

# Sean Buller

**Current Address**  
1283 Golden Beach Rd  
Bracebridge, ON,  
P1L 1W8

sjbuller@edu.uwaterloo.ca  
+6506868795

**Permanent Address**  
1283 Golden Beach Rd  
Bracebridge, ON,  
P1L 1W8

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## SKILLS SUMMARY

- Proficient in C, C++, C#, HTML/CSS, PHP; Experience with Matlab, VHDL, Java, Python, Ruby, Github, Xcode, OS X, Linux (Fedora, Ubuntu), iOS, Windows
- Ability to manage varying disciplines for a successful project outcome
- Efficient at problem solving and conflict resolution
- Able to learn new tools, languages and implement modern software practices quickly
- Strong leadership, communication and organizational skills

## TECHNICAL SIDE-PROJECTS

### ARM Microcontroller, 2014

- RTOS preemptive task scheduling with priorities and states
- Memory layout for linker script, defined vector table and initialized memory
- Familiar with synchronization primitives and interrupt-driven program architecture

### Raspberry Pi, 2014-2015

- Worked on simple GPIO applications in C, Python and assembly
- Experience with pulse-width modulation, system timers and interrupts

### Dijkstra's Shortest Path Finding Algorithm with Fibonacci Heap, 2014

- Familiar with memory limitations and speed considerations
- Experience with optimal data structures and asymptotic analysis
- Placed 4th in 2A University course competition for speed and optimization of program with professor recognition

### LED Cube, 2012

- Programmed matrix in C to display various patterns, sent to memory over SPI
- Hand soldered 512 LEDs together along with breadboard PCB, uses ATmega32 microcontroller and various IC components

## WORK EXPERIENCE

**Software Engineer**, Apple Inc., Cupertino, CA, Sept 2015 – Sept 2016, Jan 2017 – April 2017

- Worked in an embedded environment for applications that have real-time requirements
- Experienced writing drivers for various hardware peripherals
- Developed diagnostics tools for efficient on-device debugging with appropriate host-side applications
- Reviewed schematics in order to derive software requirements

**Junior Computer Engineer, Agfa-Gevaert, Mississauga, ON, Jan 2015 – May 2015**

- Lead a project in a multidiscipline R&D team that doubled the throughput of prints
- Multi-process and multithreaded application development with GDB debugging practice
- Wrote a C++ driver to control movement of carriage in three dimensions and manage interactions of components within the printer
- Developed thorough understanding of codebase in order to efficiently narrow down a general bug to a root cause and implement a solution

**Web Developer, Interactive Computer Solutions, Vaughan, ON, 2013 – 2014**

- Created a greeting card website to assist in creating orders and allow customers to track their items and collected usage data
- Calculated unit costs and sale costs for items in order to provide competitive prices to customers
- Implemented UPS APIs for shipment tracking and delivery costs

**EDUCATION**

**Candidate for Bachelor of Applied Science, Computer Engineering Co-Op Program,** University of Waterloo, Waterloo, ON, September. 2012 – Present

**Georgian College Credit, Georgian College, Barrie, ON, December 2010**

- Completed Web Authoring course

**Ontario High School Diploma, Bracebridge and Muskoka Lakes Secondary school,** Bracebridge, ON, June 2012

- Received Specialist High Skills Major in Information and Communications Technology
- Four years of Principal Honors

**ACTIVITIES & INTERESTS**

- Robotics Team Member (November 2011 – May 2012)
- Analyzed problems and proposed ways of solving them effectively
  - Participated in University of Ontario Institute of Technology robotics competition; received best sportsmanship award and team placed 3rd place
  - Participated in University of Guelph robotics competition; team placed 3rd
  - Assisted in setting up regional public school's robotics competition.
- Member of Professional Engineers Ontario.
- Enjoy web design, software development, embedded systems, wakeboarding, and meeting new people