

# Melody Chen

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## Education

University of California, Los Angeles

Expected June 2022

*Bachelor of Science in Computer Science; GPA: 3.85/4.00*

**Relevant Coursework:** Data Structures and Algorithms, Programming Languages, Machine Learning, Operating System Principles, Probability and Statistics, Computer Organization, Computer Systems Architecture

**Honors:** UPE(CS Honor Society), HKN(Electrical & Computer Engineering Honor Society), Dean's Honors List

## Skills

Technical Skills: C, C++, Python, Java, JavaScript, OCaml, Express, React.js, MongoDB, MySQL, Verilog

Languages: English (fluent), Mandarin Chinese (fluent), Taiwanese (fluent), Japanese (JLPT N2 Certified), Spanish

## Work Experiences

Google, Mountain View, CA

6/2020 ~ 9/2020

*Incoming STEP(Software Engineering) Intern*

Human Computer Interaction Research Group, UCLA

*NSF REU Summer Research Intern*

6/2019 ~ 9/2019

- Worked under Professor Xiang Chen with PhD Candidate Yao Xie on the **XAI**(Explainable AI) project CheXplain
- **Co-Author** of the paper, "CheXplain: Enabling Physicians to Explore and Understand Data-Driven, AI-Enabled Medical Imaging Analysis", **published at ACM CHI Conference 2020** (24.3% Acceptance Rate)
- Designed and implemented the high-fidelity prototype for CheXplain with **React.js** and **Firebase** used to present to medical professionals during co-design and user study sessions, and at the ACM CHI Conference

*Undergraduate Researcher*

3/2019 ~ 6/2019

- Analyze TensorFlow CheXpert model to experiment with saliency map to obtain annotations on Chest X-ray Images
- Sorted over 60,000 patients' Chest X-ray records for data analysis with **Bash** and **Python**

## Extracurricular Activities

DailyBruin, UCLA Student Media

10/2019 ~ Present

*Assistant Bruinwalk Director*

- Lead student developer team working on UCLA's most popular **professor and apartment review website** with **50k average monthly users**
- Implementing redesign of the site written in **Django** with UI/UX designers and leading team of front/backend developers

DevX, UCLA

10/2019 ~ 4/2020

*Backend Developer*

- Working on DrugDecider, a **web-based application** for patients of **UCLA Health** to determine customized side effects of drugs in real time with **ML** in collaboration with **UCLA Lab of Computational Neuropsychology**
- Working on integrating ML model written in **R** into backend API of web application build with **Node**, **Express**, and **MongoDB** to query instantaneous results to feed frontend interface built with **React.js**

Eta Kappa Nu(Electrical & Computer Engineering Honor Society), UCLA

4/2019 ~ 3/2020

*Officer/Webmaster*

- Maintain and update the member website for the Electrical and Computer Engineering Honor Society of UCLA
- Worked on re-building the website currently built with Ruby on Rails using React.js, Flask, and PostgreSQL

## Engineering Projects

Resistor Reader, LA Hacks

3/22 ~ 3/24/2019

- Implemented and designed **computer vision** application able to identify color bands of resistors to calculate the resistance of the resistor given a clear image in **Python** through numpy, scipy, and matplotlib

Smart Lock, IdeaHacks

1/18 ~ 1/20/2019

- Built a SmartLock with features such as **facial recognition** and **motion detection**, through the use of components and APIs such as the **Raspberry Pi**, gyroscope, and Microsoft Azure Facial Recognition API