a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Engineering Co-op Program
Faculty of Applied Science
2385 East Mall
Vancouver, BC Canada V6T 1Z4

Phone 604 822 3022
Fax 604 822 3449
eng.coop@ubc.ca
www.ubcengineeringcoop.com

Daniel Chau
Computer Engineering

TECHNICAL SKILLS

Electrical Equipment
- Oscilloscope
- Signal Generator
- Multimeter
- Breadboard
- Soldering Iron
- Microcontrollers
- DE1-SOC

Software Literacy
- MS Word / Excel
- C#, C
- HTML, CSS
- Java
- Adobe Lightroom 5
- Adobe Photoshop CS6
- Matlab

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

ACADEMIC & CO-OP STATUS

Academic Program
- Computer Engineering; 3 of 8 academic terms completed
- Anticipated date of graduation: May, 2020

Co-op Status
- Completed 0/5 work terms; available for 1 beginning May, 2020

TECHNICAL PROJECTS

Personal Website (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
- Implemented all functionality and appearance using HTML and CSS

Twitter Dataset Analysis (Java):   November, 2016
- Created multiple implementations for a graph interface which allowed for efficient traversal over datasets with over 1750000 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
- Created an Abstract Data Type to hold the dataset which allowed quick access to the given data
- Designed a K means clustering algorithm to sort restaurants into neighbourhoods and a least squares regression algorithm used to predict users future rating based upon previous behaviour

UBC Water Collection Design Simulation (Excel):   March 2016 – April 2016
- Created a responsive rain water catchment system using an Excel spreadsheet to track varying rainfall patterns over the past 4 years
- Designed the system to properly account for unforeseen circumstances such as season-long droughts other extreme weather
- Analyzed data gotten from the simulation system to create a comprehensive report of the best possible recommendation for Site C which received a 97.8% satisfaction rating

Speed (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

Custom Ukulele (Grade 12 Physics):   May, 2015 – June, 2015
- Built a fully-functional 21-inch-long 14-fret ukulele out of cedar, mahogany, and rosewood
- Created the fret board, nut, neck, body, bridge and saddle using a band saw, planer, jointer, table saw, drill press, and stationary sanders

VOLUNTEER WORK EXPERIENCE

CIBC Run for the Cure (Toronto, Ontario)   **October, 2011 – October, 2014**
General Event Volunteer
- Assisted in directing upwards of 2000 participants through the course
- Organized checkpoints throughout the race dealing with participants, volunteers, and event managers

Relay for Life (Toronto, Ontario)   **April, 2014**
Event Manager
- Coordinated and ran events for upwards of 300 people such as Sumo Wrestling, Candle Walk, and group sports
- Directed and dealt with people who had questions, problems, or complaints about the event

Ontario Educational Leadership Centre (Longford Mills, Ontario)   **July, 2013**
General Camp Volunteer
- Demonstrated leadership and adaptive skills in an efficient manner to complete landscaping and painting jobs over a 200 sq. ft. area

OTHER WORK EXPERIENCE

Spoon University (UBC)   **October, 2016 – Present**
Photographer
- Conceptualize, style, and photograph a variety of food using light boxes, self-created backdrops, and DLSRs
- Edit photographs using Adobe Lightroom 5 and Adobe Photoshop CS6 to develop a final product ready to be published online

EDUCATION

University of British Columbia   **September 2015 – Present**
Bachelor of Applied Science - Computer Engineering

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