Jesse Yan

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EDUCATION

University of Chicago (GPA: 3.8/4.0) **Chicago, IL**
Master of Science in Financial Mathematics **Expected June 2025**

- Concentrations: Trading and Risk, Options and Derivatives, Financial Computing
- Coursework: Portfolio Theory & Risk Management, Computing for Finance (Python), Fixed Income, Fixed Income Derivatives, Machine Learning, Quantitative Trading Strategies, Credit Markets, Adv Computing for Finance (C++), Macro Finance, Foreign Exchange Products & Pricing, High Performance Computing, Probability & Stochastic Processes, Modern Applied Optimization, Applied Algorithmic Trading, Option Pricing, Mathematical Market Microstructure, Full-Stack Quantitative Finance, Stochastic Calculus, Options: Numerical Methods

University of Illinois at Urbana-Champaign (UIUC) **(GPA: 3.9/4.0)** **Champaign, IL**
Bachelor of Science in Actuarial Science; Minor in Business, Minor in Communication **December 2021**

Illinois Mathematics and Science Academy (IMSA), Aurora, IL (ACT: 36) **June 2018**

Awards & Honors: Top 15 USA IMC Prosperity 2 Trading Competition (2024), FinMath Alpha Scholar, James Scholar Honors, Dean's List, State Farm Actuarial Science Scholar, NAMIC Mutual Insurance Foundation Scholar, ARML

SKILLS

Computing: Python, Jupyter, R, VBA, SQL, SAS, C++, CUDA, Cython, Vim, Linux, Git (GitHub), Snowflake, Tableau, Alteryx, QlikView, Microsoft Office (Excel, PowerPoint, Word, PowerBI), Robotic Process Automation (UiPath), RMS (Moody's), AIR (Verisk), ProVal (Winklevoss Tech)

Professional Exams Passed: Financial Mathematics (June 2019), Probability (September 2019), Investments and Financial Markets (July 2021), Statistics for Risk Modeling (May 2023), Predictive Analytics (October 2023)

EXPERIENCE

Neuberger Berman **Chicago, IL**
Quantitative Researcher – University of Chicago Project Lab **June 2024 – August 2024**

- Adapted the Merton model for municipal bonds, focusing on asset volatility, default risk, and municipal finance traits
- Completed quantitative analysis on model modifications to find trading signals using Snowflake, Jupyter, and Python

PricewaterhouseCoopers (PwC) **Chicago, IL**
Quantitative Consulting Associate **August 2022 – October 2023**

- Constructed deliverables determining fair values of complex financial instruments and OTC derivatives used in stock compensation for financial reporting, regulatory disclosure, tax, and transaction advisory purposes (e.g. ASC 718, SEC's PvP) using Black-Scholes, Merton, Cholesky, Finnerty, Chaffe, and Monte-Carlo simulation models
- Conducted risk assessments, audits, and other analyses of pension plans to ensure funding levels remain adequate
- Calculated actuarily determined contribution rate scenarios using ProVal for pension plan projections and redesigns
- Marketed and organized bids for auctions of pension risk transfers between pension clients and insurance carriers

Management Consulting – Intern **June 2021 – August 2021**

- Provided support for audits, surveys, and ad hoc analyses on retirement, health, pension, and other benefits plans
- Validated the migration of proprietary Pharmacy Benefit Managers (PBM) repricing model from Excel to Alteryx

Travelers Insurance **St. Paul, MN**
Actuarial Leadership Development Program Intern (Remote) **June 2020 – August 2020**

- Analyzed relative pricing competitiveness in Select business to understand cross-sell underwriting impact
- Visualized implications of new underwriting flow rules in Commercial Accounts business using QlikView and SAS

Axis Capital Reinsurance **Champaign, IL**
Catastrophe Modeling Support & Actuarial Intern **January 2019 – August 2019**

- Created loss models and comparison reports using SQL, R, RMS, and AIR to assist underwriting business functions
- Developed custom tools using VBA and Python to expedite and streamline the catastrophe modeling process
- Generated industry report and competitor analysis to assist in one-off portfolio optimization project
- Won internship capstone challenge for team presentation to senior leadership on Directors and Officers coverage

ADDITIONAL INFORMATION

Extracurriculars: UChicago – Course Assistant (Macroeconomics, Microeconomics); **UIUC** – FACES Consulting, Actuarial Science Club (Committee), AXIS Risk Management Academy (Committee), Gamma Iota Sigma, Asian American Association

Interests: YouTube channel, tennis, swimming, running, sports betting, poker and other card games, piano