MASTERS OF financial insurance

MFI candidates
2023 - 2024

Statistical Sciences
UNIVERSITY OF TORONTO
What our industry partners say about MFI students:

“Very impressed by the superb technical skill, creativity, and professionalism shown by the MFI student we hired for the summer internship... The work exceeded my expectations.”

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“Boris has been a great addition to the team, we appreciate having him share his expertise in programming and analytics. It’s been a pleasure working with him over the past few months, he has a great attitude and is always willing to help. We anticipate that he will have a very successful career ahead.”

Lisa Cicoria, BMO

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“Huan has advanced analytical and learning ability that I am sure the MFI program greatly prepared her for. I wish I learned of the program and the student list earlier.”

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Sean Myers, BMO
Launched in September 2016, the Master of Financial Insurance (MFI) program addresses the growing industry demand for professionals with expertise at the confluence of Data Science, Insurance, and Mathematical Finance. Since its inception, the MFI program has rapidly expanded, producing highly sought-after professionals in sectors such as finance, insurance, fintech, pensions, and consulting. The 2024 cohort, carefully selected from a competitive pool of applicants, features 28 candidates with a low acceptance rate of under 10%, maintaining a balanced gender distribution.

Our students benefit from a dual educational approach: they receive theoretical instruction from globally recognized academics in the Department of Statistical Sciences, which ranks among the top 10 in the world according to the Shanghai Rankings. Simultaneously, they gain practical insights from accomplished industry professionals, enhancing their problem-solving skills and industry acumen. This blend of academic and industry exposure equips our students with unique insights and insider knowledge.

The MFI Team, Sarah, Shari, and I, remain dedicated to nurturing and expanding our network of industry collaborators. We proudly offer students the opportunity for summer internships, or longer durations, which not only furthers their professional growth but also enriches your organization.

The Department of Statistical Sciences offers the Master of Financial Insurance Program (MFI), a full-time professional program focused on producing students who will become leaders in the global finance, fintech, and insurance industry. The program stands on three pillars: data science, financial mathematics, and insurance modeling. It provides students with education at the interface of these domains with sufficient depth and breadth so that students can provide both detailed analysis of finance and insurance risks, as well as provide a bird’s-eye perspective on how the embedded risks affect the firm enterprise wide.

The program is particularly appropriate for students with backgrounds in statistics, actuarial science, economics, and mathematics, or students with a quantitative background (such as those in physics and engineering). While students have different backgrounds coming into the program, they are trained together as one cohort. In the first semester, students are exposed to core theory and methodology, in addition to numerous industrial seminars. While in the second semester, they work on a variety of case studies and projects led by industry professionals.

The MFI Program runs for 12 months, from September to August. Students take academic courses in the first two terms with the program culminating in a 16 week work-term placement designed to provide real-world experience in finance and/or insurance. As an added bonus students are ready to start full time work or extend their contracts into September!

**Program Outline**

**TERM 1**
- Applied Probability for Mathematical Finance
- Applied Time-Series Analysis
- Life Insurance Mathematics
- Data Science for Risk Modeling
- Industrial Seminar Series (Part 1)

**TERM 2**
- Financial Risk Management
- Finance and Insurance Case Studies
- Numerical Methods for Finance & Insurance
- Data Science in Practice
- One Elective Course in a Related Topic
- Industrial Seminar Series (Part 2)

**TERM 3**
- From September Available for Full Time Work!
Traditionally, the finance and insurance worlds are quite distinct, but this distinction is disappearing. Financial firms are taking exposure to insurance risks, insurance companies are providing guarantees to their clients that fundamentally intertwines them with the financial markets, and pension plans provide income guarantees which profoundly link their obligations to these markets. The Masters of Financial Insurance (MFI) program answers the growing need from industry to fulfill this unique skill set.

The MFI is a professional program that provides candidates with a sophisticated understanding of this complex interaction of the financial and insurance fields. The program contains a comprehensive set of offerings and students gain rigorous training in data science, actuarial science and finance. Graduates from this program are versatile and well armed to face the highly skilled work required of them in the banking, insurance, pension, fintech, and consulting industries.

Hiring a Work Term Student

You can test drive new “pre-professionals” through a cost effective, risk free environment and also shape the training of future professionals by offering feedback to the program. Bringing an MFI graduate student on board for a work placement either for the summer term or in an extended contract - as the students are available for full time, or longer term contract employment immediately after the summer - is an excellent way to connect with emerging high achieving professionals, and bring new thinking and strategy to your organization.

The students presented in this resume book will be well-prepared to bring their competencies, knowledge and expertise to your organization over the summer term (May-August), and beyond!
Ways to Get Involved

The MFI Team has been impressed by the enthusiasm and support given by industry partners. You can be involved not only by providing summer work terms for our candidates but also in other ways:

• Attending our annual fall reception
• Delivering a guest lecture to our students
• Hosting a company tour or information session
• Participating on a Panel Discussion
• Sponsoring MFI events such as the MFI Fall Reception or Alumni Socials
• Mentoring a student
• Providing an informational interview
• Offering mock interviews and feedback
• Hosting an on-campus information session
• Hiring a recent graduate
• Participating on an advisory board

What Industry Partners Have To Say

“Thank you, team MFI at the University of Toronto, for creating an amazing program with bright, well rounded, hard-working students with amazing knowledge and technical skills, ready to contribute in today’s data driven world. Your program is directed by a group of amazing people who are a true pleasure to deal with and to make it simple to communicate. Our MFI intern (Jiayan Yang) was ready to contribute from day one. In her role, Jiayan was involved in creating multiple strategic predictive models and heavily engaged in automating a reporting package... Her technical skills are exactly what today’s analytical world requires. Jiayan surely exceeds my expectation and that’s why she was offered a second work term with our organization. Thank you Jiayan and team MFI!”

Artur Liwski, BMO

“Thank you, team MFI at the University of Toronto, for creating an amazing program with bright, well rounded, hard-working students with amazing knowledge and technical skills, ready to contribute in today’s data driven world.”

For anyone who wishes to develop a very strong foundation of financial mathematics and insurance and gain the skills to apply them in the real-world, I strongly recommend UT’s MFI program!”

Alexey Pakhuchiy, MFI 2017 & TD

Working with the MFI students was a real delight. I saw no shortage of creativity, curiosity, and teamwork. I was also very touched when some of my students reached out to me after this course and told me that they’ve gotten amazing positions and benefited greatly from the course and program. For anyone who wishes to develop a very strong foundation of financial mathematics and insurance and gain the skills to apply them in the real-world, I strongly recommend UT’s MFI program!”

Basil Singer, CEO, Modellcity Inc.
Student Profiles

Please Note:
The student profiles featured here are an overview.

If you wish to review the full résumé of any of our talented cohort please contact the MFI Office

(mfi.info@utoronto.ca)
Nicholas Adegbe

Nicholas is an exceptional student and MasterCard Foundation Undergraduate and Graduate Scholar. Having an educational background in actuarial science, he also has hands on experience in the field of data analytics, data visualization and reporting. In addition Nicholas has great presentation skills and relationship-building aptitude that cultivate brand loyalty and enthusiasm.

**EXPERIENCE**

- **AI-Society, KNUST, Ghana**
  - Co-Founder
  - Jan. 2023-Present
  - Empower college students who have passion for AI & Data Science by linking them to industry opportunities

- **Mpharma Ghana**
  - Inventory Analyst
  - Mar. 2022-Present
  - Analyzed & visualized inventory ensuring product availability & supply optimization
  - Processed & managed orders using SAP ERP software
  - Compiled supply chain reports in Excel on product performance & fulfillment rates for managerial purposes

- **EdPlus at Arizona State University**
  - Baobab Community Guide
  - Nov. 2022-Jul. 2023
  - Facilitate information sessions about the platform’s opportunities, & increasing access to career prospects for Africans
  - Build relationships with consumers to create loyalty & passion for the brand
  - Create an environment for young people to share ideas, increasing project collaboration & partnerships

**EDUCATION**

- **Master of Financial Insurance**
  - University of Toronto
  - 2023 - 2024

- **BSc (Honours) Actuarial Science**
  - Kwame Nkrumah University of Science and Technology (KNUST)
  - 2021

**SKILLS**

- Technical: R; MATLAB; Python; AXIS; SAP ERP; Microsoft 365

**PROFESSIONAL CERTIFICATES/AWARDS**

- MasterCard Foundation Scholarship: 2017-2024

**INTERESTS/ACTIVITIES**

- Soccer; Volleyball; Entrepreneurship; Community Impact

David Gameli Agbeko

David has a deep-seated interest in actuarial science, statistics, data science, and finance. He exudes high energy in the face of challenges and quickly adapts to new working environments while striving to become better at what he does. He is an author, entrepreneur and youth empowerment advocate.

**EXPERIENCE**

- **Project, MFI Summer Group Project**
  - Summer 2023
  - Evaluated pricing of relevant life insurance products, forecasted reserves, analyzed profit at the portfolio level & conducted investment strategy using mean-variance optimization analysis
  - Presented results & findings to the elite faculty of MFI

- **McGill University Faculty of Agriculture & Environmental Science, Quebec, Canada**
  - Dec. 2022-Aug. 2023
  - Project Assistant (Remote)
  - Assisted in USAID Grant applications for the McGill partners’ scholarship, internship, & entrepreneurship project
  - Increased accessibility of students to internship opportunities by creating a database of approximately 60 agri-food industries
  - Conducted research & outlined practical solutions in addressing challenges confronting internship acquisitions
  - Part of a team of developers to create content for the McGill-Ghana collaborative project website

- **International Programs Office (IPO), KNUST, Kumasi, Ghana**
  - Nov. 2021-Nov. 2022
  - Inbound Exchange Officer
  - Developed the first Fact Sheet for planning, execution & effective information dissemination to KNUST partners
  - Assisted in presentations to the KNUST community that increased awareness & patronage of the IPO services

**EDUCATION**

- **Master of Financial Insurance**
  - University of Toronto
  - 2023 - 2024

**SKILLS**

- Technical: Python; R; AXIS; SQL; Excel; Microsoft 365

**PROFESSIONAL CERTIFICATES/AWARDS**

- Mastercard Foundation Scholarship: 2017-2024

**INTERESTS/ACTIVITIES**

- Writing (Author and Editor): Author of “Winning Transition Battles”
  - President and Founder of Edu-Consult Africa
  - Community Outreach and Volunteering Conference Speaker and Master of Ceremony (MC)
Paul Agbekporun

Ambitious, talented, and results-oriented, Paul holds a Master’s degree in Mathematical Statistics and Sciences. His career objective is to apply his expertise on the application of statistical machine learning and stochastic analysis. He has proven interpersonal and time management ability developed through academic projects, work and volunteer experience.

**EDUCATION**

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<th>University of Toronto</th>
<th>2023 - 2024</th>
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**SKILLS**

- Technical: R; Python; AXIS; Microsoft 365
- Excel VBA; SQL; LaTeX; AXIS; Microsoft 365
- SAS Certified Specialist: Base Programming 9.4
- SAS Certified Advanced Programmer for SAS 9
- IBM Data Analysis with Python Certification
- Bloomberg Market Concepts Certification

**PROFESSIONAL CERTIFICATES/AWARDS**

- MasterCard Foundation Scholarship - UofT, 2023 - 2024
- AIMS Scholarship: 2019

**INTERESTS/ACTIVITIES**

- Soccer; Volleyball; Penny Smiles Foundation
- Presented findings & discussed improvements using alternative approaches in different scenarios

Jiarun Chen

Graduating in Applied Mathematics in Probability and Statistics, Jiarun has accumulated an extensive amount of experience from tutoring high level statistical courses to the completion of projects analyzing and processing data. Having strong analytical, planning and administrative skills, Jiarun can maintain efficiency and initiative when working independently and in teams.

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**SKILLS**

- Technical: Python; R; MATLAB; SAS; Excel VBA; SQL; LaTeX; AXIS; Microsoft 365
- IBM Data Analysis with Python Certification
- Bloomberg Market Concepts Certification

**PROFESSIONAL CERTIFICATES/AWARDS**

- Master of Financial Insurance
- University of Toronto Scholar 2018
- AIMS Scholarship: 2019

**INTERESTS/ACTIVITIES**

- Tutor: 4+ years for university level mathematics & statistics (200 students)
- Presented findings & discussed improvements using alternative approaches in different scenarios
Yifan Cheng

With a background in Statistics and Mathematical Science, Yifan has a strong career interest in data and financial analysis. He has excellent communication skills developed through case presentations and work experience, with proven problem-solving and time-management skills to meet tight deadlines.

EXPERIENCE

University of Toronto
Teaching Assistant (Applied Probability)
• Delivered tutorials, office hours & graded projects & exams for 150+ students
• Assisted students in understanding subject materials & responded to questions via discussion board
• Updated materials to ensure lectures are targeted to students by highlighting the most critical take-aways

NewBreak, Mountain View, U.S.
Data Analysis (Remote)
• Performed detailed analysis of 1,000,000+ sample data to explore & evaluate the click-through rate
• Developed R codes to illustrate the demographic composition of users in sample data
• Provided valuable insights & data-driven recommendations to product teams

University of Toronto
Research Project Assistant
• Simulated one example in the paper by Monte-Carlo simulation about one-sample test for proportion
• Analyzed the primary works of other key authors during the same period to look for parallels with the topic
• Collaborated with other team members to evaluate the literary works

PROFessional
Certificates/Awards

Dean’s List Scholar: 2023

With more than two years working experience at various companies in the insurance industry, Sam is a passionate, dedicated, and detail-oriented actuarial professional with the ability to learn and adapt in a fast-paced environment. He also has demonstrated strong problem-solving, time-management, and interpersonal skills.

EXPERIENCE

Moody’s Analytics, Toronto
Actuarial Software Programmer
• Enabled “Reserve Components” calendar year report in Universal Life module under dynamic valuation in AXIS
• Developed a new Calendar year report named “User Defined Category Details” in AXIS
• Fixed & self tested 3+ existing bugs found by clients in AXIS

Aviva, Toronto
Corporate Actuarial Assistant
• Assisted in the Quarter End Valuation process & IFRS 17 Change management using AXIS & Excel
• Developed VBA macro tools to automate the Risk Integrity system reconciliation process

Moody’s Analytics, Toronto
Actuarial Software Programmer
• Enabled “Reserve Components” calendar year report in Universal Life module under dynamic valuation in AXIS
• Developed a new Calendar year report named “User Defined Category Details” in AXIS
• Fixed & self tested 3+ existing bugs found by clients in AXIS

NN Life Insurance Co. Ltd
Actuarial Analyst
• Assisted in developing the company’s MS Azure Database by building ETL pipelines in Azure Data Factory & writing T-SQL queries in Azure Data Studio
• Optimized & automated 5+ Data Transformation processes using Qlikview to increase productivity
• Conducted User Acceptance Tests using Qlikview & Excel to ensure the correctness of SQL queries

UW ActSci Club Mentor; Guitar; Piano; Skiing; Breakdancing

INTERESTS/ACTIVITIES

UofT Badminton Club: 2019 - 2023

16 17
Yahan Cui

Yahan has excellent logical analytical skills and is great at sourcing the reasons behind the data and proposing optimization solutions. She specializes in teamwork and can quickly establish good working relationships. Having equally developed time-management skills, she is able to work well independently and collaboratively in teams to achieve time-sensitive goals.

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
Actuarial Science & Statistics
Dalhousie University
2023

SKILLS
Technical: Python; R; AXIS; Microsoft 365

PROFESSIONAL
CERTIFICATES/AWARDS
Society of Actuaries
FM (Financial Mathematics);
SRM (Statistics for Risk Modelling)
Dalhousie In-Course Scholarship:
2021, 2022
Ross Stewart Smith Scholarship:
2021

EXPERIENCE
Project: Machine Learning I
Dalhousie University
Oct. 2022
• Using Python, wrote a program to divide the data into groups
• Repeated the K-means clustering until the centroid of each group did not change
• Calculated the sum of the squared distances of each data point in a group from each centroid & plot scatter plots to see how each group changes

Project: Machine Learning II
Dalhousie University
Dec. 2022
• Wrote a classifier in Python to recognize handwritten digits in pictures
• Transformed the digits in the pictures into a matrix, used data from the training set, calculated the regression coefficient using gradient descent, & minimized the loss function
• Applied the resulting equations to the testing set & observed percentage of correct matches & the loss

Project: MFI Summer Project - UofT
• As part of a team, designed insurance products for an insurance company
• Successfully calculated the premium, which makes the aggregate loss positive in a maximum of 10% of cases by simulating, predicted the monthly benefit reserves
• Planned a five-year investment by using mean-variance optimization such that the expected annual return is between 8% & 14% while also minimizing the volatility

Project: AXIS Modeling for Whole Life Product, UofT
Jul. 2023
• Successfully calculated the premium, which makes the aggregate loss positive in a maximum of 10% of cases by simulating, predicted the monthly benefit reserves
• Applied the resulting equations to the testing set & observed percentage of correct matches & the loss

SPORTS/HOBBIES
Sports; Hiking; Climbing; Badminton

Muge (Gloria) Deng

With a background in Actuarial Science and Statistics, Gloria is proficient in data analysis and has passed four SOA exams. She is also an effective team leader, detail-oriented, proactive, and a data-savvy explorer, developed through specialized coursework in actuarial science, risk management, and financial modelling.

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
Actuarial Science & Statistics
University of Toronto
2023

SKILLS
Technical: Python, R Studio; SQL; Excel; AXIS; Microsoft 365

PROFESSIONAL
CERTIFICATES/AWARDS
Society of Actuaries
FM (Financial Mathematics);
IFM (Investment & Financial Markets);
SRM (Statistics for Risk Modelling)

EXPERIENCE
Project: AXIS Modeling for Whole Life Product, UofT
Sep. 2023-
Oct. 2023
• Developed a detailed AXIS cell for a whole life product, captured key metrics including gross premium, death benefit, & net cashflow
• Introduced advanced feature modifications to the base cell, enhanced the cell’s responsiveness & precision
• Demonstrated adeptness in results reconciliation by verifying AXIS-reported values against self-computed results

Time Series Modelling with Applications in Economics & Public Health
Sep. 2022-
Nov. 2022
Researcher under the guidance of Professor Peter Kempthorne at MIT
• Gained a basic understanding of time series analysis, simple time series modes, & financial time series
• Familiarized with the stationary processes of testing estimated noise sequence for time series dependence
• Mastered Auto-regressive (AR), moving average (MA), & ARMA models selection & forecasting
• Completed a research paper by collecting & analyzing real-world time series data which was accepted by MEEA 2022

Guangzhou Hanhui Venture Capital Management Co., Ltd.
Jun. 2021-
Aug. 2021
Intern, Investment Management Department
• Investigated specific industries, analyzed & summarized various data in the industry
• Conducted credit evaluation for companies, evaluated the company’s business situation, tax information, & legal risks
Shuqi (Lexi) Deng

Shuqi is a target-driven professional actively pursuing a career in finance. She has strong analytical ability with practical experience in collecting, cleaning, and analyzing data. Shuqi has also demonstrated excellent communication, verbal and written, through collaborations with managers, clients, and team members.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours) with High Distinction
Mathematical Applications in Economics & Finance Specialist
University of Toronto
2021 - 2022

Dean’s List Scholar: 2020; 2022; 2023

CFA Level 1: 2023

EXPERIENCE

Project: Canadian Government Bonds 5-Years Yield Prediction  
Feb. 2023
- Utilized Python to calculate the yield rate, spot rate, forward rate with the scipy package & functions
- Analyzed the yield curve, spot curve, forward curve for future bond yields trends generated from Python for insights
- Calculated & examined the corresponding covariance matrices, eigenvalues, eigenvectors & their implications

Project: U of T Price of Empire Research Project  
Jun. 2022 - Aug. 2022
- Conducted comparative inspections of over 300 data entries between Canadian trade tables & Excel spreadsheets
- Collaborated with team members to complete multi-years of data compilations

Project: Airbnb Price Determinant Data Analysis  
Dec. 2021
- Completed an IMRAD report with Linear Regression model to discuss methods, results, & limitations
- Conducted literature reviews, exploratory data analysis, & five model building to determine the fittest model
- Utilized R for data visualization in the map to identify potential price determinants
- Collaborated with team to record a presentation of the results

University of Toronto
Research Assistant
May 2021 - Aug. 2021

- Collected 200+ entries of data from multiple sources
- Gathered 100+ CNKI academic journals & summarized
- Collaborated with team members to complete multi-year data collection
- Coded in Excel to build a solid foundation for research topics

Professional Risk Management Specialization
Technical: Python; MATLAB; R; SQL; AXIS; Excel VBA; Microsoft 365

Lijie (Lily) Fan

Coming from a strong analytical background, Lily has a strong working knowledge of financial risk management, analytical and problem-solving skills from working in the finance, technology, and government sectors. She possesses excellent interpersonal skills to collaborate effectively with cross-functional teams and clients.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BMath (Honours)  
Math/Financial Analysis & Risk Management - Professional Risk Management Specialization
University of Waterloo
2020 - 2023

MBA (Honours)
Mathematics & Financial Analysis
University of Toronto
2020 - 2023

INTERESTS/ACTIVITIES

Crafting Jewellery; Design & Carving; Board Games

EXPERIENCE

The Bank of China, Zhejiang, China  
Financial Risk Analyst
Oct. 2022 - Dec. 2022

- Managed financial data, including data collection, validation, & reconciliation, using advanced Excel functions & macros
- Analyzed financial statements to identify risks & opportunities, utilizing data visualization tools Microsoft Power BI

The Ontario Public Service, Toronto, ON  
Business Finance Analyst
Jan. 2022 - Apr. 2022

- Analyzed business needs requirements for Cloud, Security, End User, Business, & Digital Transformation solutions
- Updated corporate clients’ technical needs with Microsoft Azure Sentinel for cloud expertise

Long View Systems, Toronto, ON  
Business System Analyst
Sep. 2021 - Dec. 2021

- Conducted financial modeling, scenario analysis, & sensitivity testing to support strategic planning & risk management

Professional Risk Management Specialization
Technical: Python; MATLAB; R; SQL; AXIS; Excel VBA; Microsoft 365

PROFESSIONAL CERTIFICATES/AWARDS

CFA Level 1: 2023

Term Dean's Honours List: 2020

Term Distinction: 2020 - 2021

Term Dean’s Honours List: 2020
PwC Canada Scholarships for Distinction: 2018

CFA Level 2: 2023

INTENDED CAREER PATH

Financial Risk Management

She possesses excellent interpersonal skills to collaborate effectively with cross-functional teams and clients.

- Created Technical Runbooks for clients using Microsoft Intune & integrated the application into Zscaler/ZPA
Maarouf Hatab

Maarouf is a meticulous and energetic individual with a keen sense of observation. He is a quick learner with hands-on experience in using machine learning models, data analysis in Python, Power BI and Excel. He is particularly interested in Blockchain and Fintech with also some experience in web development.

ExPERIENCE

Project: MFI Summer Project, UofT
Premium Pricing & Reserves Profit Analysis
- Developed a pricing strategy for a new whole life insurance product considering factors such as mortality rates, interest rates, & operational expenses
- Provided monthly predictions for the benefit reserves of the company over a five-year horizon, accounting for policy premiums, mortality benefits, & operational expenses

CEQA Foods & Beverages Limited, Accra, Ghana
Data Analyst - Intern
- Designed & developed dynamic visualization dashboards using Power BI to generate weekly reports
- Spearheaded the automation of file retrieval processes from servers, demonstrating strong technical proficiency in Python for seamless data extraction & manipulation significantly reducing manual workload

Kleros – Web3 Space
Blockchain Explorer - Freelance
- Used web scraping techniques to extract Ethereum contract addresses especially from GitHub
- Mapped contracts addresses to their respective domain or subdomain submitted in JSON format

Government of Ghana, Central Region, Ghana
Human Resources Department Intern
- Played a pivotal role in coordinating & facilitating local government training workshop

Feiyang He

Feiyang has acquired strong analytical skills using machine learning models, time series models, and portfolio theory to solve financial problems. Feiyang also has exhibited excellent oral and written communication skills when working independently and collaboratively in teams.

ExPERIENCE

Project: MFI Insurance Summer Project, UofT
- Implemented cvxpy package in Python to find the minimum variance portfolio within the targeted range of return
- Performed value at risk analysis to justify the minimum variance portfolio in comparison to other portfolios within the targeted range of return
- Presented the optimal portfolio’s characteristics & the value at risk analysis to program instructors

PROJECT: MFI Summer Project, UofT
- Implemented Linear Regression, K-Nearest Neighbors, Random Forest, & Elastic Net Regression making prediction in R
- Applied exploratory data analysis, data splitting, stratified sampling, cross validation, & model tuning to improve model performance

Mingyi Fund, China (Remote)
Quantitative Researcher
- Collected monthly data of 14 macroeconomic variables to predict Chinese government 10-year bond daily yield in R
- Implemented VAR model, ARIMA model, Random Walk, & Nelson-Siegel Model to predict Chinese government 10-year bond daily yield in R

INTERESTS/ACTIVITIES

UCSB Soccer Team; Guitar

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Eugene Kwok

Eugene has strong leadership, research, and data management capabilities with a keen attention to detail. Also having strong quantitative, analytic, and problem solving skills, he is a great communicator, quick learner, and adaptable in a rapidly evolving environment.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BA (Honours) High Distinction
International Economics
Minor in Mathematics
University of British Columbia
2023

SKILLS

Technical: Python; R Studio; LaTeX; STATA; Microsoft 365

PROFESSIONAL

Certificates/Awards
Certificate of Appreciation for Student Leaders: 2023
Patricia M. Mohr Award (International Economics): 2021
William M. Mercer Memorial Scholarship: 2021

BSc (Honours)
Mathematics & Statistics
(Specialization in Statistics)

McMaster University
2023

INTERESTS/ACTIVITIES

Badminton: BC Provincial U23 Men's Single Bronze Medalist: 2023

Aojie (Jay) Li

Aojie has strong interpersonal skills demonstrated through working independently and collaboratively in teams. With strong leadership and execution with experience in deep research of mathematical modelling and data analysis, Aojie is interested in working in pension plans, risk modelling, and financial analysis.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
International Finance

University of British Columbia
2023

SKILLS

Technical: Python; R Studio; MATLAB; AXIS; AWA Machine Learning; Microsoft 365

PROFESSIONAL

Certificates/Awards
Course Certificate: “Financial Markets” (Yale University: 2022)

INTERESTS/ACTIVITIES

Basketball; Volleyball

EXPERIENCE

2023 Summer Project, UoT
- Analyzed & evaluated difference between whole life insurance & 20-year endowment on premiums charged by insurer & company's reserve using Excel in a life insurance case study
- Simulated the movement of company's reserve under 20-year endowment using Python

University of British Columbia

Applied International Economics Research Project – International Finance
- Diagnosed the relationship of Environmental, Social & Governance (ESG) Score & stock returns in U.S. technology sector by carrying out data cleaning, merging & regression analysis on STATA

Research Assistant
- Assisted UBC professor to collect information on tweets about racial justice on discriminatory behavior by building & distributing survey to 38 groups & searching Ph.D. profiles per Ph.D. program from top 100 universities
- Quality checked 816 figures & verified 458 people from collected institutions to improve data accuracy

University of British Columbia, Centre for Accessibility
- Notetaker/Mathematics Content Tutor
- Coached students with disabilities by uploading neat & self-written lecture notes on a secure website & organizing one-on-one mathematics content tutorials on a weekly basis

EXPERIENCE

Project: 5-year horizon analysis for a new insurance product from AIC
University of Toronto
- Calculated expense augmented premiums
- Provided the predicted monthly benefit reserves for the company through recursive formula
- Created a profit analysis through simulation under new mortality assumption at portfolio level for the first five years
- Carried out a mean-variance optimization analysis & an efficient frontier plot through python

Project: Hungary Chickenpox Cases Time Series Analysis
McMaster University, Hamilton
- Compared to the datasets. Confirmed that Budapest's data is representative & selected it as the analysis subject
- Analyzed the ACF & PACF plot & hypothesized the model of either AR or ARMA
- Observed with ADF test, confirmed the model is ARIMA (2,3), & did the parameter estimation
- Draw Residual VS Time, QQ plot, and Residual ACF images to verify the correctness of the Box Test

CITIC Prudential Life Insurance, Nanjing, China
- Finance Intern
- Created spreadsheets using Microsoft Excel for periodic reporting
- Developed & analyzed budgets, performing financial statement analysis
- Tested budget system & conducted research & analysis on the cost control system
Wei Zhe (Nicholas) Lin

Nicholas is a highly proactive actuarial science graduate, holding six SOA exams, with relevant work experience in two of the largest insurance companies in Hong Kong. Having excellent interpersonal and communication skills in English, Cantonese and Mandarin, he has proven ability to work independently and collaboratively in a fast-paced environment.

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
Actuarial Science
Minor in Finance
University of Hong Kong
2022

Dean’s Honour List 2020 - 2021

SKILLS
Technical: Python; VBA; SAS; SQL; AXIS; Microsoft 365

PROFESSIONAL
CERTIFICATES/AWARDS
Society of Actuaries
P (Probability);
FM (Financial Mathematics);
SRM (Statistics for Risk Modelling);
IFM (Investment & Financial Markets)
FAM-L (Fundamentals of Actuarial Mathematics - Long Term)

INTERESTS/ACTIVITIES
Basketball; Badminton; Hiking; Violin; Piano

EXPERIENCE
• Intern, Product Development Department
  AIA Company Limited, Hong Kong
  Jul. 2021 - Dec. 2021
• Actuarial Intern, Group Actuarial Department
  AIA Company Limited, Hong Kong
  Jul. 2021 - Dec. 2021
• Provided support in IFRS17 retrospective run
• Conducted preliminary checking on the SAS platform using SQL code to avoid possible program running failure due to duplicated or missing data
• Performed roll-forward of CSM balance for 10+ business units through UiPath to post monthly balances to an accounting platform
• Used test tools with independent calculation logic to check if the balances are consistent with the expectations, & automated the process by VBA to increase the efficiency automatically, reducing turnaround time by 70%
• Assisted in preparing an actuarial report by running profit & loss allocation of assets to meet specific investment return policies
• Ran User Acceptance Test to ensure the premium shown on brokers’ platforms matched our calculation
• Performed calculations on prepayment amount & surrender value to fulfill customers’ requests

Cong (Crystal) Liu

With a solid quantitative background in Applied Statistics and Economics, Crystal’s interest in risk and insurance modelling drives her commitment to deliver analytical insights that inform decision-making. She is enthusiastic about contributing her quantitative mindset and technical skills to reinforce risk modelling frameworks and boost strategic business growth.

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
Specialist in Statistical Science
Major Economics
University of Toronto
2023

Dean’s List Scholar: 2020-2023

SKILLS
Technical: R; Python; SAS; Tableau; Alteryx; AXIS; Microsoft 365

PROFESSIONAL
CERTIFICATES/AWARDS
CIBC Exceptional Student Award: 2022; 2023
Innis College Scholarships: 2020-2023
Deans List Scholar: 2020-2023

INTERESTS/ACTIVITIES
Piano; Musicals; Puzzles

EXPERIENCE
• Application Developer
  CIBC, Toronto
  Jan. 2023 - Aug. 2023
• Delivered proper, timely & cost-effective solution for enterprise BI tools & services being used by 1000+ users
• Standardized & streamlined request collections with Power Automate, reducing turnaround time by 70%
• Collaborated with cross-functional teams to translate business requirements into actionable technical plans that fulfill business ask while adhering to enterprise security standards
• Facilitated efficient change management for enterprise BI infrastructure through collaborative technical discussions
• Gained a comprehensive understanding of end-to-end data flows through active participation in project activities
  University of Toronto
  Nov. 2022 - Dec. 2022
• Extracted 2,000+ stock price data during 2019-2022 to evaluate the predictive performance of 3 machine learning models; identified logistic classifier as the optimal model given gathered dataset
• Developed a daily COVID search index using the average Google search popularity of the relevant keywords to incorporate the pandemic shock on U.S. stock market
• Achieved a predictive accuracy of 77.70% for stock direction using a logistic classifier built with Python
**Keyi Luo**

**EDUCATION**
- Master of Financial Insurance  
  University of Toronto  
  2023 - 2024
- BSc (Honours)  
  Statistics & Actuarial Science  
  Minor in Economics  
  University of Toronto  
  2019
- University College Alumni Scholarship;  
  Bursary Fund Awards;  
  2018

**SKILLS**
- Technical: Python; SQL; SAS; Javascript;  
  AXIS; PowerBI; Microsoft 365
- Mathematics/Financial Analysis &  
  Risk Management
- K-Pop/Jazz/Hip-Hop Dance

**CERTIFICATES/AWARDS**
- Certified Advanced Programmer for SAS 9
- FM (Financial Mathematics)
- Certified Advanced Programmer for SAS 9
- Top 3 best Co-op BMO:  
  Fall 2019

**INTERESTS/ACTIVITIES**
- Electric Guitar; Hip-Hop Dancing

**EXPERIENCE**
- Loblaw Technology  
  Senior Reporting Analyst  
  Apr. 2020 - Apr. 2023
  - Analyzed reporting output providing process improvement recommendations
  - Conducted ad-hoc analyses to deliver insights into potential optimization opportunities; assisted with urgent escalations
  - Utilized machine learning algorithms to create predictive models for key performance indicators, guiding strategic decisions for senior leadership
  - Automated manual reporting processes
  - Managed ETL processes & database maintenance; used cron expressions & Quartz scheduling tools to automate reporting; oversaw data analysis initiatives to meet stakeholders’ reporting requirements & led customer experience improvement projects

- Bell Mobility  
  Analytic Assistant, Marketing Analytics  
  Nov. 2019 - Dec. 2019
  - Cleaned data & conducted QA processes on raw customer survey data using MS Excel
  - Built survey dashboards utilizing MS Excel features
  - Actuarial Assistant  
    - Built & developed advanced Excel pricing models of specialized life insurance portfolio using VBA
    - Conducted financial performance analysis using SQL & tracked key performance drivers leveraging portfolio database

**Yuan (Cindy) Pei**

**EDUCATION**
- Master of Financial Insurance  
  University of Toronto  
  2023 - 2024
- BMath (Honours) Distinction  
  Mathematics/Financial Analysis &  
  Risk Management  
  Professional Risk Management  
  Specialization  
  University of Waterloo  
  2021

**SKILLS**
- Technical: Python; R; MATLAB; SAS; VBA; SQL; AXIS;
- Advanced VBA programming to develop customized scripts & macros tailored to the data structures & requirements of financial information packages
- Leveraged advanced VBA programming to develop customized scripts & macros tailored to the data structures & requirements of financial information packages
- Developed & implemented VBA automation solutions to streamline the Banking Capital Adequacy Ratio reporting process, resulting in time savings of 1-2 hours per person/day
- Designed & integrated risk assessment tools within the toolkit, enabling proactive identification & mitigation of potential risks associated with regulatory changes & process adjustments

**CERTIFICATES/AWARDS**
- Top 3 bank-wide Best Co-op BMO:  
  Fall 2019

**INTERESTS/ACTIVITIES**
- K-Pop/Jazz/Hip-Hop Dance

**EXPERIENCE**
- Bank of Montreal, Toronto  
  Financial Analyst, Wealth Management  
  May 2020 - Aug. 2020
  - Leveraged advanced VBA programming to develop customized scripts & macros tailored to the data structures & requirements of financial information packages
  - Developed & implemented VBA automation solutions to streamline the Banking Capital Adequacy Ratio reporting process, resulting in time savings of 1-2 hours per person/day
  - Designed & integrated risk assessment tools within the toolkit, enabling proactive identification & mitigation of potential risks associated with regulatory changes & process adjustments
Yu Peng

Yu Peng is a highly adaptable, and detailed oriented individual. She has developed exceptional written communication skills, through academic projects and work experience. With a strong background in quantitative analysis, Yu is actively seeking opportunities to apply her skill set.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours) Statistics & Applied and Mathematical Sciences
University of Toronto
2023

SKILLS

Technical: C/C++; Java; Python; MATLAB; R; SAS; MySQL; AXIS; Bloomberg; Wind; LaTeX; PyCharm; Eclipse; IntelliJ; Git; Tableau; Microsoft 365

PROFESSIONAL CERTIFICATES/AWARDS

• 2019 National Scholarship; UofT Mississauga Honor Roll: 2019-20

INTERESTS/ACTIVITIES

Badminton; Jogging; Dancing; Fitness

CERTIFICATES/AWARDS

• UofT Datathon: Top 5

EXPERIENCE

CSC Financial Co., Ltd., China
Data Analyst Intern
Aug. 2022- Nov. 2022
• Calculated price-weighted, equally weighted & value weighted share price indices of multiple companies in the open stock market & visualize the results in Excel and R
• Computed standard deviation & coefficient of variation for each company chosen in the portfolio, & the correlation coefficients between share return to determine which companies to be combined as a portfolio
• Constructed the Treynor-Black, Sharpe & Jensen model of data to test the performance of the portfolio
• Employed time series models in R to calculate the VaR of various investment portfolios over one year
• Assisted in the analysis & visualization of stock trading data at the firm’s trading floor

PwC, Management & Consulting, China
Summer Intern
Jul. 2021- Aug. 2021
• Collected materials about personal information protection & performed preliminary analysis
• Contributed to the cooperation project with Everbright Bank & assisted in formulating consulting plan
• Assisted in conducting customer status research
• Compiled relevant documents

Taikang Insurance Group Inc., China
Quantitative Analyst Intern
May 2021- Jul. 2021
• Created two-dimensional survival function to account for the statistical correlation between the two spouses’ survivals; estimated the unknown parameters using Bayesian approach, maximum likelihood estimation, & Markov chain Monte Carlo simulation

Raphael Tang

Raphael Tang is an excellent communicator and experienced in macro-economic, financial time series and quantitative finance models. Having an undergraduate background in Economics and Mathematics, he is well-versed in financial econometrics, panel and cross section econometrics and seeking suitable positions to apply his quantitative aptitude.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BA (Honours) Economics
Wilfrid Laurier, University of Waterloo
2022

SKILLS

Technical: Python; R; STATA; Bloomberg

PROFESSIONAL CERTIFICATES/AWARDS

• Peter Sinclair Award - [most technical thesis paper]; 2022
UofT Datathon: Top 5
• Academic Merit Awards (WLU); 2019
• Academic Entrance Scholarship (WLU); 2018

INTERESTS/ACTIVITIES

Participant in church charity events for relief missions; Competitive Powerlifting; Brazilian Jiu Jitsu

EXPERIENCE

Kenanga Investment Bank Berhad, Malaysia
Intern, Private Wealth Management
May 2020-
• Assigned to ‘discovery’: Testing & researching models & strategies not yet used by the department
• Focused research on Autoregressive models & variations: Produced a report on the AR(1), AR(n) & SETAR model for the use of high frequency algorithmic trading

Maybank Berhad, Malaysia
Intern, Private Wealth Management
Jun. 2021-
• Assigned to structured products, derivatives & equities
• Produced presentation on the 2020 US presidential election & effects on global financial markets. Distributed for training & education
• Used time series models to forecast department’s model portfolio. Used VAR to assess portfolio risk, & GARCH for a short term out of sample risk forecast. The VAR showed a significant relationship between economic & portfolio risk, & the GARCH showed a relatively high volatility prediction

Maybank Berhad, Malaysia
Intern/Private Wealth Management
Aug. 2019-
• Assigned to Gaming, Oil & Gas, & Financial Institutions/ Banking
• Helped run rudimentary excel based financial forecasts for analyst reports
• Programmed simple back testing strategies based on technical analysis on the Bloomberg terminal
• Gathered data from Bloomberg terminal & local stock exchange for analyst reports

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Zixuan (Olivia) Tong

Zixuan is accomplished in conducting research, analyzing data, and offering actionable insights. With a strong background in actuarial science, quantitative finance and financial analytics, she is knowledgeable in risk assessment and financial modelling. Zixuan has great interpersonal skills and fosters communication and collaboration in diverse teams.

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

• BSc (Honours)
  Actuarial & Financial Mathematics
  McMaster University
  2022

EXPERIENCE
Royal Bank of Canada, Hamilton, ON
Financial Analyst
• Contributed extensively to professional discussions surrounding prospect of CBDC in Canada & China; researched cryptocurrencies & identified 2 specific technologies that RBC could implement for digital finance
• Analyzed business cases from a business analyst lens, applying research findings and quantitative analyses to provide solid recommendations through reports & presentations
• Assessed potential business & financial risks, & devised mitigation and contingency plans to prevent risks

Bank of China, Xi’an, China
Client Assistant
• Directed customers in completing various business documents while delivering assistance in activating credit & debit cards, transferring funds & other banking processes
• Expanding Mobile Banking Services & Innovating to Promote Digital RMB in China

McMaster & The Co-operators Problem Solving e-Workshop
• Entered final round of competition; used R to analyse the appropriate premium that automobile insurance company should acquire based on real insurance data
• Collaborated with group of 4 to explore topics including statistics, optimization, mathematical finance & programming

SKILLS
Technical: Python; R; SAS; Excel VBA; AXIS; LaTeX; SQL; AXIS; Microsoft 365, Running; Cycling; Road trips

INTERESTS/ACTIVITIES
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• Yoga; Travelling; Singing

CERTIFICATES/AWARDS
ASTAM (Advanced Short-Term Actuarial Mathematics - Short Term)

PROFESSIONAL
Teaching Assistant
• Led weekly academic tutorials with practical exercises of Microeconomics II course for ITAM students
• Facilitated student engagement on online office hours during COVID-19 for achieving satisfactory grade

Board of Actuarial Science Member
• Structured informative & engaging workshops for BSc Actuarial Science students
• Organized engaging talks from company executives in the actuarial & financial field

Fernanda Vazquez Hernandez

Fernanda is a high-performing and proactive actuary with experience in insurance pricing adapting to changing business needs. Through her solid actuarial background and extensive training in statistical modelling and quantitative analysis, she has developed a strong work ethic with excellent time management and communication skills.

EXPERIENCE
• Board of Actuarial Science Member
• Structured informative & engaging workshops for BSc Actuarial Science students

PROFESSIONAL
INSTITUTE
• ITAM, Instituto Tecnológico Autónomo de México, Mexico City

SKILLS
Technical: Python; R-Studio; MATLAB; LaTeX; SQL; AXIS; Microsoft 365

Certifications
Society of Actuaries
P (Probability); FM (Financial Mathematics); ASTAM (Advanced Short-Term Actuarial Mathematics); FAM - S (Fundamentals of Actuarial Mathematics - Short Term)

Language: Spanish; English
Ting Wang

Through working at various large financial corporations, Ting has acquired advanced financial data analytical skills and proven ability to streamline the process of complex information compilation by creating models and tools in Python. An avid badminton player and ardent reader, reflects his commitment to both physical fitness and intellectual growth.

**EXPERIENCE**

- **Deloitte, Toronto, ON**
  - Analyst, Audit & Insurance
  - Performed audits to obtain reasonable assurance on whether the financial statements are free of material misstatement, whether caused by error or fraud
  - Provided support to the audit team
  - Assisted senior consultants on model validation & output check for client’s IFRS17 implementation
  - May 2022 - Dec. 2022

- **Travelers Insurance, Toronto, ON**
  - Intern, Pricing
  - Independently updated auto insurance loss trend & premium trend by running SAS program, & reconciling AY loss triangles in Alpha
  - Developed Property Indices research on Statistical Canada and Moody’s economic reports
  - Analyzed property & auto rate level indications
  - Pacific Life Re, London, UK (Remote)
  - Intern, Europe Research & Development
  - Analyzed experience claim data & reconciled results
  - Supported actuarial research projects
  - Streamlined data visualization process
  - Jan. 2022 - Apr. 2022

**SKILLS**

- Technical: Microsoft 365; R; Python; SQL; SAS; Tableau; Bloomberg; AXIS
- Badminton Player; Reading

**INTERESTS/ACTIVITIES**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**EDUCATION**

- Master of Financial Insurance
  - University of Toronto
  - 2023 - 2024
- BSc (Honours)
  - Actuarial Science & Economics
  - University of Toronto
  - 2021

Jingyu (Suki) Xu

Jingyu has developed statistical analysis, risk modeling, leadership, and teamwork skills, cultivated through past work and project experience. As a pro-active learner, Suki can multi-task on various projects to a high standard and is passionate about data and quantitative analysis. She also possesses proven ability in customer service, time-management, teamwork, and problem-solving.

**EXPERIENCE**

- **Project: MFI Summer Project**
  - Developed a pricing strategy & portfolio investment strategy for new whole life insurance product
  - Calculated expense-augmented premiums for smokers & non-smokers using normal approximation methods
  - Using Python, provided monthly predictions of the company's benefit reserves for the first 5 years
  - Re-analyzed all values but in 20-year term & 20-year endowment, comparing the differences between predicted reserves & true reserves
  - Applied mean-variance optimization analysis & included an efficient frontier plot of the expected investment portfolio returns against risk
  - May 2023 - Aug. 2023

- **Travelers Insurance, Toronto, ON**
  - Intern, Pricing
  - Independently updated auto insurance loss trend & premium trend by running SAS program, & reconciling AY loss triangles in Alpha
  - Developed Property Indices research on Statistical Canada and Moody’s economic reports
  - Analyzed property & auto rate level indications
  - Pacific Life Re, London, UK (Remote)
  - Intern, Europe Research & Development
  - Analyzed experience claim data & reconciled results
  - Supported actuarial research projects
  - Streamlined data visualization process
  - Jan. 2022 - Apr. 2022

- **Deloitte, Toronto, ON**
  - Analyst, Audit & Insurance
  - Performed audits to obtain reasonable assurance on whether the financial statements are free of material misstatement, whether caused by error or fraud
  - Provided support to the audit team
  - Assisted senior consultants on model validation & output check for client’s IFRS17 implementation
  - May 2022 - Dec. 2022

**SKILLS**

- Technical: Python; R; SAS; Latex; Jape; KNIME; AXIS; Microsoft 365
- Badminton Player; Reading

**INTERESTS/ACTIVITIES**

- Cooking; Radio Broadcasting; Board Games

**EDUCATION**

- Master of Financial Insurance
  - University of Toronto
  - 2023 - 2024
- BSc (Honours)
  - Actuarial Science & Economics
  - University of Toronto
  - 2021

**CERTIFICATES/AWARDS**

- Society of Actuaries
  - P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**INTERESTS/ACTIVITIES**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**EDUCATION**

- Master of Financial Insurance
  - University of Toronto
  - 2023 - 2024
- BSc (Honours)
  - Actuarial Science & Economics
  - University of Toronto
  - 2021

**CERTIFICATES/AWARDS**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**INTERESTS/ACTIVITIES**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**EDUCATION**

- Master of Financial Insurance
  - University of Toronto
  - 2023 - 2024
- BSc (Honours)
  - Actuarial Science & Economics
  - University of Toronto
  - 2021

**CERTIFICATES/AWARDS**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading

**INTERESTS/ACTIVITIES**

- Society of Actuaries
- P (Probability); FM (Financial Mathematics); IFM (Investment & Financial Markets);
- Badminton Player; Reading
Han (Althea) Yang

Althea has an outstanding academic background with strong technical proficiencies in data modelling and risk analytics. She is highly motivated, enthusiastic, and possesses exceptional interpersonal skills cultivated from work and volunteer experience. Additionally, Althea has developed great time management with a proven ability to work under pressure to meet timelines.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours) with Distinction
Actuarial Science
Minor in Mathematics
Simon Fraser University
2021; 2022

SKILLS

Technical: R; Python; MATLAB; VBA; LaTeX; AXIS; Microsoft 365

Society of Actuaries
P (Probability);
FM (Financial Mathematics);
VEE: Economics

VEE: Accounting & Finance
VEE: Mathematical Statistics

President's & Dean's Honour Roll:
2021; 2022

Open Scholarship: 2022

INTERESTS/ACTIVITIES

Basketball; Photography; Movies

Ziyang Ye

Ziyang is an engineering degree holder with excellent analytical skills and extensive quantitative research experience in the financial industry. Having adopted multiple leadership roles in various engineering projects and composed many robust analytic reports, he has developed strong leadership abilities and fostered a reputation as a key contributor through problem-solving and innovation skills.

EDUCATION

Master of Financial Insurance
University of Toronto
2023 - 2024

BASc (Honours)
Industrial Engineering
Minor in Engineering Business
University of Toronto
2023

SKILLS

Technical: Python; R; MATLAB; Java; Javascript; SQL;
AutoCAD; AMPL; SAS; SAS Viya; PowerBI; VBA; Microsoft 365

INTERESTS/ACTIVITIES

Basketball; Photography; Movies

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EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BSc (Honours)
Mathematics & Statistics
University of Toronto
2023

SKILLS
Technical: Python; R; SQL; AXIS; Microsoft 365

PROFESSIONAL CERTIFICATES/AWARDS
Dean's List Scholar: 2020; 2022

INTERESTS/ACTIVITIES
Football; Movies

Jiaheng (Steven) Zhou

EDUCATION
Master of Financial Insurance
University of Toronto
2023 - 2024

BMath (Honours) with Distinction in Statistics
University of Waterloo
2022

SKILLS
Technical: Python; R; SQL; Excel VBA Macros; Power BI; AXIS; Microsoft 365

PROFESSIONAL CERTIFICATES/AWARDS
CFA Level 1
2019 President's Scholarship of Distinction

INTERESTS/ACTIVITIES
SDA Student Research Case Study Challenge: 2022
2022 ASA Datafest

Steven demonstrates a strong foundation in financial mathematics and data science through the completion of the CFA Level I. He is a self-motivated learner with hands-on experience in wealth management and fixed income securities. He is enthusiastic about applying his statistical analysis skills to quantitative finance and risk management.

EXPERIENCE
TD Bank, Toronto
Wealth Operations Officer
Aug, 2022 - Mar, 2023

- Reconciled RESP accounts & processed internal account transfer requests in Excel via VBA Macros promptly & efficiently. Led a project to clear more than 1800 backlog requests in three months
- Investigated RESP account transfer errors by gathering & analyzing information from multiple sources & platforms, including ISM, CGI CORE, & EIS View
- Coordinated with other teams to validate internal account transfer requests submitted by TD Wealth Management clients by adhering to established Service Level Agreements
- Improved & documented the EUCs (end-user computing) by modifying the existing macros in Excel VBA to make the workflow more intuitive & less error prone. Identified gaps in current procedures to reduce operational risk

China Guangfa Bank (CCB), Wuhan
Financial Analyst Intern
May 2021 - Jul, 2021

- Assisted in the underwriting & issuance of the ¥800 million medium-term note for Hubei Yangtze Investment Group & the ¥500 million short-term commercial paper for Huangshi State-owned Assets Management CO., LTD by preparing the issuing documents & performing due diligence analysis while adhering to look-through principle.
- Analyzed credit risk of 15 state-owned entities that intended to issue fixed-income securities
- Documented critical client company parameters
Meet Our Alumni

Tianrun Pang, MFI '20

"The MFI program had constantly challenged us in its unique way, both intellectually and socially, with a plethora of projects, presentations, seminars, networking events. So many of my firsts happened here – first job interview, first networking event, first four-hour long final. I am ever so grateful for everything the MFI program has gifted me and the admin team has certainly done an excellent job!"

Harper Lin, MFI '22

"The MFI experience was truly a challenging and rewarding experience. The mix of theoretical finance with numerous opportunities to practice implementation truly prepared me for the professional world." 
Boris Migan, MFI '23

"My time at U of T was nothing but an unforgettable experience. I am highly thankful for the depth of knowledge the MFI program has armed me with. It is a privilege to be part of such a great program."
Adrien Brice Nouya, MFI '17

"The MFI taught me to be confident and strong in networking and communication, deep and diversified knowledge, and to keep pace with the new development frontier of the financial market and relevant technologies."
Meng (Moriah) Yu, MFI '18

"One thing about being in a small-sized program is that we can build this close bond with each other. We are not only classmates, but also friends who can support each other in the industry... Although it was only a one-year program, it became a journey to discover my capabilities, my area of interests, and my future career. The MFI program showed me how to be a leader and an influencer. It’s been an absolutely fantastic ride, and I will never forget the MFI family.”
Yuling (Tim) Wang, MFI '21

"When I first joined the MFI Program, I thought it would be a top master’s program on finance and insurance. Today, after graduating, I know it is way more than that. Beyond the world-class faculty and courses, we have exposure to great industry professionals, real world case studies, and all the necessary support to boost our careers. I could not be happier with my choice.”
Alan Fontoura, MFI '22

"The MFI program has been incredibly useful for me because it helped me to further improve my theoretical knowledge while giving me an opportunity to apply the information I learnt to meaningful projects that mimic the real world.”
Saeed Mohammed, MFI '20

"Meet our Alumni

"It is an honour for me to be part of the MFI program. The teaching team supported and guided me with their valuable insights and industry experience. They constructed the perfect studying environment to suit my background and interest in actuarial science, data science, and financial mathematics. MFI also provided me opportunities to connect with industry professionals, and to further improve myself beyond academics.”
Colin Chen, MFI '20

"I found the Master of Financial Insurance to be a perfect blend of pricing theory, risk management and data science. Being part of the 3rd cohort of the program, I had the opportunity to be exposed to several experts in the field and established professionals of both industries. Would also particularly praise the structure of the program itself; by having the internship as the last component of the academic year, the program sets us, the students, up for success by allowing us to stay on - when the opportunity arises - with the companies where we trained as interns.”
Paola Tolentino, MFI '19
Senhao (Jimmy) Chen, a University of Waterloo graduate before joining the MFI Program, completed his work term at Purpose Investments as a Quantitative Analyst. He has not only excelled academically in all core MFI courses but has also been a role model to his classmates through coaching and leadership promoting a positive learning environment. Congratulations Jimmy!

“My experience in the 2022 Master of Financial Insurance (MFI) program was truly exceptional. This program not only equipped me with a robust understanding of finance and insurance but also immersed me in advanced disciplines such as machine learning and time series analysis. Through challenging real-world case studies, I developed practical problem-solving skills that are vital in today’s financial landscape. What truly sets the MFI program apart is its unwavering commitment to fostering industry connections. We had the privilege of participating in seminars with seasoned professionals and benefited from guest lecturers who expertly bridged the gap between theoretical knowledge and real-world application.

I would like to express my profound gratitude to the dedicated professors and staff who have played a pivotal role in making this program outstanding. Receiving the prestigious MFI Academic Achievement Award, which is awarded to the top-performing student in coursework throughout the year, is a tremendous honor. It not only reflects the program’s academic rigor but also motivates me to strive for excellence in my future endeavors. In summary, my journey through the MFI program at the University of Toronto has been nothing short of transformative.”

BORIS MIGAN graduated from the University of Prince Edward Island in Actuarial Science, with a minor in Business & Statistics. Boris secured a highly sought-after place on the BMO Graduate Rotational Program soon after joining the program. Throughout his time as a MFI student, Boris has been an enthusiastic and active participant in guest lectures and industry sessions. Congratulations on your well-deserved award Boris!

“Joining the MFI program was a game-changer in my professional journey. At the beginning, I was uncertain about my career trajectory. However, I held a fervent desire to enhance my expertise and absorb as much knowledge as possible. Over an intense year at MFI, I delved deeply into data science, finance, and insurance. These are crucial subjects that have equipped me with the skills necessary to stand out in today’s competitive job market. The program’s exceptional faculty, overflowing with passion and expertise, further piqued my curiosity in these subjects. To me, MFI was more than just an academic pursuit; it was a hub of inspiration, robust learning, and invaluable networking. I am profoundly grateful for the connections I’ve made, the insights I’ve garnered, and the transformative experiences I’ve had.”

BORIS MIGAN, MFI Business Acumen Award Recipient
Awarded to the MFI student who best embodies the values and qualities of the MFI Program, and whose fellow students see as the best representative of the MFI

JOHN NDOLO (joint recipient) came to the MFI Program after graduating from Jomo Kenyatta University of Agriculture & Technology (JKUAT) and from a Masters Program from the African Institute for Mathematical Sciences (AIMS). John is also a MasterCard Foundation Scholar, and is currently working at Roche in their Nigeria location. John is loyal and active representative of the MFI Program, and a valuable advocate and spokesperson for inclusivity. Congratulations John!

“As an Alumni of the MFI program at University of Toronto, I can confidently attest to the incredible depth and robustness of the MFI program, particularly in the fields of actuarial science, mathematical finance, and data science. This comprehensive curriculum not only equipped me with a strong theoretical foundation but also practical skills that have been invaluable in my transition to the industry.

My experience as a Market Data and Insights lead at Roche Africa was greatly enhanced by the diverse knowledge I gained through MFI. Furthermore, the program’s emphasis on teamwork and the support of my exceptional classmates made the challenging journey all the more rewarding. MFI truly stands out as a transformative experience that empowers students to thrive in a multitude of industries.”

JOHN NDOLO, MFI Ambassador Award Recipient

ZHI YE (MICHAEL) LUAN (joint recipient) was a University of Toronto graduate before joining the MFI Program. He has been an extremely engaging, popular and proactive member of the 2023 cohort. He is sensitive to the sentiment of his classmates with great team spirit, frequently advocating on their behalf. Congratulations Michael on your well deserved award!

“The MFI program was an immensely rewarding and challenging. The academic rigour in tandem with hands-on professional guidance with unparalleled tutelage from world-class professors and industry professionals provided an experience that prepared me for the future.

The program’s commitment to cultivating integrity, excellence, and innovative thinking among its students is why being recognized with the Ambassador Award is such an honor.”

ZHI YE (MICHAEL) LUAN, MFI Ambassador Award Recipient
“The MFI program attracts students with training in mathematics, statistics, actuarial science, computer science and operations research. This broad base of skills allows the students to quickly learn some subtle concepts in mathematical finance.

Our MFI hire, Mike Liang, works on the institutional structuring desk at CIBC Capital Markets, and is developing a system and method of visualizing pricing deviations over time. The hiring process was very quick and seamless.”

Tushar Arora, CIBC

“Our MFI Intern (Yixin) showed great skill in producing daily investment analytical reports & analyses with high accuracy and attention to details.

She also had a positive and collaborative attitude, always willing to support her team members and cope with urgent situations. Yixin is a promising professional in the field of investment management, and we are very happy to her joined our team.”

Timothy Li, HOOPP

“Jimmy’s shown a keen understanding of quantitative methods, and he’s been able to apply this knowledge effectively in our fast-paced environment. Clearly, the MFI program has given him the tools to excel from the get-go, and he’s been a great addition to our team.”

Jason Chen, Purpose Investments

If you are interested in collaborating with the Masters of Financial Insurance program, or wish to receive the full resume of any of the students in the profile section, the MFI Team would be delighted to hear from you!

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