



REQUEST FOR PROPOSAL

RFP #: OPT – S1.F

TITLE: PORTFOLIO OPTIMIZATION

CLOSING DATE AND TIME: **FEBRUARY 7, 2025 @ 5:00 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.

Upload the report, along with the code, 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:

- Recommendation of a portfolio with the following six stocks, using the **percent *daily*** returns of the closing prices from January 1, 2024 through December 31, 2024. Using the historical volatility and mean of the percent ***daily*** return rate, optimize the stock strategy to minimize the risk for a ***daily*** return of at least 0.25% (assume $\sum p_i = 1$). For this optimization, you can assume no transaction costs to buy or sell stocks. Provide a recommendation as to what *percent* of this portfolio to allocate in each stock.
 - NVDA
 - GOOG
 - AMZN
 - AAPL
 - META
 - TSLA
- Create the efficient frontier and provide the graph (report-ready graph), along with some strategy on portfolio ***options for different levels of risk (provide at least two options for a portfolio for different levels of risk)***.

Data Provided

No data is provided to the consulting team for this analysis. However, YahooFinance is a great resource.