

# CIS600 Fundamentals of Data and Knowledge Mining

## **Week 4 Model Performance Evaluation**

### Discussion Questions

1. Why do we need a dedicated discussion on model performance evaluation?
2. What are the methods for evaluating true model performance in an unbiased way?
3. What are the metrics for evaluating classification model performance? Why do we need any metrics other than accuracy?
4. False positives vs. false negatives? Scenarios: spam email detection, cancer diagnosis kit, criminal justice system
5. Additional topic: Receiver Operating Characteristic (ROC) and Area Under Curve (AUC). What are they and why do we need them?
6. Q&A