

Steven Luo

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➤ Technical Skills

PROGRAMMING LANGUAGES

- ANSI C
- C++
- Java
- Python
- SQL

FRAMEWORK & TOOLS

- QNX (RTOS)
- Android
- Unix
- GNU Make
- 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 bilingual 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 to utilize Open Data
- Automated processing of a raw 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 implemented using low bypass filter into finite state
- 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 <random>
- Easy to use UI with dynamic statistics tracking including export function

➤ Experience

Blackberry Firmware Developer

January 2017 - April 2017
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 Java Instructor

May 2016 - August 2016
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 Management Hardware Tester & Support

May 2016 - August 2016
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