89	0.94	0.88	0.91
gini	4	0.9	0.93	0.91	0.92
gini	5	0.91	0.94	0.91	0.93
gini	6	0.89	0.95	0.87	0.91
gini	7	0.89	0.95	0.87	0.91
entropy	3	0.88	0.93	0.88	0.9
entropy	4	0.87	0.92	0.88	0.9
entropy	5	0.9	0.93	0.91	0.92
entropy	6	0.9	0.93	0.9	0.92
entropy	7	0.92	0.94	0.92	0.93

#### Random Forest

Criterion	Number of Estimators	Accuracy	Precision	Recall	F1
gini	1	0.88	0.94	0.87	0.9
gini	2	0.9	0.94	0.9	0.92
gini	3	0.94	0.97	0.93	0.95
gini	4	0.91	0.92	0.93	0.93
gini	5	0.92	0.92	0.94	0.93
entropy	1	0.9	0.94	0.9	0.92
entropy	2	0.92	0.92	0.96	0.94
entropy	3	0.93	0.94	0.94	0.94
entropy	4	0.93	0.94	0.94	0.94
entropy	5	0.93	0.93	0.96	0.95