

ABOUT ME

Technical Skills C/C++, Python, IPython/Pandas, Unix/Linux, Excel VBA, Go
Web & Design HTML/CSS/Javascript, Django, Adobe Photoshop
Interests Distributed Systems, Machine Learning, Concurrency, Data Analysis

WORK EXPERIENCE

LinkedIn

Intern, Software Engineer – Graph Team

Mountain View, CA (Winter 2015)

- Designed and implemented query persistence feature on the new generation graph database that would be the core of the Economic Graph
- Analyzed performance on our query processor to find bottlenecks
- Developed a framework around Norbert and Kafka to test for correctness on new builds in our distributed systems

Citadel LLC

Intern, Software Engineer – Options IT

Chicago, IL (Summer 2014)

- Developed in C++, a high performant multithreaded WebSocket server serving all the traders' browser to replace an existing C++ GUI
- Improved performance from the old GUI by using low lock times, non-blocking I/O, async events and caches
- Worked on ad-hoc projects on PnL and Volatility Pricing

Scotia Capital

Financial Engineer – Credit & Equity Derivatives

Toronto, ON (Fall 2013)

- Developed and improved option modelling tools for equity traders in C++ and VBA

RESEARCH

Nessie: Key-Value Store using RDMA

Research Assistant

Univeristy of Waterloo (Summer 2015)

- Implemented features in the paper and wrote applications on top of Nessie

PROJECTS



www.github.com/JohnnyJohnAndTheFunkyBunch

Predictious Trading Bot

- Wrote a bot in Python to trade DJI/Gold/Silver contracts using Black-Scholes binary option pricing.

Rotman International Trading Competition

- Developed quantitative strategies and applied them during the competition againts undergraduate and graduate students from schools around the world

Bloombuzz

- Won first place for the Pagerduty API during Hack The North with a real time stock monitoring app

Various Web Projects

- Created YouTubeSync that allows users in the same session to synchronize their YouTube video even when pausing, playing, and skipping.
- Wrote a simple WebSocket server library from scratch in Go (golang)
- Full Stack development on a video streaming website developed using Amazon Web Services (EC2, S3, CloudFront, RDS, Route 53, CloudWatch)

EDUCATION

University of Waterloo

Waterloo, ON (2012–Present)

- Honours Bachelor of Mathematics (Computer Science)
- Dean's Honours List: 93% Average