

Patrick Wang

Computer Science at UC Berkeley

@ patwang123@berkeley.edu 301-529-0286 Berkeley, California github.com/patwang123 patwang123.github.io

Education

University of California, Berkeley
Bachelors degree in Electrical Engineering and Computer Science
Graduating May 2023 GPA: 4.0 Berkeley, CA

Experience

Undergraduate Student Instructor
University of California, Berkeley
June 2021 – Present Berkeley, CA

- Led discussions of more than 50 students in the introductory CS class at Berkeley, receiving significantly above average course evaluations
- Focus area on software, developing website, office hour queues, section tools, and more for almost 2000 students each semester
- Used ReactJS, Flask, MySQL, Google Cloud, HTML, Markdown

Software Engineering Intern
Hatch
May 2021 – Aug 2021 Seattle, WA

- Contributed to a full-stack application that acts as an incubator and forum for startups, allowing for convenient idea validation, user feedback, and advanced customer metrics
- Created high priority features necessary for the product, such as feedback requests, notification systems, customer engagement rankings, chat systems, and improving page loading times
- Achieved full backend to frontend integration with feature-complete delivery, exceeding goals and stretch goals.
- Used NextJS, Python, AWS EC2, S3, DynamoDB, RDS, CloudWatch, Lambda, AppSync, SES, SQS, Cognito

Software Engineering Intern
Rimble
Feb 2021 – May 2021 Berkeley, CA

- Developed API and authentication system for predicting professional League of Legends e-sports game odds using machine learning for a seed round startup valued at \$5 million
- Led development on website to act as a sales funnel for potential investors, creating metrics, key selling points, and API documentation
- Used ReactJS, Python, Django, AWS Lambda

Data Science Intern
Johns Hopkins Applied Physics Laboratory
June 2018 – Aug 2018 Laurel, MD

- Designed a framework to integrate various resource models to predict long-term resource allocations and advise governmental policies
- Performed data analysis for model testing on large fragmented data
- Used Python, Pandas, Numpy, and Java

Technical Skills

Java Python JavaScript HTML CSS
LISP NodeJS NextJS ReactJS Flask
Django AWS Firebase MongoDB
SQL Tensorflow Pytorch

Projects

ShallowSleep

- Predict people's sleep stages using only radio waves, compared to traditional and costly sleep studies
- Developed a machine learning model with an adversarial architecture using LSTMs and CNNs, along with a website to visualize predictions and statistics
- Python, Pytorch, ReactJS, Firebase

PathWiz

- Pathfinding visualizer to help students understand the search process of algorithms such as A* and Dijkstras
- ReactJS, Javascript, HTML, CSS

NeuralNet

- Built a neural network from scratch to predict data such as the MNIST handwritten digits, with curve sketching tools to help identify optimal hyperparameters
- Python, Scikit-learn, Tensorflow

RemindMe

- Created a task tracker with various features such as notifications, filters, and priority levels to assist with productivity
- Python, Django, HTML, MySQL

Extracurriculars

Launchpad

- Member of Launchpad, a Citadel, IMC, Microsoft, and Bloomberg sponsored machine learning and consulting club.
- Worked on projects in a variety of machine learning disciplines and developed new features for the club's website

Computer Science Mentors

- Tutored a group of students and created course content for all mentors to use