Frank Liang

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Education

University of Waterloo
Honours Computer Engineering
GPA: 3.7/4.0

Relevant Courses:
- Algorithms and Data Structures
- Operating Systems
- Embedded System Design
- Discrete Mathematics
- Digital Computers and Systems
- Electronic Circuits

Qualifications

Languages:
- C/C++
- C#
- Java
- JavaScript
- Scheme
- SQL
- HTML/CSS
- XML
- ARM ISA
- MATLAB
- VHDL
- Git

Technical Proficiency:
- Logic Gates
- Operating Systems
- Digital Systems
- Linux OS
- Computer Hardware
- Finance and Capital Markets

Awards and Achievements

University of Waterloo
President's Award of Distinction Scholarship ($2,000)

BC Ministry of Education
BC Achievement Scholarship ($1,250)

Work Experience

NexJ Systems Inc. – Toronto, ON **May 2017 – Aug 2017**
Fullstack Developer – Product Development
- Developed a new backend security system based on personal research that dictated the transparency and accessibility of data throughout our client's different levels of management
- Collaborated with senior managers and UI/UX designers in product design and proceeded to implement these new features with minimal supervision
- Resolved bugs in both the frontend (HTML/CSS) and the backend (Java/JavaScript/Scheme) in an agile environment
- Conducted numerous presentations to other developers and managers regarding new features and patch updates

KPMG LLP – Toronto, ON **Sept 2016 – Dec 2016**
Software Developer – Digital Compliance
- Took initiative to independently develop a Capital Markets data automation and analysis tool that is now profiting over 10 million dollars per annum for the company
- Created both the frontend (XML) and the backend (C#) and generated SQL databases, stored procedures, and scripts for ease of data manipulation
- Collaborated closely with senior partners, managers, and other tax professionals in the software design process

PAVAC Industries – Vancouver, BC **Jan 2016 – Apr 2016**
Junior Electrical Engineer
- Assembled and wired a $600,000 Electron Beam Welder with other members of the Electrical Department and completed the project 30% faster than the previous machine
- Edited schematic designs/drawings for the BIAS and Arc Protection PCB boards using Zuken e3

Projects

Avalon Web – *Completed*
- A web application version of the board game Avalon with support for multiple number of players created with HTML/CSS/JavaScript
- Automated game setup process and gameplay through random role assignment and JS scripts carrying out host procedures

GPS Navigator – *Completed*
- Developed a Java Application on Android Studio that collected readings from internal sensors to calculate walking displacement and generate GPS navigation
- Created a recursive algorithm to determine the shortest path between the user's chosen starting point and destination
- Implemented an UI that updates a Graph View display accelerometer and gyroscope readings through event handlers