

# DANIEL CHAU

UBC Computer Engineering

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## OBJECTIVE:

Take pride in every step of the process. To make an impact in society by creating compelling and innovative advancements in technology and culture.

## TECHNICAL SKILLS:

### Electrical Equipment

- Oscilloscope
- Signal Generator
- Multimeter
- Breadboard
- Soldering Iron
- DE1-SOC

### Software Literacy

- C#, C
- HTML / CSS
- Java / JUnit / JavaScript
- Adobe Lightroom / Photoshop
- Matlab / R Studio
- Swift
- Git

### Hardware Literacy

- Verilog
- Quartus
- ModelSim
- x86 Assembly
- ARM Assembly
- Arduino IDE

## ACADEMIC & CO-OP STATUS:

The University of British Columbia

September, 2015 – Present

Bachelor of Applied Science - Computer Engineering

### Academic Status

- 6 of 8 academic terms completed by May, 2018
- Anticipated date of graduation: May, 2020

### Co-op Status

- Completed 0/5 work terms; available for 4, 8, 12, or 16 months beginning May, 2018

## TECHNICAL PROJECTS:

### Website Development (HTML / CSS):

July, 2015 – Present

- Created and self-developed a personal blogging / photography website (danielchau.com) by implementing a Bootstrap framework to develop a responsive, mobile-forward user experience.
- Developed a cross-platform ready website for the "Hire a Piper" business (hireapiper.com) using UML practices and a scrum development process with sprint deliveries.
  - Implemented a Python script for the "Contact Me" functionality.
- Implemented all functionality and appearance using HTML, JavaScript and CSS.

### Livewire IOS Application (Swift / SQL / Python):

September, 2017 - December, 2017

- Developed a real-time audio transcription App with a team of 4 colleagues.
- Supported the App with a MySQL python-based database that was hosted on a Google Cloud Compute Engine and connected to the App through REST API calls.
- Managed the workflow of the development process through Git.

### SmartMirror (Arduino / HTML / CSS / Python):

March, 2017 – April, 2017

- Developed an interactive mirror that displayed real-time information such as weather, date, time, and Facebook and Twitter feeds.
- Implemented "awake" and "sleep" modes using the Raspberry Pi 3 with a motion sensor to detect human movements in front of the mirror.
- Managed the communication between the Arduino, and SQL server using a Python script and communication between the SQL server and the HTML / CSS website using a PHP script.

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**Twitter Dataset Analysis (Java):****November, 2016**

- Created multiple implementations for a graph interface which allowed for efficient traversal over datasets with over 1,750,000 units of data.
- Designed breadth and depth first search algorithms to find links between nodes within our dataset allowing for analysis such as finding common influencers and number of retweets.

**Yelp Restaurant Database (Java):****December, 2016**

- Worked with a Yelp dataset given in JSON format that contained user, restaurants and reviews.
- Maintained an in-memory database with the information and coded a server that can be accessed by multiple clients that responded to multiple commands and interacted with the database.
- Designed a K means clustering algorithm to sort restaurants into neighbourhoods and a least squares regression algorithm used to predict user's future rating based upon previous behavior.

**Speed Java Application (Java):****June, 2015**

- Created and conceptualized a prototype Android application created with Java and developed in Eclipse for the purpose of testing an individual's reaction speed.

**OTHER WORK EXPERIENCE:****Spoon University (UBC)  
Photographer****October, 2016 – Present**

- Conceptualized, styled, and photographed a variety of food using light boxes, self-created backdrops, and DSLRs
- Edited photographs using Adobe Lightroom 5 and Adobe Photoshop CS6 to develop a final product ready for online publication

**AWARDS:****Computer Science Award****2015****PROFESSIONAL AFFILIATIONS:****APEGBC Member Advantage Program for Students (MAPs)****2016 – Present****ACTIVITIES AND INTERESTS**

- Standard First Aid Certification
- Ontario G2 Class Driver's License
- Photography
- Fashion / Lifestyle / Music
- Hiking / Exploring
- Alpine Skiing / Soccer / Ultimate Frisbee / Track and Field / Tennis