

The MathWorks SMART Laboratory Northeastern University Collaboration Day Event

Pizza!



Friday, February 21, 2020
1:30- 3:30 pm

Pizza!



Keynote Address - Raytheon Amphitheater

1:30 -- 2:30 pm

Financial Services and Computational Finance with MATLAB



Chris Garvin
Senior Software
Engineer Manager

Financial Services encompasses an array of application areas such as investing, banking, econometric modeling and risk management. Increasingly sophisticated software tools are being developed to provide financial products that give professionals a competitive advantage in this space.

This presentation will highlight industry segments and application areas illustrating how MathWorks applies computational finance tools and solutions to this space. You will learn about asset allocation, sentiment analysis and algorithmic trading using MATLAB.

The first example will walk you through the steps to build an asset allocation strategy based on hierarchical risk parity and compare the results to a traditional mean variance methodology. Next, a deep learning model will be used to classify the sentiments of Tweets as positive or negative. Sentiment analysis is used in investment decision making. Finally, we will explore how a rule-based model is used to make trading decisions.

Bio:

Chris Garvin is a senior software engineering manager and principal software engineer leading the Computational Finance software development team. He has been at MathWorks since 1993. He has guided the development of products that serve the Financial Services and FinTech space and has been the primary developer of the Financial, Database, Datafeed and Trading Toolboxes and Spreadsheet Link. He received a Bachelor of Science in Electrical Engineering from Union College and an MBA certificate from Northeastern University.

Poster session and demonstrations - Raytheon Amphitheater 2:30 – 3:30 pm

MathWorks employees, Northeastern students and faculty will demonstrate their current work.