Capstone Project 1: Statistical Data Analysis

The tech industry currently has the highest employee turnover rate at 13.2%. Although big tech companies like Google provide great benefits packages and amenities at the office, employees stay at google for an average of 1.1 years. I am hoping that this analysis of employee attrition will help companies look into other variables that may cause employees to leave the company like job involvement, and environment satisfaction. What variables cause employee attrition?

Some of the variables that may contribute to employee attrition are age, relationship status, years working and the years at the company. After doing some hypothesis testing and a couple of t-tests I found that the variables age, job satisfaction, total working years are significant.

There are some significant variables that are correlated with each other. The correlation plot shows that years at the company, years in the current role, years since last promotion and years with the current manager are all correlated with each other. Job level and monthly income are also correlated with these four variables. Age is correlated with job level, monthly income, total working years.

Most of the correlations shown on the plot are in between dependent variables such as years at the company, years in the current role, years since last promotion and years with the current manager depend on each other along with job level and time spent at

the company. I think some of the most important tests that we could use are linear

hypothesis testing and the difference between means.