Denton Liu

Software Engineering

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First Place

Summary of Qualifications

- o Proficient in Java, C, C++ and various assembly languages.
- o Enjoys working in and understanding low-level environments such as embedded systems.
- o Familiar with building websites using HTML5, CSS3 and JavaScript.
- o Adept with Linux and many common applications such as Git and GDB.

Projects

LAByrinth

- o Created a labyrinth game using a microcontroller board with C.
- Utilised both serial and parallel I/O to communicate with peripherals.

Breadboard Computer

- o Created a computer based on the 6502 processor on a breadboard using only ICs (integrated circuits).
- o Programmed a version of Pong using 6502 assembly.
- o Utilised an EEPROM programmer to load assembled hex image.

Java-Webchat

- o Developed RMI-based (Remote Method Invocation) communication protocol.
- Implemented a user database which took precautions to secure user data using salted hashes.
- Made use of object-oriented programming principles in order to create a cleaner codebase.

Experience

2015

IT Volunteer, Administration, Newcomer Centre of Peel.

- o Created tool to backup user data using Windows Batch scripting.
- Acted as system administrator.
- Provided technical assistance to employees.

2007-2015

Cadet Warrant Officer, Royal Canadian Air Cadets, 700 David Hornell VC Squadron.

o Planned and organised events as a member of a team.

University of Toronto High School Design Competition

- Captained the drill team consisting of the squadron's most successful cadets.
- Commanded over 120 peers during graduation parade of Drill and Ceremonial Instructors Course.

Education

2015-2020

Candidate for Bachelors of Software Engineering, University of Waterloo, Waterloo, Ontario.

Cumulative GPA: 3.85

2011-2015

2014

Ontario Secondary School Diploma, Martingrove Collegiate Institute, Toronto, Ontario.

Academic Average: 95.0%

Awards and Scholarships

2015 Sandford Fleming Foundation Programming Competition Award

2015 Dean's Honours List at University of Waterloo

2015 President's Scholarship of Distinction

2014 General Proficiency Award at Martingrove Collegiate Institute

2015 Second Place

2016 Term Average of 87% or Greater

2017 Admission Average of 95% or Greater

2018 Second Greatest Overall Academic Average

Interests and Hobbies

- o Plays cello, double bass and piano.
- o Avid unicyclist.
- Fanatical user of LATEX.
- o Proud Vim user.