

# Rhys Bower

[rhys.bower@alumni.ubc.ca](mailto:rhys.bower@alumni.ubc.ca) • (604) 441-4662 • [www.rhysbower.com](http://www.rhysbower.com) • Open to relocation • Eligible to work in the US

## EDUCATION

### Bachelor of Science, Major Computer Science

The University of British Columbia (UBC) (Vancouver, BC)

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 (Part Time) | UBC - 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 (Part Time) | UBC - 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 (Part Time) | 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 a web 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.