Steven Luo

✉ swluo@edu.uwaterloo.ca 🌐 swluo.me 📞 519-729-8764 in swluo ⌗ o00o00o

❯ Technical Skills

PROGRAMMING LANGUAGES	FRAMEWORK & TOOLS
- ANSI C	- QNX (RTOS)
- C++	- Android
- Java	- Unix
- Python	- GNU Make
- SQL	- GNU GDB
	- Git

❯ Education

University of Waterloo - Computer Engineering
BASc 2020
- Conference speaker and delegate for Engineering Society
- Webmaster for Waterloo Engineering Society's WordPress website

❯ Personal Traits

Collaborative
- Successful team player with exceptional communication skills resulting in effective sprint meetings

Enthusiastic
- Track record of establishing upbeat and friendly environments through a can do attitude with witty sense of humor

Driven
- Demonstrates passion for the job and continuous learning by consistently taking on extra responsibilities

❯ Projects

Locked In Concentration   March 2017
- Tomato Timer live on Ubuntu Software Center using Snapcraft to support platform independent distribution
- Automated build process using Makefile through automatic variables and compiler generated dependencies
- Graphics manipulation using raw texture rendering and alpha blending

Data For a Cause   September 2016
- Successful proof of concept that helps Nonprofits utilize Open Data
- Automated processing of a 230,000 entry dataset into MySQL database from Open Data Canada
- Created a user friendly searchable interface for easy data access

Map My Path (Android)   March 2016
- Real time accelerometer data processing for footstep detection
- Footstep recognition algorithm using low bypass filter integrated with finite state machine
- Dynamic path finding algorithm using recursion for quick navigation

RU-Timer   December 2015
- World Rubiks Cube Association style timer with microsecond accuracy
- Unique uniformed random scrambles guaranteed by Mersenne Twister Generator using C++11
- Easy to use UI featuring dynamic statistics tracking with data exporting

❯ Experience

Blackberry   January 2017 - April 2017
Firmware Developer   Kanata ON
- Managed parallel interprocess communication and multithreaded execution flow by creating thread safe state machine
- Developed asynchronous logging system for Atmel touch screen drivers allowing multi-touch debugging and behaviour analytics
- Utilized defensive coding practices for mission critical systems in a QNX real time embedded system to meet ISO road vehicle standards

Peach Arch Education   May 2016 - August 2016
Java Instructor   Vancouver BC
- Presented interactive lectures for Introduction to Java Course
- Educated students in object-oriented principles, specifically inheritance using "has a" and "is a" relationships
- Designed final project to test OOP, texture control, and animation effects

Global Fleet Managment   May 2016 - August 2016
Hardware Tester & Support   Vancouver BC
- Re-engineered test benches to support new generation GPS trackers
- Programmed GPS trackers through serial communication (Bash Scripting)
- Conducted remote diagnosis using wireless SMS bootstrap commands