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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 Pharmasystems 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 sys_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

Bomberman 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