# Andrew Poon

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# **EDUCATION**

# **B.E.Sc Software Engineering with Co-op**

Sep 2018 – Present

University of Western Ontario, London

- Courses in Machine Learning, Artificial Intelligence, Cloud Computing, Operating Systems, Web Development, Human-Computer Interface Design, Network Architecture, and Network Application
- o Employed the software development process in project-based learning with a variety of languages, tools, frameworks, platforms, and infrastructure.

# Experience

IO Industries Inc May 2021 – Aug 2022

Student Computer Programmer

- Developed and maintained the Linux versions of camera control software including Debianbased and RPM-based Linux distributions using C++ and QT
- o Implemented a multi-threaded approach to executing bash scripts through the camera control software; Manually converted batch script from Windows to bash script on Linux.
- o Managed network and PC configuration to facilitate software and hardware testing which included the M.2 PCie card, the 40Gbps network card and network switches.
- o Tested releases of camera control software and camera firmware for control-breaking bugs.
- o Trained new programmers on C++, QT and Linux development and provided general guidance.
- Learned the basics of volumetric cameras starting from FPGA board, sensor, IR lens, firmware, registers within camera, Bayer filter, synchronization protocol and various sensor trigger and SMPTE standard.

#### **Project**

### Peer-To-Peer Image sharing network

JavaScript

- A command-line based program that allows a user to query an image over a P2P network
- Peer nodes were bound randomly based on available ports and the program uses a custom network protocol called Image Transfer Protocol.

#### **Chatroom service**

C++ and python

- A GUI based program that provides 50 public chatrooms for multiple users to connect and share messages with each other.
- The program involves skill learned in the operating system class such as multithreading, blocking threads, and semaphores and it was hosted on an amazon EC2 server.

# BlackJack

Java

o A console-based Blackjack where it will print out a randomly dealt hands of card and the player can bet, hit, split, double down against a computer which follows the best move given the sum of cards.

# **Technical Skills**

- o Java, JavaScript, C++, Python, UML, Wireshark, Excel, PowerPoint, Subversion, Linux, Bash,
- o QT, C#, Unity, git, Java Fx, SQL, mySQL, Node.js, Angular, XML, React.js, MongoDB, JSON, AWS,