

Dear Hiring Manager,

I want to extend a welcome for you to visit my personal website [www.swluo.me](http://www.swluo.me) for an in-depth look at my portfolio and gain some insight into my life through my blog.

I am a second year student at the University of Waterloo, majoring in Electrical Engineering. By being an outspoken member of the Engineering Society and along with my excellent communication skills, I was selected to present a speech at the FYIC conference at Ryerson University hosted by ESSCO (Engineering Student Societies Council of Ontario). I am a person who will add value to any team, through my witty sense of humour which features self deprecating jokes. My attention to detail and work ethic have been honed through years of menial jobs. I always take the initiative to find every opportunity to validate/battle-harden my skills. A small list of accomplishments includes: second place finish at Protohack Vancouver 2016, third place finish at Waterloo Google Games 2016, and first place heat at UBC Physics Olympics 2015. Experiences such as analyzing data directly from the CERN Super Collider at TRIUMF to NASA hosted hackathons are the norm for me.

Please see my resume or <https://ca.linkedin.com/in/swluo> for additional information on my experience. If you have any further questions, I can be reached by cell at [519-729-8764](tel:519-729-8764) or by email at [swluo@uwaterloo.ca](mailto:swluo@uwaterloo.ca). Thank you for your time and consideration, and I look forward to speaking to you about this employment opportunity.

Best regards,

A handwritten signature in black ink, appearing to be 'SL' with a long horizontal stroke extending to the right.

Steven Luo

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## Technical Qualifications

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**Proficient with:** ▪ C, C++, Java, Python, SQL, Bash, Assembly (ARM)

**Tool Experience:** ▪ Git, Makefile, GDB Debugger, Matlab/Simulink

**Development Environments:** ▪ Android, Arduino, Keil MCU, PIC, Unix

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## Interpersonal Skills

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- Successful bilingual (English and Mandarin) team player with exceptional communication and time management skills
  - Proven self starter with a can-do attitude, always ready to take on responsibilities regardless of the job description
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## Projects

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**Android Pedometer App** ▪ Analyzed accelerometer data using software implemented low bypass filter  
(Java) ▪ Created footstep recognition algorithm using finite state machine  
*January 2016* ▪ Used recursive path finding algorithms with navigation points on SVG map  
▪ Delivered code on time every two weeks, meeting all deliverables

**Android Track Your Boom** ▪ Used Google Play Services framework to implement “my location” on  
(Java) Google Maps API  
*April 2016* ▪ Compared and contrasted sonic boom by drawing overlays on Google maps  
▪ Created sonic boom sound effect and animated jet flyby

**Pomodoro Timer** ▪ Utilized SDL framework to capture and process all raw input from I/O  
(C++, SDL) ▪ Handled graphics manipulation using texture rendering and alpha blending  
*August 2016* ▪ Hardcore mode ignores system shortcut and forces window foreground

**Hack the North 2016** ▪ Turned raw data into useful, queryable format for Non-profit use  
(C++, SQL) ▪ Parsed a 230,000 entry dataset from Open Data Canada into SQL database  
*September 2016* ▪ Created a user friendly search interface that queried from SQL database

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## Work Experience

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**Hardware Testing & Support** ▪ Designed and implemented new test bench to support new GPS trackers  
Global Fleet Management with legacy tracker support  
*May 2016 – August 2016* ▪ Programmed GPS trackers through serial communication (Bash Scripting)  
▪ Conducted remote diagnosis using SMS bootstrap  
▪ Performed local diagnosis with multimeter and test bench

**Java Instructor** ▪ Developed course plan for Java Programming Level 1 (Grade 8 - 12)  
Peach Arch Education ▪ Incorporated object-oriented principles specifically encapsulation and  
*May 2016 – August 2016* inheritance into projects  
▪ Designed final project to be a full brick breaker game including texture control, score counter, and audio/visual effects

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## Education

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**University of Waterloo** ▪ Conference speaker and conference delegate for Engineering Society  
*BASc, Electrical Engineering* ▪ Webmaster for Waterloo Engineering Society’s WordPress website. Helped  
*June 2020* develop new digital services and conduct website overhaul.