Patrick Yi

3A Computing and Financial Management Student

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Experiences

Ford Motor Company of Canada – Software developer - Projection   Jan 2022 - Apr 2022

- Participated in development of CarPlay Android application project.
- Implemented injection of CarPlay settings during runtime using *ADB* and *Android intents*.
- Included unit testing to CarPlay project using *Robolectric* and *Soong build system*.
- Used: Kotlin, AOSP, Android Studio, Git, ADB, Fastboot, Soong

Republic of Korea Air Force – Fire control avionics technician, Staff Sergeant   Jan 2019 - Nov 2020

- Assisted maintenance of fire control avionics components of C-130, CN-235, RC-800B/G, and RC-2000B
- Offered translation of aircraft manuals and technical inquiries
- Provided interpretations for officers and technicians from Elbit Systems, Rockwell Collins, and Dassault
- Led the squadron as a squad leader for 9 months

Finastra - QA Automation Developer   May 2018 - Aug 2018

- Developed and deployed an internal *ASP .NET MVC 5* project to an internal *IIS Server*.
- Engaged in development of a browser test automation project using *Selenium Page Object Model*.
- *Speeded up of automation tests using Selenium by 50%* compared to the previous test framework.
- Used: C#, Selenium, ASP .NET MVC 5, Razer Pages, Entity Framework, Git, Microsoft SQL Server Management Studio, JavaScript, html, SQL.

Projects

myRTOS (C | Embedded | QEMU | ARM)
- Developed a *real-time embedded operating system* following Navilos project and tutorial book.
- Learned *basic concepts of real-time operating systems* and *ARM CPU design*.
- Implemented *context switching, timers*, and *memory allocation of tasks* in QEMU emulation.

Minesweeper Client & Server (C++ | Boost | CMake | Git Submodule | OOP)
- A text-based minesweeper client & server.
- Client solves a given minefield from server with a probability-based algorithm.
- Built with *Boost* and *JSON* for serialization and used *Object-oriented Programming* to modularize common components.

Chess Group Project (C++ | OOP | ncurses | Observer | Git)
- A text-based chess game with text-based UI with ncurses library.
- Uses Observer patterns to effectively show the chessboard via UI.
- Learned how to effectively use Git and vscode in group work.

Education

University of Waterloo   **Waterloo, ON**
Candidate for Bachelor of Computing and Financial Management   Expected August 2024

- Recipient of Computing and Financial Management Outstanding Academic Achievement Award ($2000 scholarship)