

## **C++ for Mathematical Finance (MF703, Fall 2016)**

### **Project #4**

#### **Portfolio Optimization**

Develop a general purpose portfolio optimization application utilizing the following two methods:

- 1) Mean-Variance Frontier (Lyu's Chapter 31 and/or Bernt Arne Odegaard's Financial Numerical Recipes in C++)
- 2) Black-Litterman Method (Two papers are included)

You will need to specify input, output, and methodology required.

#### **Notes:**

You may or may not need linear algebra functionality such as matrix addition, multiplication, transpose, inverse, eigenvalue, etc. You can definitely use general purpose functions and/or classes found on numerous Internet sites.