Case 1. Predicting Consumer Choice

Residents of the north suburbs of Sydney, Australia can commute to downtown Sydney by car or train. Their choice of transportation mode will be due, in part, to the time and cost of commuting by car and train. On the day of the Journey to Work Survey, Sydney commuters indicate their primary method of transportation (car or train) and their best alternative method of transportation (car or train). For both the chosen and alternative methods, 333 commuters provide time and cost estimates for all trip components by car, train, bus, walking, and other modes of transportation.

The survey responses are stored in a file named “Sydney.csv”. Please download the file from CSV.

1. Build a model to predict consumer’s choice of transportation mode.
2. Evaluate the effect of price changes on consumer’s choice.

Case 2. Who are going to leave next

Why are our best and most experienced employees leaving prematurely? Have fun with this database and try to predict which valuable employees will leave next. Fields in the dataset include:

* Employee satisfaction level
* Last evaluation
* Number of projects
* Average monthly hours
* Time spent at the company
* Whether they have had a work accident
* Whether they have had a promotion in the last 5 years
* Department
* Salary
* Whether the employee has left

1. Explore the data and understand the impact of individual factors on the employees’ decision of leaving the company.
2. Build a model to predict who are likely to leave.