

Mohammed Reza Momin

5515 Princeton Run Trail Tucker, GA 30084

404-425-0245

momin.mohammed9@gmail.com

EDUCATION

JOHNS HOPKINS UNIVERSITY, Whiting School of Engineering
Master of Science Degree in **Data Science**: expected December 2021

Baltimore, Maryland

GPA: 3.61 / 4.0

- Certificate of **Financial Mathematics: Quantitative Portfolio Management**

UNIVERSITY OF GEORGIA

Athens, Georgia

Bachelor of Science Degree: May 2019

GPA: 3.55 / 4.0

Major: **Applied Mathematics** Minor: **Computer Science**

- Certificate of **Data Science**; Certificate of **Actuarial Science**

TECHNICAL KNOWLEDGE

- Programming Languages: Python, R, MATLAB, SQL, VBA, STATA, Java, X++, Swift
- Software: Microsoft Office Suite, Microsoft Power BI, Microsoft Azure, Amazon Web Services (AWS)
- Coursework Topics: Data Science, Financial Mathematics, Financial Derivatives, Machine Learning, Stochastic Calculus, Data Visualizations, Statistical Modeling, Optimization

WORK EXPERIENCE

RSM US LLP **Technology Consulting Associate**

July 2019-December 2020

- Conducted analysis to assess and evaluate a client's data management and business intelligence
- Wrote complex SQL queries to troubleshoot bugs in tables and build data entities in Microsoft Dynamics
- Developed X++ code with Microsoft Visual Studio Team Foundation Server (TFS) to customize Dynamics
- Automated the testing of business processes within the Microsoft Dynamics 365 (D365) Enterprise system by using the Regression Suite Automation Tool (RSAT) and managed it through Azure DevOps

UPS **Finance & Accounting Intern**

May 2018-August 2018

- Queried data from an SQL database to conduct cost/revenue analysis and build KPI reports
- Interpreted Financial statements and built Power BI dashboards to tell the story of year over year metrics
- Presented changes in actual vs. planned profits at segment level using data visualizations to make pricing recommendations.

PROGRAMMING PROJECTS

Github: <https://github.com/MohammedReza9>

Finding the Optimal Risky Portfolio on the Efficient Frontier

Language: **Python**

- Conducted a Monte Carlo simulation to find the optimum weights to assign a given set of stocks
- Plotted 2500 portfolios on an expected volatility vs expected return plot (efficient frontier)
- Highlighted the portfolios with the lowest volatility and the highest Sharpe Ratio (optimal risky portfolio)

Machine Learning – Classification and Regression on large datasets

Language: **Python**

- Implemented various machine learning algorithms on multiple datasets from the UCI Machine Learning Repository
- Projects consisted of data preprocessing, outlier removal, and feature selection
- Algorithms included: Nearest Neighbor, Logistic Regression, Naïve Bayes, Decision Trees, and Kernel Machines

Statistical Model Building to Predict the Amount of Niobium Oxychloride

Language: **R**

- Built a statistical model to measure the effect of chlorination of Niobium Oxychloride by Phosgene in a tube-flow reactor, a chemical experiment done by the University of Iowa.
- Conducted statistical analyses for hypothesis testing, statistical modeling, and variable selection
- The final model resulted in a R^2 value of .9596 (~96% of the data can be explained by the model)

EXTRACURRICULAR ACTIVITIES

JP Morgan Chase **Software Engineering Virtual Experience**

August 2020

- Participated in the open access JP Morgan Chase Virtual Experience Program with InsideSherpa
- Interfaced with a stock price data feed using Python, Git, and a financial data feed from a server
- Implemented a JP Morgan tool called Perspective using React and Typescript
- Used Perspective to web develop a chart for a trader's dashboard to conduct financial analysis