Education

University of Waterloo Waterloo, ON

4A BACHELOR OF COMPUTER SCIENCE

Sep 2014 - Aug 2019

Skills

Programming Languages Scala, Swift, Javascript, Rust, C, C++, Ruby, C#, Python **Frameworks & Tools** Rails, iOS SDK, React, Node, Git, Bash, Webpack

Experience _____

Coursera Mountain View, CA

SOFTWARE ENGINEERING INTERN

Jan 2018 - Apr 2018

- · Automated the payments reconciliation process using a map reduce programming model saving on average 24 developer hours each month
- Developed payment reporting batch job to measure payments data integrity over time mitigating risk of costly errors going unnoticed
- Diagnosed and assisted in recovery of \$175,000 in lost revenue due to critical payment gateway outage

Shopify Ottawa, ON

DEVELOPER INTERN - IOS POINT OF SALE

May 2017 - Aug 2017

- Improved app performance of high traffic areas by up to 50%
- Developed proof-of-concept alternative UI based on user research and rewrote large sections of the app as part of major design overhaul

Shopify Ottawa, ON

DEVELOPER INTERN - ARCHITECTURE & ACCELERATION

Sep 2016 - Dec 2016

- Rewrote the Rails asset pipeline (Sprockets) source map implementation, reducing overall compile time by 80% and fixing numerous bugs
- · Migrated Shopify's codebase to Webpack and benchmarked against the updated Sprockets implementation
- Improved CoffeeScript->ES6 AST conversion tool to detect and prompt users on ineffectual statements

Shopify Ottawa, ON

DEVELOPER INTERN - FRONTEND

Jan 2016 - Apr 2016

- Refactored common UI elements into components and collaborated on the architecture of a new company wide shared component library
- · Wrote a tutorial for building Rails UI components, documented current best practices, and built high quality examples

Octane Biotech Kingston, ON

SOFTWARE ENGINEERING INTERN

Jul 2015 - Aug 2015

Jul 2013 - Aug 2013

- Developed a modular, serializable, graphic form builder using C# and WPF

JIC Designs Kingston, ON

Developer Intern

· Developed frontend components for an Electronic Health Record using the Sencha Ext JS Framework

Projects

String Cleaning July 2017

COMMAND LINE TOOL WRITTEN IN RUST WHICH STRIPS UNUSED LOCALIZATION STRINGS FROM IOS PROJECTS

 Used parallel iterators and an Aho-Corasick automaton to scan a codebase with thousands of files and hundreds of localization strings in under 200ms

Totally Not Mario May 2014

TWO-DIMENSIONAL PLATFORMING GAME RESEMBLING SUPER MARIO, WRITTEN IN PYTHON

• Led a team of four, designed the overall program architecture, and developed several core engine components, namely collision detection, animation states, and the player movement system