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April 8, 2022

STAT 287

Project Check-in #5

**Working Title:** What Factors Drive Employee Turnover?

**Summary**

The goal of our project is to figure out which factors about employment lead to a higher employee turnover. Our data set contains fields such as salary, time since last promotion, time with same manager, stock option amount, and other benefits. Then, the same people were asked later if they stayed at that company. This field will be used as our dependent variable in our machine learning models.

**Major Activities Planned for This Week**

1.     Finalize one or two machine learning algorithms to include in our final analysis

2.     Include a comparison of the accuracy of these algorithms

**Major Activities Accomplished This Week**

1.     Finalize one or two machine learning algorithms to include in our final analysis

2.     Include a comparison of the accuracy of these algorithms

**Open Challenges and Questions**

* We are currently using two methods to predict our boolean dependent variable. Logistic regression and K nearest neighbor. Do you think it may be worth trying other classification techniques like decision trees or a search vector machine?

**Major Changes to Research Plan**

* No big changes to our plan. Our hope is to finish up our python script and start working on our slides soon.

**Revised Week by Week Timeline**

**Week of Apr 11**

1.     Finalize one or two machine learning algorithms to include in our final analysis

2.     Include a comparison of the accuracy of these algorithms

**Week of Apr 18**

1.     Prepare for presentation