Steven Luo | Electrical Engineering

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Technical Qualifications

Proficient with: ▪ C/C++, Java, Python

Version Control: ▪ Git, SVN

Development Environments: ▪ Unix (Default), Android, FPGA

IDE Experience:
- Visual Studio
- Android Studio
- Unit testing (JUnit)
- GNU GDB debugger

Other Experience: ▪ SQL, UML, XML

Interpersonal Skills

- Successful bilingual (mandarin) team player with exceptional communication and time management skills
- Proven problem solving abilities, creating tailored solutions in high pressure situations due to adept learning capacity

Projects

Rubik Cube Timer & Scrambler (C++)
December 2015
- Competition timer with microsecond accuracy, using C++11 <Chrono>
- Generates uniformly random scramble using Mersenne Twister generator
- Modular console program written using object oriented design patterns in C/C++ with linked listed data structure with UML class diagram

Network Discrete Event Simulations (C++)
October 2016
- Analyzed data input using <fstream> by implementing queue priority queue data structure to sort, queue, and process client requests
- Generated simulation result finding maximum client delay and average client delay based on server constants and transmission speeds

Track your Boom Android (Java, Google Maps Api)
Nasa Space Challenge 2016
- Using Google Map Api with on board GPS to find and display location
- Display impact area of Sonic/Low boom on map for visual comparison
- Animation of jet flyby and media playback of Sonic/Low boom

Pedometer Map Android (Java, XML Layout)
January 2016
- Created footstep recognition algorithm by applying low bypass filter
- Finite state machine using gyroscope to track North/East displacement
- Used graph theory to find shortest path from start to end point on map

Work Experience

Passenger Service Agent, Air North Airlines
July 2014 – August 2015
(Transport Canada Security Clearance)
- Expedited completion of probation period through quick learning of Canadian Aviation Regulations, and company policies/procedures.
- Achieved 95% on-time performance due to time management skills during check-in and boarding process
- Developed problem solving skills by providing all passengers with tailored solution in high pressure and time constraining situations

Education

University of Waterloo
BASc, Electrical Engineering
June 2020 || Waterloo, ON
- Lighting Talk speaker and conference delegate for Engineering Student Societies Council of Ontario at Ryerson University
- Waterloo Engineering Society Class Representative
- Waterloo ASIC (Application Integrated Circuit) team

Awards

City of Richmond U-ROC
May 2014
- To commemorate outstanding youth within the City of Richmond, Youth Council Chair (Robert's Rules) with over 350 recorded volunteer hours