

### **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 **Graphic Design:** Adobe Photoshop and Illustrator

# **EDUCATION**

### University of Waterloo, Waterloo ON

Sept 2012 - Apr 2017 (Expected)

- · Candidate for BASc degree in Systems Design Engineering, Honours
- Activities: Engineers Without Borders (2014 Present)

# **WORK EXPERIENCE**

# Systems Software Developer - 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%
- · Analyzed Java codebase using Klocwork to identify and fix critical bugs ahead of BlackBerry PRIV launch

## Java Developer - 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
- Automated processing of security availability feeds using SQL and SSIS

# Supply Chain Analyst - Weston Foods, 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 - NexJ Systems, Toronto ON

Jan 2013 – Apr 2013

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

#### **PROJECTS**

Bit for Android (2016) • @ play.google.com/store/apps/details?id=com.jonathandeiven.bit

Published a puzzle game that teaches children binary numbers and bitwise operators on Google Play Store

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

Developed a web application that computes user's typing speed using JavaScript

Flood Tile Game (2014) • ₽ github.com/jonathandeiven/Flood

Created a tile matching game using C++ and XWindow graphics