

# Arabelle Hou

Computer Engineering

## TECHNICAL SKILLS

---

### Languages (most to least familiar)

- Java
- C/C++
- C#
- JavaScript
- VHDL
- Python
- ARM Assembly

### Web Development/Other

- AngularJS
- ASP.NET MVC
- EXT.NET
- HTML/CSS
- SVN/Git/GitHub
- Windows/Linux Environment

### Software/Tools

- Altera DE2 Board
- Android Studio
- Arduino
- Eclipse/Visual Studio
- JetBrains TeamCity
- JIRA/Confluence
- JUnit Testing
- ModelSim/Quartus
- MySQL/Microsoft SQL Server

## TECHNICAL WORK EXPERIENCE

---

### Demonware

January, 2016 – Present

#### *Software Developer Intern*

- Working with Python and C++ on client-side and server side applications for services such as matchmaking, user profiling, data pipelining, and game statistic gathering
- Gaining experience with networking, databases, Amazon Web Services, distributed system technologies (e.g. Kafka, Docker), virtual machines, and the Linux environment and command line

### Paragon Testing Enterprises

May, 2015 – August, 2015

#### *Junior Software Developer*

- Integrated the Adobe Content Server (ACS) into the company's client/internal web applications and their Microsoft SQL Server database, after setting up a MySQL database and an Apache Tomcat server to host the ACS on a CentOS virtual machine
- Presented a prototype of the ACS during a technical presentation to the manager and CEO of the company, and completed a Software Requirements Specifications document outlining the project
- Wrote JavaScript and C# code to fix more than five JIRA issues in production for the online testing products offered by the company
- Worked simultaneously on three web applications implemented in an MVC architectural pattern, using AngularJS and EXT.NET frameworks

## TECHNICAL PROJECTS

---

### UBC Launch Pad – Senior Web Developer

September, 2015 – Present

- Collaborating with a group of five students to develop web applications, such as a social platform so that users can create and upload photos in an online portfolio [<https://github.com/ubc-dev-brew/workshop>].
- Working with technologies such as MongoDB, Google Analytics, SASS, and JavaScript on a Node.js server.

### SportsHack – CFL Predictor

November, 2015

- Collaborated with four other students in SportsHack to create a play predictor web application for CFL games, based on CFL's real world data
- Wrote Python code using a Django framework, HTML/CSS, and JavaScript to create the front-end of the application within two days

### UBC Thunderbots Football Club – Software

September, 2014 – August, 2015

- Collaborated with UBC's Thunderbots Football Club student team to work on an autonomous robot soccer team that was entered in the Annual International RoboCup Competition and Conference

- Wrote code to successfully complete five new member Challenges assigned by the team, utilizing C++ code and AI simulation (grSim) in a Linux (Ubuntu) environment

#### **nwHacks – EcoGEM**

**March, 2015**

- Participated in a 36-hour hackathon with two undergraduate students to produce an Android app written in Java code that monitors a user's automobile efficiency, rewarding them with coupons when a monthly goal is achieved [<https://github.com/sarahyeo/EcoGEM>].
- Implemented the Android app using the Mojio API, used to create apps for the Mojio device that plugs into the car's On-Board Diagnostic (OBDI-II) port

## **WORK EXPERIENCE**

### **UBC Teaching Assistant – CPEN 221**

**September, 2015 – December, 2015**

#### ***Principles of Software Construction***

- Provide online and in-person instruction for students in topics such as abstraction and specification of software, testing, verification, abstract data types, object-oriented design, type hierarchies, and concurrent software design
- Host Office Hours, during which I demonstrate problem solutions, and aid with assignments and course materials.

## **EDUCATION**

### ***University of British Columbia***

*Bachelor of Applied Science / 3<sup>rd</sup> Year Computer Engineering*  
September, 2013 – May 2018 (expected)

- 5 of 8 academic terms completed
- 88.1% Cumulative Average

### ***University Transition Program***

*Early Entrance to University*

- One of the 20 students accepted into the program, completing five years of high school in two and graduating with a Grade 12 District Scholarship Award

## **VOLUNTEER WORK EXPERIENCE**

### **GEERing Up! UBC Engineering & Science for Kids**

**July, 2014**

#### ***Junior Instructor (JI)***

- Instructed campers, aged 5-17, three or more hands-on activities per camp-day to teach students about engineering and science in an engaging way
- Provided extra assistance to students with exceptionalities and made sure all campers interacted well with each other for an ideal summer camp experience
- Worked together with fellow Junior Instructors to prepare a JI Activity for campers at the end of each camp week

## **AWARDS**

### **Dean's Honour List**

**2014, 2015**

- Students with a standing of A- or better in the previous Winter Session

### **Chancellor's Scholar Award**

**2013**

- Awarded each year on a competitive basis to students entering UBC

## **ACTIVITIES AND INTERESTS**

- Vice President Academic for the UBC Electrical and Computer Engineering Student Society (2015-2016)
  - Organize academic events such as Beef and Pizza (professor Q&A session), create review packages, and plan review sessions for Electrical and Computer Engineering students