

# Melody Chen

Website: [melodychn.github.io](https://melodychn.github.io)  
Los Angeles, CA

Email: [melodyc1205@ucla.edu](mailto:melodyc1205@ucla.edu)

Phone: (213) 298 6849

Github: [melodychn](https://github.com/melodychn)

## Education

**University of California, Los Angeles**, Los Angeles, CA

Expected June 2022

*Bachelor of Science in Computer Engineering; GPA: 3.84/4.00*

Relevant Coursework: Introduction to Computer Science(C++), Data Structures and Algorithms, Logic Design of Digital Systems, Computer Architecture, Introduction to Engineering Design: Internet of Things

## Skills

Skills: C++, Java, Python, JavaScript, Arduino, Raspberry Pi, Microsoft Suite, Adobe Photoshop, Adobe Illustrator  
Languages: English(fluent), Mandarin Chinese (fluent), Taiwanese(fluent), Japanese (4 years), Spanish(4 years)

## Experience

**Human Computer Interaction Research Group**, UCLA

*NSF REU Summer Research Intern*

6/2019 ~ Present

- Working with PhD Candidate Yao Xie on her latest XAI project Chexplain, to be submitted to ACM CHI 2020
- Built the frontend prototype with React.js, Firebase, and sass used to present to physicians and radiologists during co-design sessions.
- Working and researching on altering CheXpert model in order to implement saliency map to obtain annotations on Chest X-ray Images

*Undergraduate Researcher*

3/2019 ~ 5/2019

- Work on National Science Foundation funded XAI(Explainable AI) project for creating a transparent and interactive diagnostic system for pathology identification from chest X-ray image inputs that allows for users of the system to guide and improve the model in real time
- Write code in bash and python for data analysis and sorting of over 60,000 patients' chest X-ray records, work to improve the existing deep learning model

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

4/2019 ~ Present

*Webmaster*

- Maintain and update the official website for the Electrical and Computer Engineering Honor Society (Iota Gamma Chapter)
- Currently working on re-building the website with React.js for the 2020 school year to prepare for new inductees

**Bruin Racing: Super Mileage Vehicle Team**, UCLA

9/2018 ~ Present

*Member of EV(Electric Vehicle) Electrical- Data Acquisition Team*

- Assist in the development of a Joulemeter system using Arduino, voltage divider, current shunt, and amplifier; wrote C code for the hall effect and temperature sensor of the vehicle through the Arduino
- Help assemble circuits necessary for the design of the electric vehicle that will attend the Shell Eco-Marathon 2019

**Institute of Electrical and Electronics Engineers(IEEE)**, UCLA

9/2018 ~ 6/2019

*Member of Open Project Space(OPS) and General Board*

- Attend lectures to learn the basics of electrical engineering, such as soldering, breadboarding, serial communication, and IC chips; learn to code on an Arduino; work on projects that utilizes skills learned in lectures(ex. Blinker with 555 timer, Distance Sensor)
- Participate in IEEE's Annual Hardware Hackathon IdeaHacks; built a SmartLock with features such as facial recognition and motion detection, through the use of components such as the Raspberry Pi, gyroscope, and solenoid lock

## Awards/Acknowledgments/Achievements

Dean's Honor List

2018 ~ 2019

Eta Kappa Nu(Electrical & Computer Engineer Honor Society)

2019 ~ Present

National Merit Commended Scholar

2017