Catherine Kung

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EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE — Irvine, CA

B.S. Computer Science, Informatics Minor — *June 2020*

- **Honors**: Magna Cum Laude (GPA: 3.96), Campuswide Honors Program, Phi Beta Kappa (PBK)

EXPERIENCE

INTUIT — Mountain View, CA

Software Engineer - Machine Learning Platform — *August 2020 – Present*

- Facilitated the onboarding of a backend service onto internal data lake and created dashboards on Kibana to expedite the process by which platform insights are generated
- Redesigned and led the development of a web application plugin used by data scientists and machine learning engineers to manage machine learning models
- Consolidated various platform services into one service, optimizing platform efficiency by centralizing focus and alleviating customer pain point of navigating multiple applications
- Redeveloped and open-sourced an internal CLI/SDK (https://github.com/intuit/mlctl) that allows ML Lifecycle operations such as training to be controlled via a single command line interface or notebook environment

Software Engineer Intern — *June 2019 – September 2019*

- Assisted in maintaining a web application used by tax analysts to create and modify models for calculating tax returns
- Integrated the frontend of the web application with the backend using REST API and React.js, improving performance time by 80%
- Increased the usability of the web application by implementing several React components with Redux framework to accommodate customer needs
- Accelerated testing procedures by developing the test automation infrastructure of the web application, leveraging Selenium, Jenkins, and Docker

INVESTIGATING VIRTUAL LEARNING ENVIRONMENTS (IVLE), UC IRVINE — Irvine, CA

Research Assistant — *January 2019 – June 2020*

- Conducted a systematic comparison of machine learning models in predicting academic success to better inform stakeholders regarding the use of predictive models in higher education
- Extracted various combinations of predictors from student clickstream data collected from approximately 2,000 college students and trained 5 machine learning models
- Evaluated models under technical and ethical considerations by determining predictive accuracy and satisfaction of fairness criteria: independence, separation, and sufficiency

CALIFORNIA INSTITUTE FOR TELECOMMUNICATION AND INFORMATION TECHNOLOGY (CALIT2) Irvine, CA

Research Assistant - UC Irvine Division — *January 2018 – June 2019*

- Collaborated with team members to devise an interactive Chromecast application that assists users in monitoring workout progress by providing feedback on form and speed of exercises via motion tracking
- Enhanced the user interface by researching the efficacy of sound, color, and animations in motivating users, implemented new features accordingly, and oversaw user testing

TECHSMART ACADEMY — Palo Alto, CA

Programming Instructor — *June 2017 – August 2017*

- Educated children ages 9-14 on the fundamentals of Python and Java by integrating a curriculum that utilized the video game, Minecraft, and modified existing functions and characters of the game

PUBLICATIONS/PRESENTATIONS

Kung, C., & Yu, R. (2021, January). Interpretable Models Do Not Compromise Accuracy or Fairness in Predicting College Success, presented at IJCAI 2021 Workshop on AI for Social Good.

Kung, C., & Yu, R. (2020, August). Interpretable Models Do Not Compromise Accuracy or Fairness in Predicting College Success. In Proceedings of the Seventh ACM Conference on Learning@ Scale (pp. 413-416).