James Liu
Jamesliu.ca

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SKILLS

Programming Languages
Java, C#, Python, Racket, C, C++, Ruby

Web Development
JavaScript (incl. AngularJS, Node.js, and jQuery), PHP, HTML5, CSS3, Apache, Nginx, Less, Sass, Stylus, Jekyll, Ruby on Rails

Mobile Development
Android, Windows Phone 8

Databases
MySQL, PostgreSQL, MongoDB

Applications
Visual Studio, Eclipse, Sublime Text, IntelliJ IDEA
Microsoft Office, Adobe Creative Suite

Operating Systems
Windows, Mac OS X, Linux

Other
Git, SVN, Bower, Grunt, Yeoman
Google Analytics, New Relic
Mandarin Chinese – Proficient

TECHNICAL EXPERIENCE

BronyCAN | *Web Developer*
October 2013 – Present
- Developed a brand new WordPress theme to replace the static HTML pages that were used the previous year, which was used as a gateway for registration, hotel booking, and information for over 1000 attendees.
- Configured the at-con server, registration systems, and various networks.

Restart! Comic/2P reSTART! | *Co-founder, Lead Developer*
May 2010 – October 2012
- Operated a weekly online webcomic with a team of three others from the United States, which amassed over 125 thousand pageviews, and was nominated for a spot on Kotaku's weekly webcomic feature, Sunday Comics

PERSONAL PROJECTS

ScheduleCreator | *Ruby on Rails, AngularJS, Zurb Foundation*
February 2015 - Present
- Created a site that helps students optimize their schedule
- Designed and developed front-end with AngularJS and Foundation.
- Integrated information from another project, 4.0 For All, to allow for course average information to be displayed alongside course schedules

PickAPlaceFor.Us | *Scala, Play Framework, Yelp! API, Google Places API, Foursquare API*
January 2015 – Present
- Designed and developed algorithms for determining best choices for where to go with friends, with a user system, voting, user groups, and custom venue addition.

4.0 For All | *Node.js, AngularJS, MongoDB, Express, Ubuntu Server, Varnish, Python*
December 2014 – Present
- Developed a website that utilizes historical grade distribution data to help UBC students make more informed choices about courses.
- Designed and created a responsive UI with AngularJS, implementing a unique algorithm to rank the "score" of each professor, creation of a RESTful API with Node.js, as well as configuring and deploying the application on a VPS, complete with HTTP caching with Varnish.
- Created an additional tool in Python to automatically retrieve data from the UBC PAIR servers, utilizing ImageMagick and Tesseract OCR to complete the CAPTCHA on each form, with a ~40% success rate.

SimpleBus | *AngularJS, Flask, Translink API, HTML5*
November 2014 | jamesliu.ca/simplebus
- Developed a client-side web app that simply tells you how long until your bus arrives with AngularJS that fetches bus information from Translink, stores user settings locally using the HTML5 Local Storage API, all in a customizable and draggable interface.
- Created a "forwarding" server to work around incorrectly configured CORS headers in the Translink API.

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PERSONAL PROJECTS continued

Project Launch | *JavaScript, SoundCloud API, HTML5*
October 2014 | jamesliu.ca/project-launch
- An entirely client-side web app that emulates the functionality of a Novation Launchpad in the browser. Developed in 21 hours at a hackathon, Project Launch allows users to import music and sounds from their computer or SoundCloud and sample, remix and mashup their favourite music.
- Implemented functionality that allows for selecting portions of sounds to assign to buttons, SoundCloud integration, sound playback, sound status indicators, and the core of the application, as well as helping to bugfix and test code written by the three other team members.

Confinder/Hackfinder | *AngularJS, Google Maps API, HTML5*
June 2014 – July 2014 | jamesliu.ca/confinder
- A simple and easy to use webapp to help you find conventions or hackathons near you.
- Implemented functionality to locate the user using the HTML5 Geolocation API, as well as a Google Maps based geocoder, creation and maintenance of a JSON file containing convention and hackathon information, and an implementation of the Haversine formula.

Rollin'! | *C#, Windows Phone 8*
February 2014 | jamesliu.ca/rollin
- Developed and published a simple Windows Phone 8 app from scratch.

ACADEMIC PROJECTS

TrafficBuddy | *Ruby on Rails, AngularJS, MySQL, Redis, Google Maps API, HTML5*
February 2015 - Present
- Responsibilities include creating a front-end based on AngularJS to display maps, traffic information, as well as obtain the user's location with the HTML5 Geolocation API or Google Maps.
- Helped with back-end functions such as parsing City of Vancouver RSS feeds and user authentication.

OTHER EXPERIENCE

University of British Columbia | *Undergraduate Teaching Assistant*
August 2014 – Present
- Taught over 150 students in weekly tutorials, in addition to designing, maintaining and ensuring tutorial content was up to date with the current course material.
- Helped to answer students' questions online, and in person during office hours, in addition to grading exams, assignments, and online quizzes.

University Transition Program | *Computer Science Instructor*
March 2014 – July 2014
- Taught a class of about 15 gifted students, developing the course website, working closely with the Vancouver School Board to develop the curriculum and exercises, based on the UBC CPSC 110 course material.

EDUCATION

University of British Columbia, Vancouver, BC
Bachelor of Science, Computer Science
September 2013 – Present
GPA – 3.8 in relevant courses, 3.75 cumulative

University Transition Program, Vancouver, BC
Dogwood Diploma, Class of 2013
A program designed to prepare 13-15 year olds for early entrance to university by condensing a typical 5 year high school course load into an intensive, rigorous 2 year curriculum.