**Problem Set**

**Conjoint Analysis**

**AEM 6700, Fall 2016**

**Due: Wednesday November 16, 2016**

Consider the In-class Activity #5 (“What attributes drive the demand for Smart TVs”). Start with the excel database *TV\_Choices\_data*. Then do the following:

1. Run the STATA code *TV\_Choice.do* and obtain the parameter estimates.

2. Clearly explain what was done in the STATA code in term of i) data manipulation; and ii) modeling. That is, show that you understand the code. It is important that you understand how the data was manipulates; this is one of the objectives of the in-class exercise.

Once you obtain the parameter estimates, please answer the following questions:

3. Please provide an interpretation of the results just using the parameter estimates from the logit model.

4. Calculate the importance of each attribute in this conjoint design (make sure you show your calculations)

5. Suppose that the current product (baseline for comparison) is brand=Samsung, screen size=40, 3D=yes; price=500. Consider tradeoffs between the attributes ‘price’ and ‘screen size’. Answer the following questions:

i) In average, how much are consumers willing to pay more to increase the screen size to 50?

ii) In average, how much is the price reduction that consumers would expect if the TV does not have the 3D feature?

6. Determine mark for brand=Sony, size=40, price=400, 3D=no. When doing this, please consider that the choice set is:

* brand=Samsung, size=50, price=600, 3D=yes.
* brand=Samsung, size=30, price=400, 3D=no.
* brand=Sony, size=50, price=500, 3D=no.

7. IN one paragraph, please explain the relationship between conjoint models and Discrete Choice/Random Utility Theory.