

Emmett Tan

Computer Engineering

<https://emmetttan.github.io/>

TECHNICAL SKILLS

Programming

- C
- C++
- Java
- Javascript
- Ruby

Software/OS

- Eclipse
- Xcode
- Quartus II
- Git

Hardware and Tools Experience

- Altera FPGAs
- Microcontrollers
- Multimeters
- Oscilloscopes

ACADEMIC & CO-OP STATUS

Academic Program

- **University of British Columbia**
Bachelor of Applied Science - Computer Engineering Software Option
- Anticipated date of graduation: May, 2017

WORK EXPERIENCE

Amazon Web Services - Simple Queue Service Team

May 2016 - August 2016

Software Developer Intern

- Created a command line interface to search through hundreds of terabytes of application logs
- Reduced time needed to answer customer id specific trouble tickets in half
- Wrote scripts to automate the creation of amazon resources for new regional deployments

Vanrx Pharmsystems Inc.

January 2015 - August 2015

Systems Engineering Intern

- Built a robot automation control interface to allow easy rapid prototyping
- Assisted R&D with setting up and testing concepts for machines in development
- Setup vision system and calibrated cameras to detect missing vials

Idea Rebel

July 2014 – August 2014

Mobile Developer Intern

- Used Xcode to debug and test various parts of a social media app
- Ensured that user's information is properly updated by re-fetching data periodically
- Fully Implemented password reset functionality

TECHNICAL PROJECTS

Deos161: Operating System Programmed in C

April 2016

- Implemented several system calls, including fork(), waitpid(), lseek(), and sbrk()
- Wrote coremap physical page initialization, allocation, and deallocation functions
- Setup virtual memory fault handling

Shopping Web Application

November 2015

- Created front end user interface using HTML, CSS, Bootstrap and Javascript
- Used MongoDB to store product information and customer purchase orders
- Setup two-way data binding between user cart inventory and product stock using AngularJS

Bombberman Videogame for the Nios II Embedded Processor

September 2014

- Implemented bitmap drawer code, which reads and draws a 24 bit color 20x20 pixel bitmap
- Wrote erase and redraw functions in order to create the illusion of sprite movement
- Created random map generator which shuffles positions of powerups on the start of each new game