**Data 608: Knowledge and Visual Analytics**

**Summary:** Final Project Proposal Your final project is to create a public visualization using data relevant to a current policy, business, or justice issue. You may use any dataset you can find for this assignment, as long as it is either public or you have permission from the data’s owner/administrator to work with it and share it.

**Topic: Portfolio Optimization & Forecasting**

This proposal is submitted to create a financial portfolio by using selected asset classes such as EFT’s, Bonds, S&P500, Muni and Real Estate funds. Key theme of this proposal is to:

1. Visualize Historical performance as portfolio or individual asset in the portfolio
2. Visualize comparisons with in the portfolio and market indices
3. Run model to optimize portfolio performance
4. Plot predictions based on various simulations using standard algorithm

**Data Sources**

1. Yahoo Finance
2. Nasdaq & Bloomberg

Data acquisition will be done via available API’s or web scraping. This data will be analyzed by using visualization and regression methodologies.

Available time series data will be rendered and plotted to conclude portfolio performance along with the predictions.

This solution will be deployed as a shiny app.