**Thesis Progress Report**

**Dhruv Ramesh**

**Supervisor: Prof. Hui Chen**

**Methodology:**

* Collect monthly return data of S&P 500 component companies, as of 1985, from 1985 to 2018 as well as monthly return data of Fama-French factors for the same time period. S&P 500 data is obtained from WRDS and Fama-French factor data is obtained from Ken French’s website. **COMPLETED**
* Replicate the methodology used in DeMiguel(2009) and compile initial results along multiple metrics comparing performance of equal-weighted, minimum variance and mean-variance optimized portfolios. **COMPLETED**
* Repeat above analysis but alter type of loss function used, as opposed to just using Mean Squared Error, when estimating returns. Tabulate results for 60 and 120 month estimation windows. **COMPLETED**
* Repeat above analysis again but this time for varying lengths of estimation windows, number of factors used in the estimation process and type of loss function used. Tabulate results. **Tentative Completion: November 22nd**
* Draw theoretical/intuitive and data-supported conclusions regarding the “ideal loss function” or illustrating how the situation/environment should affect the type of loss function used when estimating returns. **Tentative Completion: November 30th**
* Submit initial draft of final written report. **Tentative Completion: December 15th**