

# Series 7

## Introduction to Computational Finance

return no later than April 26th, 2021

### **Optimal Portfolios**

In this series we deal with the closing prices of Macdonald's, Bank of America, IBM, Chevron, Coca-Cola, Novartis and AT&T, over a one-year time span extending from 2013-05-01 to 2014-05-01.

Using the data available on Moodle, draw Markowitz's efficient frontier using on the one hand the analytical expression, and on the other a random Monte-Carlo search.

Using the efficient frontier, find the weight of the portfolio with the minimal volatility. What can you say about the return of this portfolio?