

# Josh DeGrazia

FOURTH YEAR UNIVERSITY OF WATERLOO COMPUTER SCIENCE STUDENT

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## Education

### University of Waterloo

Waterloo, Ontario, Canada

B.C.S. (BACHELORS OF COMPUTER SCIENCE)

Sept. 2013 - Present

- with Business Option and a Minor in Combinatorics & Optimization

## Skills

**Languages** C, C++, C, Java, Python, Bash, Ruby, HTML, CSS, Javascript (ES6), Coffeescript

**Technologies** React, Rails, Sass, Webpack, ASP.NET, Android, Node.js

## Experience

### Software Developer, RPM Technologies

Toronto, Ontario, Canada

MAY 2014 - AUGUST 2014; MAY 2015 - AUGUST 2015; JAN. 2016 - APRIL 2016

Java, VB6, C#, ASP.NET, Perl, Python

- Created a compiler using Perl and Java to translate a 180,000 line Visual Basic 6 program into a C# ASP.NET program, vastly improving the performance and reliability of the program by re-writing core functionality with the new tools available
- Wrote a large Python project which generated and processed large, encoded test government documents related to financial records which the QA team was previously required to write by hand

### Full Stack Engineer, Chalk.com

Kitchener, Ontario, Canada

SEPTEMBER 2016 - DECEMBER 2016

CoffeeScript, Ruby on Rails, React, Sass

- Created a feedback module allowing administrators to leave feedback for teachers on each of their lesson plans, allowing teachers and school-level administrators to view aggregated feedback on a centralized page
- Created PDF export options for teachers allowing them to print out progress on state-level teaching standards and their weekly attendance, as well as front-end interfaces for accessing each report
- Collaborated on the design and implementation of a large client infrastructure change allowing users to be grouped by school, in addition to previously only being grouped by their institution
- Implemented tools for Chalk.com employees to manage users and add many users to the system with ease
- Worked heavily with the product and front-end leads on creating new coding standards and design patterns for React code in order to increase productivity, make feature implementation easier, and follow more closely with industry best practices

### Software Engineer, Amazon.com

Vancouver, BC, Canada

JUNE 2017 - AUGUST 2017

## Relevant Projects

### JSketch

JAVA, ANDROID, SWING

- A vector drawing program built off of Java for CS 349 (User Interfaces) using the Swing library to render objects drawn by the user
- Later updated the interface using Android Studio to allow it to run on Android phones

### OS/161

C, BASH

- Built a basic command-line operating system for CS 350 (Operating Systems)
- Implemented basic system calls for managing thread state as well as synchronization primitives for use in the OS
- Implemented virtual memory management using page tables

### WLP4 Compiler

C++, BASH

- Over the term, created a fully functioning compiler for a subset of the C language called WLP4
- Wrote an assembler translating a set of MIPS commands to binary instructions
- Created a WLP4 parser and used it to produce MIPS commands, which were then translated into binary using the assembler we had previously built