

Patrick Tu

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Education

University of Maryland, College Park

College Park, Maryland

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

August 2018 – May 2022

- Relevant Coursework: Object-Oriented Programming I and II; Introduction to Computer Systems; Discrete Structures; Organization of Programming Languages; Algorithms; Calculus III; Linear Algebra

Experience

Uniformed Services University of the Health Sciences

Bethesda, Maryland

SOFTWARE ENGINEER INTERN

May 2019 – Aug. 2019

- Used Niagara TAC I/A to develop system algorithms for new air handling units in order to work conjointly and regulate building conditions
- Automated hydro-pumps to behave a specific way under specified conditions dependant on weather
- Optimized air handling units to reduce electrical power consumption

Mobomo, LLC

Vienna, Virginia

SOFTWARE ENGINEER INTERN

May 2017 – Aug. 2017

- Implemented earthquake data from the United States Geological Survey to create an Amazon Alexa 'Skill' to warn locals of impending earthquakes using Java
- Worked on an agile team to automate quality assurance testing for the development of the National Oceanic and Atmospheric Administration Fisheries' webpage using Selenium

Mozilla Open Builders Lab

Virtual

FRONT END DEVELOPER

Apr. 2020 – Jun. 2020

- Developed front-end layout, using React, for startup idea "Schedit" to help consumers navigate and schedule appointments with local businesses
- Held daily scum meetings with small team to delegate weekly assignments
- Met biweekly with Mozilla software engineers to discuss progress and challenges

Projects

COVID-19 Tracker

REACT

- Built a coronavirus tracker that displays figures of confirmed cases, recovered cases, and death toll by country with an interactive world map using live data from disease.sh API

Messenger Chat Room

REACT / FIREBASE

- Created a Facebook messenger style chat room with messages updating in real-time using Firebase as a live database to support multiple users from different connections

Pig Dice Game

JAVASCRIPT / HTML / CSS

- Designed a two-player dice game built on the premise of risk and reward during 'Bitcamp' hackathon
- Developed a full stack web app using the Document Object Model to create a responsive front end layout

Skills

Front-end React, HTML5, CSS, JavaScript

Programming Java, C, Ruby, OCaml, Selenium, MatLab

Extracurricular Activity

Phi Delta Sigma Fraternity Inc.

College Park, Maryland

PHILANTHROPY CHAIR, FUNDRAISING CHAIR

Sept. 2019 – May 2020

- Initiated and oversaw biweekly fundraisers raising \$500 each month for National Alliance on Mental Illness
- Spearheaded series of week long events promoting mental health awareness