PATRICK YIN

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EDUCATION

University of California, Berkeley — B.A. Computer Science, Applied Mathematics   August 2019 - Present

- 4.0 GPA
- Regents' and Chancellor's Scholar — Merit-based scholarship for the top 2% of undergraduates at UC Berkeley
- Relevant Coursework: Artificial Intelligence (CS 188), Data Structures (CS 61B), Discrete Math and Probability (CS 70), Designing Information Devices & Systems I & II (EECS 16A & B), Structure & Interpretation of Computer Programs (CS 61A), Multivariable Calculus (Math 53)
- Current Coursework: Machine Learning (CS 189), Convex Optimization (EECS 127), Computer Architecture/Machine Structures (CS 61C)

EXPERIENCE

Berkeley AI Research — Research Assistant   Jul 2020 - Present

- Working under Prof. Sergey Levine and Justin Fu on applying reinforcement learning to autonomous driving
- Developed CNN imitation learning pipeline and PID controller for autonomous driving
- Applied transfer learning for autonomous driving tasks from Berkeley DeepDrive data to CARLA simulator

PROJECTS

Phyzmo   Oct 2019 - Dec 2019

- Reduced university course cost by $100 per student by constructing cross-platform application leveraging computer vision to help students visualize kinematic data for physics labs–published to Apple & Google Play Store
- Designed application to track moving objects and create visuals based on recorded data using Cloud AutoML
- Tech Stack: GCP Vision API, GCP Cloud Functions, GCP Storage, OpenCV, Firebase, Python, Java, Swift

Absent   Sep 2019 - Oct 2019

- Launched iOS app coaching non-native speakers to improve their accent by analyzing their voice recordings
- Utilized cosine similarity algorithm and word-level confidence analysis to dissect accent and provide feedback
- Tech Stack: GCP Speech-to-Text API, GCP Cloud Functions, GCP Storage, Firebase, Python, Swift

MultiFit   Aug 2019 - Sep 2019

- Devised a personal workout log merged with crowdsourced workout programs using Google Firebase
- Managed team of 3 by holding weekly debriefs and enforcing deadlines using ClickUp and Trello
- Tech Stack: Google Firebase (Authentication, Storage, Realtime Database), Swift

FeeSplitter   June 2019 - Aug 2019

- Invented a web application tracking shared expenses and balances between roommates, friends, and family
- Tracked over $5000 in transactions between users, helping them conveniently optimize their finances
- Tech Stack: Javascript (Node.JS, Express.JS, React.JS), HerokuApp Deployment, HTML, CSS, SQL

SKILLS AND INTERESTS

Awards	Outstanding CS61A Project Award (2020), USA Computing Olympiad Gold Division (2019), National Merit Scholar (2019)
Languages	Python, Swift, Java, Javascript, R, HTML, CSS, LaTeX, SQL
Frameworks/Tools	PyTorch, TensorFlow/Keras, NumPy, React JS, Node JS, Express, GCP, Firebase, Git
Interests	learning Mandarin, chess, basketball, running, weightlifting, anime, lofi, martial arts