

## **EAS 508 (Section 002): Homework 2**

**Due October 15, 2021 by 11:59 PM**

**Notes:** The homework should be submitted via UBLearn. 25% of the grade will be removed for each day late (that includes 12:00 AM October 16, so make sure that you give sufficient time to submit). We do not want to see code. That is, the coding is not the end result, but is a means to answer the questions. We are interested in the answers and how you understand the techniques.

### **Questions:**

1. Discuss four evaluation metrics for regression models. Show examples using the "REGRESSION.csv" and any regression learning technique we learned in the class in your discussion. **(6 Points)**
2. Discuss five evaluation metrics for classification models. Show examples using the "CLASSIFICATION.csv" and CART in your discussion. **(7 Points)**
3. What is feature scaling? Why is it essential? Show examples. **(5 Points)**
4. What is the Receiver Operating Characteristic curve? Why is it essential? Show examples. **(7 Points)**