sddec18-13: Asset management - Financial Factor Discovery - "Value"
Week 3 Report
February 8 - February 14

Team Members
Carter Scheve — *Communications Lead*
Nathan Hanson — *Project Progress Tracker/Manager*
Caleb Utesch — *Meeting Scribe*
Jack Murphy — *Research Analyst*
Samuel Howard — *Lead Engineer*
Alex Mortimer — *Project Manager*

Weekly Summary
This is the third weekly report for our Senior Design team, containing information about the events that have transpired within the last week. Our project has reached the beginning of the research stage, so we have been busy delegating the different types of machine learning models to the members of our team and learning about them from there. It is a slower time in the development process since we are all trying to become proficient with the techniques needed to implement models for our data, but there is a lot still getting accomplished.

Summary of Progress this Report
- Delegated Types of Models Amongst Group
    - Bayes Classification - Carter
    - K-Nearest Neighbors - Jack
    - Random Forest Decision Tree Classification - Alex
    - Auto-regression Models and Techniques - Sam
    - Regression - Caleb
    - Support Vector Machine Classification - Nathan
- Began Researching Models and Their Features
    - Techniques
    - Drawbacks
    - Benefits
    - Applicability to our problem

Pending Issues
Most of our group has little to no knowledge of the model type to which they have been assigned
Still no concrete deliverables for week by week progress reports
Abundance of project management and professionalism work heavily restricts our time to research

Plans for Upcoming Reporting Period
Explore Titanic scenario data analysis - Common beginning point
Continue learning about our models
Prepare a demonstration for our client for the findings we come up with

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Carter Scheve	Did some experiments with data and setup for future model tuning Setup small library to standardize data formatting and input Got more in depth into working with python Watched data science and machine learning videos on datacamp.com	10	27
Nathan Hanson	Overviewed issue/git workflow, documented process. Explored Kaggle machine learning tutorial. Became familiarized with our custom data input library. Rudimentary research on VMC algorithm for use on data set.	7	22
Caleb Utesch	Took notes during all meetings and shared with the team on google drive. Set-up local python development environment to be used throughout the course of the project. Started implementing a simple linear regression model on the given data using python data science libraries.	8	22
Jack Murphy	Continued learning with datacamp.com. Began to look specifically into the K-nearest neighbors machine learning algorithm.	8	24
Samuel Howard	Proofread and formatted project plan. Gave intro to possible models to team. Started research on autoregression techniques and models. Skimmed over the Titanic dataset.	8	24
Alex Mortimer	More Exploratory Data Analysis on the Titanic data set, started researching and learning the technique of random forest algorithms since that is the type of model I've been assigned for this introductory stage. I was out sick Monday, so I lost a bit of time there.	8	24