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Decision-aid Methodologies in Transportation Spring 2014



## EXERCISES SESSION 4

The purpose of this lab is to compare the different specifications of Multinomial Logit (MNL) models you tried in the exercises session 3 with some given examples and improve your best model by applying a non-linear specification of the utilities and if you have time, a socio-economic segmentation.

## Question 1

Compare the different non-linear specifications and tests with the interpretations given on the course web site.

## Question 2

Consider the best model you obtained at the end of exercises session 4 and perform the following tasks:

- 1. Try a socio-economic segmentation of the constant, which is equivalent to add socioeconomic variables directly to the utilities. Is this segmentation significant?
- 2. Try a socio-economic segmentation of attributes of the alternatives one-by-one. Remember the difference between discrete and continuous segmentations. Are your segmentations significant?
- 3. Try a socio-economic segmentation of all parameters. How do you test if this segmentation is significant? Is a socio-economic segmentation of all parameters relevant?

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