Jesse Yan

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EDUCATION

University of Chicago

Chicago, IL

Master of Science in Financial Mathematics

Expected June 2025

 Courses: Portfolio Theory & Risk Management, Computing for Finance in Python, Fixed Income, Fixed Income Derivatives, Machine Learning in Finance, Quantitative Trading Strategies, Credit Markets, Advanced Computing for Finance in C++, Macro Finance, Foreign Exchange: Markets, Products, and Pricing; Introduction to High Performance Computing, Option Pricing, Stochastic Calculus

University of Illinois at Urbana-Champaign (UIUC)

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)

Actuarial 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

Consulting – Associate

August 2022 – October 2023

- Determined fair values of stock compensation per ASC 718, new SEC pay-versus-performance, and other disclosure requirements using Black-Scholes, Merton, Cholesky, Finnerty, Chaffe, and Monte-Carlo simulation models
- Conducted risk assessments, audits, and other analysis 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 pension risk transfers between pension clients and insurance carriers
- Constructed regulatory reports and other deliverables for clients summarizing findings, results, and recommendations

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 Grader (Principles of Macroeconomics); 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