





# **EXPERIENCE**

#### Tradetone Research Labs

Toronto, Ontario

Software Engineer

August 2019 – Present

• Developed, tested and deployed microservices of a distributed system with applications in high-frequency trading using FPGA boards

- Designed and deployed AWS cloud infrastructure such as EC2, VPC, PrivateLink Endpoints, Site-to-Site VPN, CloudWatch, DirectConnect, etc.
- Automated build and deployment processes on CentOS servers using Bash scripts
- Developed system alerts using Slack API then integrated alerts into existing CI/CD pipeline
- Responsible for configuring and monitoring network equipment such as Cisco ASA, Arista switches, and Exablaze Fusion
- Designed and developed a trade blotter GUI using Qt5
- Developed internal tools in C++ for ad hoc analyses, e.g. create order book, measure microburst and latency of order messages, etc.

Ctrl V Waterloo, Ontario

Virtual Reality – Developer

September 2018 – April 2019

- Integrated V Cards (Gift Cards) into existing POS system that in Qt5 and C++
- Refactored legacy code to implement design patterns such as Model-View-Controller (MVC) model and Resource Acquisition Is Initialization (RAII) pattern
- Developed server-side Web API endpoints using React, Express, Node.js, and PostgreSQL

Unata Toronto, Ontario

Quality Assurance – Automation Developer

January 2018 – April 2018

- Performed regression and sanity cycles to ensure platform updates for each client satisfied their respective business requirements and offered a seamless user experience
- Designed, developed, and automated test cases using Robot Framework and Selenium WebDriver, significantly reducing the time to complete test cycles

#### Cambridge Global Asset Management

Toronto, Ontario

Equity Research – Trading Assistant, Research Associate

January 2017 – April 2017

- Responsible for idea proposal, price negotiation, and record-keeping of option trading in Cambridge
- Developed VBA scripts to analyze trade P/L, portfolio risks, and US Treasury Yield Curve roll-down return in Excel spreadsheets

### **PROJECTS**

### **Automated Trading System**

Python3, Pandas, MariaDB

June 2020 – January 2021

- Designed and implemented a systematic momentum trading model using Pandas
- Built a scheduler that automatically downloads and stores daily closes into MySQL database for backtest purposes

# **Expense Tracker**

Python3, Selenium WebDriver

January 2020

• Implemented a web scraper that downloads daily transaction data from different bank accounts, and generates expense report

# **EDUCATION**

**University of Waterloo** *Bachelor of Computing and Financial Management* 

Waterloo, Ontario

2013 - 2019

• **GPA:** 4.0/4 (Major Average: 86.0)

**Honors:** President's Scholarship of Distinction, International Experience Award, Dean's List for 6 years

## **SKILLS**

- Languages/Framework: C++, Qt5, Python3, Pandas, MySQL, AWS, HTML/CSS/JavaScript, Robot Framework, React, Node.is, Express, Sqlite3, Monit
- Tools: Linux (Bash), Perforce, Git, Wireshark, X2Go, tmux

WORK

Graduation

UNIVERSITY