RHYS BOWER

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Vancouver BC, Canada • Open to relocation in May 2018 • Eligible to work in the US

EDUCATION

The University of British Columbia (Vancouver, BC)
Bachelor of Science, Major Computer Science
Sep 2015 - April 2018
Overall GPA: 3.3/4.0, CPSC GPA: 4.0/4.0

SKILLS

Languages: JavaScript, Java, PHP, C, C++, SQL
Libraries: React, Redux, express
Tools: Git, eslint, babel, webpack

EXPERIENCE

Server Admin & Teaching Assistant | The University of British Columbia (Vancouver, BC)   *May 2016 – Present*
- Manage server infrastructure to ensure up-time of assignment submission service for over 3,300 students.
- Extended web portal for course staff to publish graded files for students to download and view (PHP, Racket).
- Instruct and evaluate weekly labs to provide students with an opportunity to apply lecture material.
- Assisted instructors during lecture by answering questions and guiding students through problems.

Software Engineer | The University of British Columbia (Vancouver, BC)   *May 2017 – Aug 2017*
- Engineered a web app to teach the C programming language using Node and MongoDB.
- Integrated with the UBC single sign on service using SAML for authentication and LDAP for authorization.
- Rewrote frontend client using React and Redux to maintain data consistency throughout the application lifecycle and Flow to reduce type errors.

Software Engineer | Cific (Surrey, BC)   *Aug 2016 – July 2017*
- Wrote a PHP backend to parse hundreds of inventory items from internal management systems and display on website with easy search interface for company dealers.
- Created a cross platform iOS and Android app using the Ionic framework with specific focus on authentication with Firebase and payment integration with Stripe and the App Store.
- Designed a marketing website to promote the launch of new client programs.

PROJECTS

Beros – Operating System Kernel (C)   *Sep 2017 – Present*
- Developing a preemptive multitasking, non-reentrant monolithic kernel in C using a layering method.

Computer Networking – Application Protocols (Java, C)   *Sep 2017 – Present*
- Implemented the DICT, DNS, IMAP and POP3 protocols with a focus of RFC compliance and error recovery.

AirBC – Web App (PHP, MySQL, Twig, jQuery)   *Jan 2017 – Apr 2017*
- In a team of four, developed project requirements for a mock airline company booking website.
- Designed and implemented the app framework including a page router and database abstraction layer.
- Built an account system with permissions and hashing to help maintain a secure system.

InsightUBC – Web App (Node, TypeScript)   *Jan 2017 – Apr 2017*
- In a team of two, implemented system to cache input data in JSON for future request performance.
- Developed system to filter course sections based on department, instructor, year level

Bowerbot – Personal Automation Bot (Ruby)   *Sep 2016 – Dec 2016*
- Built a transit pass renewal service by scraping transit webpages and submitting the renewal request.
- Designed feature to detect changes to webpages through visual diffing of rendered webpage.

Mind the Gap – Android App (Java)   *Mar 2016 – Apr 2016*
- Created an Android app to display the London Underground map with routes and train arrival times.
- Parsed data from Transport for London to generate routes based on GPS coordinates and display on the map.

Chem 3615 Online – Web App (PHP)   *2013*
- Developed web app to automatically grade pre-labs and display correct results to students after the deadline.