# Christopher Ho

**chriswxho@gmail.com • (510) 509-4690 • Irvine, CA**

**linkedin.com/in/chriswxho**

## EXPERIENCE

**Research Assistant, Shiraiwa Group** @ UC Irvine — September 2020 — June 2021
Machine Learning, Computational Chemistry — Irvine, CA

- Researched and optimized computational experiments for atmospheric chemical reactions for Prof. Manabu Shiraiwa
- Created deep architectures to model concentrations of chemicals 350× faster than the current SoTA computation model
- Applied Bayesian inference methods to approximate values for chemicals' physical properties given previous lab data

**Machine Learning Engineer Intern** @ Stream Engine — September 2020 — June 2021
Machine Learning, Full–Stack Development — Irvine, CA

- Built regression models to predict time-series audience statistics for livestream events, beating industry competitors
- Parallelized collection pipelines for streaming analytics to automate data ingestion for hundreds of concurrent streams

**Software Engineer Intern** @ Apple — June — September 2020
Full–Stack Development — Santa Clara, CA

- Developed a recommendation system to suggest workflow apps and actions based on previously collected data
- Revamped the Claris Connect UI from design sketches using JavaScript libraries, improving presentation and usability

**Tournament Director** @ American Red Cross Charity Tournament — September 2016 — September 2018
Management, Leadership — Union City, CA

- Planned, publicized, and managed tournament desk during a one-day badminton tournament for 3 years
- Raised $2,000 in 2016, $2,500 in 2017, $6,000 in 2018 for the American Red Cross

## TECHNICAL SKILLS

**Programming Languages:** Python, C/C++, Java, SQL, JavaScript, LaTeX
**Environments and Libraries:** Git, Jupyter, NumPy, sklearn, TensorFlow, PyTorch, OpenCV
**Verbal Languages:** Native English, Conversational Cantonese Chinese, Mandarin Chinese

## EDUCATION

**University of California, Irvine** — Irvine, CA
**B.S. Computer Science and Engineering, Minor in Statistics** — September 2018 – June 2022
**GPA: 3.854/4.0**

**Relevant Coursework:** Deep Learning, Image Understanding, Computational Vision, Medical Imaging, Machine Learning, Probability and Statistics, Data Structures, Algorithms, Database Management

## PROJECTS

**Using RGB Videos to Predict ECG** • Python, TensorFlow, OpenCV

- Predicted a patient's ECG waveform given an RGB video of their face, focusing on minute physiological differences
- Applied transfer learning from ImageNet computer vision models with several image pre-processing techniques

**TSTimeTable** • Python, MySQL, React

- Scraped TournamentSoftware site for information on tournament matches and added various filters for coaches' use
- Supported real-time updates for match logistics by connecting MySQL database to React display with Flask API backend