Series 7

Introduction to Computational Finance

return no later than April 21th, 2020 at 8:00

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?

Report

Each student is expected to give back a personal work consisting of a report in PDF format presenting his/her results and answering the questions of the exercise, as well as the script used to generate the presented results. Both report and script have to be uploaded on Moodle (IFC/Series6).