10321 Yearling Drive https://patwang123.github.io/

Patrick Wang

patrickwang86@gmail.com (301)-529-0286

Education

University of California, Berkeley

August 2020—Present

Bachelor of Science, Electrical Engineering and Computer Science

Cumulative GPA: 4.0 | Graduating: June 2024

Work Experience

<u>Software Engineer Intern at Hatch — California</u>

May 2021—Present

- Developing features that include systems design, email notification systems, user preferences, feedback requests, sending file attachments, as well as improving networking times for faster page loads.
- Full stack development with NextJS, MySQL/GraphQL, AWS CDK, and other AWS services.

Software Engineer Intern at Rimble — Berkeley, California

February 2021—May 2021

- Machine learning model designed to generate accurate real time odds and analytics
- Lead website development for funneling investors and developed API for clients

<u>Undergraduate Student Instructor at UC Berkeley — Berkeley, California</u>

June 2021—Present

- 20-hour TA that taught discussion section of 60 students twice every week
- Focus area on software, maintaining infrastructure at https://github.com/Cal-CS-61A-Staff/cs61a-apps
 for around 1000 students each semester

Research Intern at the University of Maryland — College Park, MD

June 2019—August 2019

- Research the effectiveness of machine learning on breaking classical/modern ciphers with Tensorflow Research Intern at the Johns Hopkins Applied Physics Laboratory Laurel, MD June 2018—August 2018
 - Helped design a framework for the integration of various models to predict long-term natural resource allocations. Performed data analysis for model testing

Projects

Personal Website (https://patwang123.github.io/)

• Personal website built with React. Content includes social links, projects, coursework, and more.

To-do List

Created a fully functional todo list/API with Django, MySQL, and various Django libraries/toolkits

Neural Network

• Coded a neural network from scratch to recognize digits from MNIST's handwritten digits database, but also generalized to work for any basic ANN

Pathfinding Visualizer (https://patwang123.github.io/Pathfinding-Visualizer)

- Created a basic visualizer for the A* and Djikstra pathfinding algorithms
- Visualization and implementation of algorithms created using Javascript, CSS, HTML, and React

Extracurriculars

Machine Learning Engineer, Launchpad (UC Berkeley)

February 2021—Present

• Developed a ML model to track sleeping stages with radio signals using LSTMs, GANs, and CNNs.

Junior Mentor, Computer Science Mentors

February 2021—Present

Tutor a small group of students weekly for CS 61A and create course content for all mentors to use.

Skills

Languages

Python, Java, C++, C, SQL, Matlab, R, CSS, HTML, Javascript, Swift, Bash, Scheme/LISP

Technologies/Frameworks

Git, React, Minitab, Bootstrap, Django, Pytorch, Tensorflow