

Education

Fordham University, Gabelli School of Business

New York, NY

M.S. in Quantitative Finance

August 2026 - December 2027

- Dean's Scholarship Recipient | Teaching Assistant, ML in Business (AIGB 6206 - Fall 2026)

University of Toronto

Toronto, Canada

B.A.Sc. in Engineering Science (Engineering Maths, Statistics & Finance; Minor in AI)

September 2021 - April 2026

- Coursework: Stochastic Methods for Finance, Probability, Optimization in Financial Engineering, Optimization in Machine Learning
- Dean's Honor List (2022, 2024-2026); Engineering Admission Scholarship

Technical Skills

- Programming: Python, C++, SQL (Postgres), MATLAB, R
- Software: Excel, Power BI, Jupyter, Git
- Quantitative Methods: Monte Carlo Simulation, Black-Scholes, VaR Analysis, Options & Futures Pricing, Quantitative Analysis (Greeks)

Work Experience

Fidelity Investments

Toronto, Canada

Researcher, Finance and Corporate Services Department

September 2025 - April 2026

- Constructed an AI pipeline in Python to automate quality assurance for multilingual financial documents using LLMs
- Designed validation logic across 30+ extracted data fields, applying quantitative accuracy checks to unstructured fund documentation
- Achieved 96% accuracy and 99.6% recall while evaluating over 1,500 financial documents, minimizing false negative entries

Vena Solutions

Toronto, Canada

Associate Solutions Manager Intern, PreSales Team

August 2024 - August 2025

- Developed custom Proof of Concept solutions in Excel supporting \$1M+ USD in ARR to a FinTech SaaS company
- Leveraged Power BI and SQL to transform static reports into dynamic, data-driven insights, leading to a 65% win rate

morLAB

Toronto, Canada

Machine Learning Research Intern, supervised by Professor Dionne Aleman

May 2023 - April 2024

- Developed and trained XGBoost and RandomForest models in Python to predict the survival of liver transplant patients
- Implemented Bayesian Optimization hyperparameter tuning to achieve a model AUC of 70%

Projects

NBA Outcome Predictor | Python, C++

July 2026 - Present

- Trained a logistic regression model in Python on rolling team-performance and injury data to predict NBA game outcomes
- Benchmarked it against real sportsbook odds and backtested a betting strategy on a held-out season, evaluated with Brier score, log-loss metrics
- Ported the model's backtesting engine to C++, running the core computation ~10x faster than the Python backtester.

Stochastic Modeling and Asian Option Pricer | Python

October 2025 - December 2025

- Built Monte Carlo option pricing models in Python for path-dependent derivatives using GBMs, evaluating pricing accuracy using 95% confidence intervals and discretization error analysis
- Implemented analytical and numerical methods for Asian options, including the Black-Scholes closed-form and pathwise Greek estimation

Bond Index Portfolio Optimizer | Python

September 2025 - December 2025

- Developed a portfolio optimizer tool in Python to minimize the tracking error, tracking the ICE Treasury Bond Index
- Integrated momentum ranking, dynamic asset allocation and Key-Rate Duration to minimize tracking error
- Achieved an annualized tracking error of 3.7% while maintaining a return within 2.3% of the benchmark

Additional

- Volunteering: [Engineers in Action](#) (bridge construction project in Bolivia)
- Languages: English (native), Mandarin (fluent), French & Spanish (conversational)
- Certifications: QuantNet C++ for Financial Engineers, [Google Data Analytics Specialization](#)
- Competitive Gaming: Former Top 500 Player in Clash Royale (out of 50M+ competing players)