



REQUEST FOR PROPOSAL

RFP #: OPT – S1.H1

TITLE: PORTFOLIO OPTIMIZATION

CLOSING DATE AND TIME: **FEBRUARY 7, 2020 @ 11:59 PM**

Portfolio Optimization: OPT – S1.H1

Background and Purpose

By responding to this Request for Proposal (RFP), the Proposer agrees that s/he has read and understood all documents within this RFP package.

Submission Details

Responders to this RFP should supply:

- A business report up to 5 pages, including any supporting plots and tables.
- A separate file with code.

The report should address **all points described in the “Objective” section** below.

The report, along with the code, should be uploaded into Moodle.

Objective

The Commercial Banking Corporation (hereafter the “Bank”), acting by and through its department of *Portfolio Pricing* is seeking proposals for banking services. The scope of services includes the following:

- Collecting of **daily** stock prices and **daily** returns for the following 5 stocks starting on January 1, 2019:
 - Seagate Technology (STX)
 - Fortive Corp (FTV)
 - ServiceNow Inc (NOW)
 - Gartner (IT)
 - Advanced Micro Devices (AMD)
- Using the historical volatility and mean return, optimize the daily stock strategy to minimize the risk for a return of at least 0.05% (assume $\Sigma p_i = 1$). For this you can assume no transaction costs to buy or sell stocks, so you just need to recommend what percent of a portfolio should be allocated to each stock.
- Create the efficient frontier and provide the graph, along with some strategy on portfolio options for different levels of risk.

Data Provided

No data is provided to the consulting team for this analysis. The team itself through any means it desires must gather all data.