# ISyE6501x GT Introduction to Analytics Modeling

Week 1 Homework

Date: 05/18/2018

**Question 2.1**

Describe a situation or problem from your job, everyday life, current events, etc., for which a classification model would be appropriate. List some (Up to 5) predictors that you might use.

Recently I am looking for an apartment that is close to my work place. The price of the monthly rent is different depending on various factors. For example, the price is higher for a 1 bedroom 1 bathroom apartment, compared to a studio. In additional, the price is higher if the room is furnished and the utility is included in the rent. By building a classification model for the apartment rent, I am able to predict the monthly rent based on the predictors. Then I can compare the predicted monthly rent to the actual rent price, and find the most desirable apartment.

The dependent variable of this model is the monthly rent price.

The independent variables (predictors) for this model are: number of bedroom, number of bathroom, apartment size in sqft, furnished/unfurnished (binary), distance to work location.

**Question 2.2**

**Included in the other attached "Week 1 HW-Question 2.2 and 3.1.txt" file. Thanks.**

**Question 3.1**

**Included in the other attached "Week 1 HW-Question 2.2 and 3.1.txt" file. Thanks.**