WAI HEI (RAY) NGAN

Software Engineer

CONTACT

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EDUCATION

Bachelor of Science in Computer Science (GPA: 3.45)

University of California, Davis
Davis, CA | Sep 2018 - Jun 2022

- Relative Coursework: Data Structures, Algorithm Design, Machine Learning, Artificial Intelligence, Web Programming , iOS fundamentals, Technology Management

SKILLS

C++, Python, Java, HTML, CSS, JavaScript, React, Git, Linux, SQL, MySQL, API, Node.js, AJAX, REST, Swift, Assembly, R

EXPERIENCE

UNDERGRADUATE CS RESEARCHER

UC DAVIS | DAVIS, CA | AUG 2020 - PRESENT

Study the impact of obfuscations on existing browser fingerprinting detection as a measure of web security.

- Analyzed top 100000 sites using web privacy measurement framework and web crawling obfuscation techniques.
- Developed obfuscation-resistant fingerprinting detection approaches using machine learning techniques.
- Broke down goals for the big picture of research into a variety of practical engineering solutions.
- Leveraged knowledge in Git, Python, JavaScript, Selenium, SQLite, mitmproxy.

SOFTWARE DEVELOPER

BIT PROJECT | DAVIS, CA | OCT 2019 - FEB 2020

- Designed 20+ programming workshops using MongoDB, Node.js, and APIs.
- Organized seminars and presentations for MongoDB at UC Davis.
- Created websites and applications using MongoDB, Express, NodeJS, and React.
- Collaborated with the members of the marketing team, design team, and management team for each project.
- Leveraged knowledge in programming fundamentals, full stack web development, teamwork, public speaking, and leadership.

PROJECTS

POPMATCH (GitHub, Website)

An iOS application that allows users to have one-on-one video meetings with people of similar interests.

- Integrated video chatting component using Twilio Video API.
- Developed user matching flow logic with Firebase Realtime Database.
- Utilized Swift, Objective-C, Firebase, Cloud Storage, Twilio API, Git.

AI Learning to Play Pong by Atari (GitHub, Website)

Atari Pong AI optimized by deep learning and reinforcement learning techniques.

- Used Google Cloud Platform Deep Learning VM and TensorFlow's Keras API to train Deep Q Learning model.
- Improved AI Agent by 93% after 2000000 training frames.
- Utilized Python, TensorFlow, Keras, NumPy, OpenAI, Google Cloud Platform.

Safe Space (GitHub, Website)

A web Application that rates COVID-19 safety ratings of different stores and restaurants.

- Leveraged knowledge of software development life cycle: planning, analysis, design, implementation, testing, and integration.
- Awarded second place for StudentsVuild4COVID19 Hackathon.
- Utilized HTML/CSS, JavaScript, Python, Flask, AJAX, Pandas, Git.