

JONATHAN DEIVEN

☎ 647-969-7442
✉ jdeivend@uwaterloo.ca
🏠 jonathandeiven.com
🐙 github.com/jonathandeiven

SKILLS

Proficient Languages: C++, Java

Familiar Languages: C, JavaScript, Python, SQL, Shell Scripting

Web Development: HTML5, CSS3, jQuery

Data Analysis: Microsoft Excel, MATLAB

Platforms and Tools: Linux, Android, Eclipse, Git, SVN

WORK EXPERIENCE

Software Engineer (Intern) - Google, Nest Labs, Palo Alto CA

Apr 2016 – Present

- RF Design, Sensors and Factory Engineering

Systems Software Developer (Intern) - BlackBerry, Ottawa ON

Sept 2015 – Dec 2015

- Developed a kernel driver to send diagnostics from the Android kernel space to the event logging server using C
- Rewrote device diagnostics kernel API to accept and process logging commands with parameters
- Created an automated testing framework for BlackBerry diagnostics using Java and UI Automator, which has been adopted by other developers to reduce test creation time by up to 90%

Java Developer (Intern) - TD Securities, Toronto ON

Dec 2014 – May 2015

- Developed a Java application to automate contract booking and repaying, ultimately cutting processing time on the trading desk by 93%
- Redesigned the login design and workflow using Java Swing API to improve the end user experience
- Implemented a cryptographically secure password reset system

Supply Chain Analyst (Intern) - George Weston Limited, Toronto ON

Oct 2013 – Jan 2014

- Developed the company's automated National Obsolescence Report to detail current and forecasted financial impact of expired goods, saving seven hours of manual work biweekly

QA Analyst (Intern) - NexJ Systems, Toronto ON

Jan 2013 – Apr 2013

- Extensively tested CRM software on web and mobile, logging over 40 undiscovered bugs

EDUCATION

University of Waterloo, Waterloo ON

Sept 2012 – Apr 2017

- Candidate for BASc degree in Systems Design Engineering, Honours
- Relevant Courseware: Object-Oriented Software Development, Algorithms

PROJECTS

Muto (2016) • jonathandeiven.com/blog/muto

- Created a USB HID-compliant modular game controller where the physical control layout is selected by the user to control computer games developed for Windows and Mac
- Developed a driver and PCB design to detect controller component placement, route the information and serialize the data using C, Arduino and EagleCAD

CHIP-8 Emulator (2015) • github.com/jonathandeiven/CHIP8-Emulator

- Implemented a CHIP-8 CPU interpreter using C++ and the SDL library for graphics, capable of running 8-bit ROM files like Space Invaders

Cautio (2015) • jonathandeiven.com/blog/cautio

- Developed an "Internet of Things" embedded system for police gun accountability using an accelerometer, gyroscope, luminosity sensor, cloud storage and Raspberry Pi