Joe (Jiaxi) Hu

EDUCATION

Rotman School of Management & Department of Economics, University of Toronto Toronto, Ontario
Master of Financial Economics *Jul 2023 – Dec 2024*

- **Awards:** Entrance Scholarship (CAD$5,000)
- **Upcoming Courses:** Options and Futures (Rotman); Corporate Financing II (Rotman); Econometrics (ECON); Financial Microeconomics (ECON); Capital Markets & Valuations (MBA); Private Equity and Entrepreneurial Finance (MBA)

McMaster University Hamilton, Ontario
Honours Bachelor of Science (Major in Actuarial & Financial Mathematics (Co-op), Minor in Economics) *Sep 2018 – Apr 2023*

- **Academic:** 3.9/4.0 cGPA
- **Awards:** Entrance Scholarship (2018); McMaster Honour Award (2018); Dean's Honour List (2019 - 2022)
- **Relevant Courses:** Financial Markets & Derivatives (A+); Mathematical Finance (A+); Corporate Finance (A+); Intermediate Microeconomics II (A+); Economic Issues (A+); Intermediate Macroeconomics II (A+)

INDUSTRY CERTIFICATIONS

- Bloomberg Certification Program – Equities, Fixed Income, Foreign Exchange *In Progress*
- Corporate Finance Institute (CFI) *In Progress*
- Exam IFM: Investment & Financial Markets (Society of Actuaries) *2021*
- Exam FM: Financial Mathematics (Society of Actuaries) *2020*
- Exam P: Probability (Society of Actuaries) *2020*

PROFESSIONAL EXPERIENCE

Ontario Teacher's Pension Plan (OTPP) | Investment Department Risk Division Toronto, Ontario
Intern – Pension Strategy *May 2022 - Dec 2022*

- Rebuilt the Asset and Liability model and validated liability valuation for the fund with more than 330,000 members
- Utilized SQL and C# to design and improve comprehensive analytical tools, tested and facilitated mortality projections
- Forecasted future asset performance of the fund, evaluated data-driven solutions to optimize pension plans
- Supported the development of sustainable strategies for investment and asset allocation with outputs from the ALM model
- Generated the weekly fund position with VBA while monitoring changes resulting from shifts in interest and inflation rates

Canada Life Insurance Company London, Ontario
Intern – Risk Research, Wealth Management Team *Jan 2021 - Aug 2021*

- Collaborated with senior analysts on activities and tasks related to Payout Annuity and Payout Annuity Mortality Studies
- Contributed to the development of a new Payout Annuity Study model, successfully reducing run time by 90%
- Used Access and SQL to manage and collect core data for projects and solve any data or calculation issues
- Performed A/E ratio Calculation, created data visualizations, and presented findings to the management teams
- Assisted senior management with programming, preparation, and interpretation of monthly actuarial reports

RELEVANT ACADEMIC PROJECTS

Algorithm Trading (Bridgewater) | Blended Learning Research Program *2022*

- Utilized Python to build time-series models for stock prices using Moving Average and Auto Regression models
- Developed ARIMAX model with comprehensive steps to generate predictions, achieving 98% accuracy in one-day forecast
- Constructed an algorithmic trading strategy based on Moving Average Convergence/Divergence (MACD) with Python
- Managed portfolio to achieve an excess return of 15% annually over the S&P 500 from October 2019 to July 2022

Cooperators Problem-Solving E-Workshop | McMaster University *2022*

- Developed Regression and Random Forest models to forecast loss amount and the number of exposures in car insurance
- Utilized comprehensive data analysis using R, developed model and generate reports for data with more than 17,000 records
- Enhanced technical abilities in data science analysis and model construction with Supervised Machine Learning Algorithm
- Generated and presented finding to actuaries at The Co-operators, achieved second place amongst 30 competing teams

PERSONAL

- **Technical Skills**: Familiar with Excel (VBA), SQL, Python, R, C# and Machine Learning
- **Languages**: Fluent in English & Cantonese & Mandarin
- **Interests**: Formula 1, Snowboarding, Poker