Zhuomin (Judy) Mao

609-933-7887 judy.mao@princeton.edu linkedin.com/in/judymao Princeton, NJ

Education

Princeton University

Master of Finance, Machine Learning Certificate

Sep 2021 – May 2023 (Expected)

Anticipated Coursework: Asset Pricing, Statistical Analysis of Financial Data, Quantitative Data Analysis in Finance, Financial Econometrics, Financial Modeling, Fixed Income Models

University of Toronto Toronto, ON

Bachelor of Applied Science in Engineering Science with Specialization in

Sep 2016 - May 2021

Princeton, NJ

Mathematics, Statistics and Finance, Minor in Artificial Intelligence, GPA: 3.95/4.00

Relevant Coursework: Financial Optimization Models, Probability and Statistics, Multivariable Calculus, Differential Equations, Linear Algebra, Stochastic Processes, Computer Algorithms and Data Structures

Business Experience

Royal Bank of Canada

Toronto, ON

Business Data Analyst, Co-op

Sep 2019 - Aug 2020

- Drove production of a new acquisition model for predicting bankruptcy using regression and machine learning techniques, leveraging R, SQL and SAS.
- Developed an efficiency-enhancing data cleaning and interpretation package using Python.
- Redesigned Credit Limit Decrease program strategy by introducing new risk measures such as payment-based capacity, identifying over \$1 million in exposed credit risk.

Deloitte LLP Toronto, ON

Summer Analyst May 2019 – Aug 2019

- Created a fuzzy matching algorithm to identify over \$500M in potential merger synergies leveraging Python.
- Designed a custom database using data engineering to facilitate customer analytics.
- Implemented a Microsoft Access UI tool as a key component of an on-going managed service.

Research Experience

University of Toronto, Department of Statistical Sciences

Toronto, ON

Research Assistant

May 2021 – Present

- Investigated reverse sensitivity analysis techniques in Python using the Wasserstein distance.
- Developed reverse sensitivity analysis functions for R SWIM package.

University of Toronto, Rotman School of Management

Toronto, ON

Thesis Student

Sep 2020 – Apr 2021

- Investigated contribution of optimism measures to any seasonality evidenced by NYSE bid-ask spreads.
- Conducted seemingly unrelated regressions analysis leveraging Python.

Leadership / Extracurricular Experience

University of Toronto, Women in Science and Engineering

Toronto, ON

President

May 2019 – Apr 2020

• Led a team of over 50 students to succeed in various initiatives, including the two-day National Conference which boasted attendance of over 350 delegates from across the globe.

University of Toronto, Institute of Electrical and Electronics Engineers

Toronto, ON

Marketing Chair

May 2018 – Apr 2019

• Organized marketing team to successfully promote various national events, including multiple hackathons.

Skills

Programming Languages: Python, R, C, SQL, MATLAB, SAS, Latex, HTML/CSS Languages: English (fluent), French (reading knowledge), Mandarin (conversational)

Interests

Jigsaw puzzles, archery, art.