ANDY CAI

✉ andycai20000212@gmail.com 🌐 andycai.xyz 📞 6692102417 📍 Los Angeles, CA
in andycai0212 ⊙ andyjcai

EDUCATION

University of California, Los Angeles Sept. 2018 to Current
B.S. Computer Science 2022
Relevant Coursework: Programming Languages, Software Construction Laboratory, Data Structures and Algorithms, Computer Architecture, Operating Systems, Discrete Mathematics
Activities: City Fellows Consortium: Los Angeles, Sigma Eta Pi Premier Co-ed Entrepreneurship Fraternity, DevX, Creative Labs, 180 Degrees Consulting

EMPLOYMENT

Routable AI Cambridge, MA
Software Engineering Intern Aug. 2020 to Current
- Developing microservices using Golang, GraphQL, and InfluxDB for Routable AI's route optimization API.
- Created a Fleet Metadata microservice that updates fleet-specific information in Google Firestore.
- Added request retrieval microservice to retrieve all ride requests a specific rider sends to the backend.

Center for Vision, Cognition, Learning, and Autonomy Los Angeles, CA
Research Assistant Apr. 2020 to Current
- Research in Reinforcement Learning for path planning for self-driving vehicles under simulated environments.
- Simulate and improve behaviors of reinforcement learning agents in unknown environments with PyTorch.
- Contributed to an open-source vehicle simulation and data collection tool in C++ under video game environment.

Blok Party Inc. South San Francisco, CA
Android Development Intern June 2019 to Sept. 2019
- Designed and updated the user dashboard and marketplace on PlayTable's gaming console to a more modern UI in Android Studio with Java and XML.
- Created Profile caching mechanism to store user's profile information locally and fetches new profile information every 24 hours.
- Integrated Stripe's Android payment SDK to implement a payment flow that enables users to purchase games and a SetupWizard that guides users through the device setup process.

UCLA DevX Los Angeles, CA
Frontend Lead Apr. 2019 to Aug. 2019
- Led the iOS development of Pulp, an experience recommendation app for college students with Facebook SDK and 4Square API.
- Ideated and implemented a social feature that allowed users to share their favorite campus hot spots with friends.
- Performed A/B testing on the new feature with 30 subjects. App nominated as "Best student Experience App" by sponsor TripAdvisor on demo day.

PROJECTS

Reinforcement Learning Algorithms in Windy Gridworld July 2020 to Current
Developed 5 different RL algorithms (Monte Carlo, SARSA-1, SARSA-n, Q-learning, N-step Q-learning) from scratch using the OpenAI windy gridworld environment.

SF Bay Area Loan Website Dec. 2019 to Jan. 2019
- Developed website for a Bay Area loan manager to automate customer information collection.
- React.js + Flask to develop a modern UI and backend that processes and sends the information of customers to our client, a loan manager. Deployed app on Heroku.

Simpy Jan. 2020 to Current
- Simpy provides a deeper insight to how Spotify users music taste overlap with their friends as well as a way for users to meet strangers that share similar music taste.
- Developed using React.js + Express.js using MongoDB and Spotify Web API

SKILLS & INTERESTS

LANGUAGES: Python, Javascript, Golang, Java, C++, Bash, Swift
FRAMEWORKS & TOOLS: Git, Node.js, React.js, Express.js, Native Android/iOS Development, GraphQL, Flask, Kubernetes, Docker
INTERESTS: Basketball, Weightlifting, Reading Memoirs, Lyrical Rap, Cooking Steak