
TECHNICAL SKILLS

- **Programming:** C++, Java, Python, Shell
- **Development:** System decomposition, Structured Analysis and Architecture, Template Metaprogramming, Object-Oriented and Policy Design Patterns, Git
- **Frameworks:** C++ Boost, STL, JSON

TECHNICAL EXPERIENCE

Top Projects Jun 2019 - Current

- **C++:** Engineered a computational finance application in C++ using Black-Scholes to price options and calculate option sensitivities. Implemented Policy-Based Design and achieved 1,000,000 simulations in ~27s.
- **Java:** Emulated the Java Collection framework, including the specification, design, and implementation and demonstrated their use in modern software engineering.
- **Python:** Engineered a financial application that analyzed near real-time market data and used the Twilio API to automatically send trade signals based on technical analysis.

EDUCATION

Boston, MA Boston University Expected Dec 2021

- MS in Computer Science; GPA: 3.90/4.00
- Graduate Coursework: Advanced Programming; Algorithms; Artificial Intelligence; Computer Language Theory; Computer Networks; Data Structures; Discrete Mathematics; Financial Informatics; Machine Learning; Operating Systems; Software Design and Patterns; Software Engineering

New York, NY Baruch College Sep 2020

- Advanced C++11/14 and Multidisciplinary Applications
- C++ Programming for Financial Engineering; Certificate of Distinction

Davis, CA University of California, Davis Jun 2015

- MBA and BA in Finance; GPA: 3.98/4.00
- Finance and Math Coursework: Statistics; Derivatives Pricing; Mergers and Acquisitions; Financial Informatics

EMPLOYMENT

Teaching Assistant QUANTNET INC Sep 2020 - Current

- C++ for Financial Engineering: Explain and respond to C++ related concepts and questions and help students with their programming projects. Sections include: Template Metaprogramming; Robustness & Efficiency in OOP; STL and Boost; Memory Management; System Errors and Exceptions; C++ Applications in Finance

Graduate Teaching Assistant Boston University Sep 2020 – Current

- Operating Systems: Explain concepts related to Processes; Threads; Scheduling; Memory Management; Virtual Memory; Synchronization; Deadlocks; Inter-Process Communication; File Systems

Strategic Finance, Sr. Manager Toast Nov 2019 – Current

- Led strategic finance function for a hypergrowth startup, including direct responsibility for 75% of company P&L and cash flow (R&D, Product, UX, Hardware, Manufacturing, Professional Services, Customer Support).

Strategic Finance, Sr. Manager Box Jun 2017 – Nov 2019

- Led three-statement modeling and strategic initiatives that drove the company towards \$1 billion in revenue.
- Achieved company's first positive annual cash flow and operating income.

Strategic Finance, Sr. Manager Genesys Sep 2014 – Jun 2017

- Led \$1.4 billion acquisition of Interactive Intelligence, creating the leading Customer Experience company.
- Led financial analysis for the \$900 million investment from Hellman & Friedman at a \$3.8 billion valuation.