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:

Software Literacy
- C# / C
- HTML / CSS
- Java / JUnit
- JavaScript
- Adobe Lightroom / Photoshop

Software Literacy cont.
- Matlab / R Studio
- Swift
- Git
- Python

Hardware Literacy
- Verilog
- Quartus
- ModelSim
- x86 / ARM Assembly
- Arduino IDE
- DE1-SOC

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:

FindmySh*t (HTML / CSS / JavaScript): January, 2017
- Worked with a partner to develop a web application to increase a user's chance of finding a lost or misplaced possession by implementing printable/downloadable QR codes that redirect the scanner to a webpage with the appropriate information about the owner of possession.
- Implemented backend architecture through Google Firebase and front-logic with all JavaScript.
- Designed and formatted webpages with HTML5, and CSS.
- Code available at: https://github.com/danielchau/returnmystuff.

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.

Spotify Lyrics Word Analyzer (Python): January, 2018
- Developed a Python script to pull a Spotify user's top 50 songs and determine the number of occurrences of each word of each song. All of this data gets compiled into a well-formatted Excel Spreadsheet.
    - Code available at: https://github.com/danielchau/Lyric.Word.Counter.
- Visualized this data by creating a layered tree map using Tableau as seen here: https://public.tableau.com/profile/daniel.chau#!/vizhome/LyricsTest/Sheet1.

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 with a team of 6 colleagues.
- 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.

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.

OTHER WORK EXPERIENCE:

Spoon University (UBC) October, 2016 – Present
Photographer

- Conceptualized, styled, and photographed a variety of food using light boxes, self-created backdrops, and DLSRs
- 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