# Assignment 6: Artificial Neural Networks

# 1 Theory

None.

### 2 Artificial Neural Networks

### **Classification Statistics:**

$$Accuracy = \frac{correct}{correct + incorrect} = 0.9367 = 93.7\%$$

# 0.9 - 0.8 - 0.6 - 0.5 -

Figure 1. ANN Training Accuracy

# 3 The Precision Recall Tradeoff

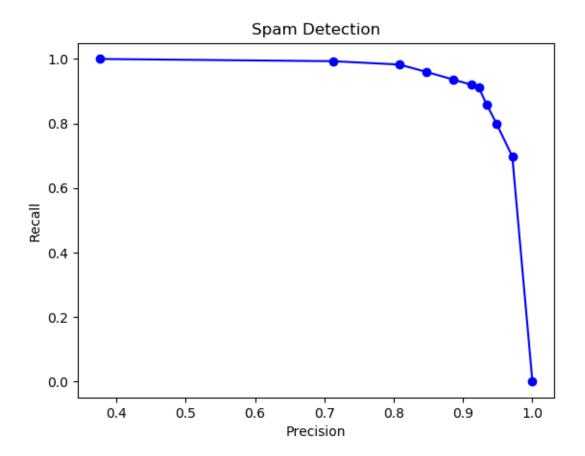


Figure 2. PR-Graph for ANN

### 4 Multi-Class Artificial Neural Networks

### **Classification Statistics:**

$$Accuracy = \frac{correct}{correct + incorrect} = 0.9138 = \mathbf{91.4\%}$$

### Multi Class ANN Training Accuracy

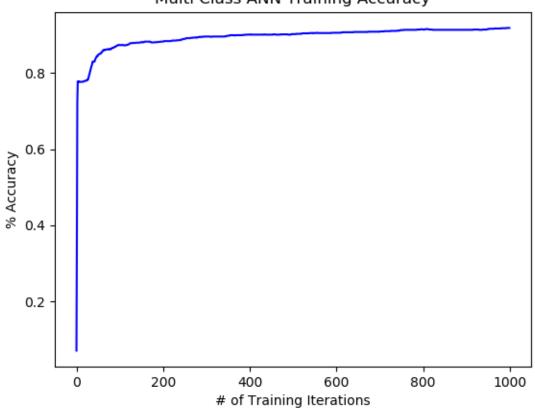


Figure 3. Multi-Class ANN Training Accuracy

## 5 Extra Credit

