

# Yu-Hsi (Ellie) Cheng

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## EDUCATION

### University of California, Los Angeles (UCLA)

Expected June 2022

*Bachelor of Science in Computer Science and Engineering*

- **Relevant Coursework:** Data Structures, Algorithms & Complexity, Artificial Intelligence, Operating Systems (IP), Logic Design of Digital Systems (IP)
- **Honors:** Upsilon Pi Epsilon, Dean's Honors (Fall 2018, Winter 2019, Spring 2019)
- **GPA:** 3.981

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## TECHNICAL SKILLS

- Programming languages: C/C++, Python, HTML, CSS, Javascript
- Frameworks/Tools: React.js, Express.js, Flask, Linux, Docker, Git, MongoDB, Firebase

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## EXPERIENCES

### Networked & Embedded Systems Laboratory, UCLA

April 2019 – Present

*Undergraduate Research Assistant*

- Working on a project evaluating different interpretable machine learning techniques for explainability
- Worked with **OP-TEE OS** Arm TrustZone technology on a **Hikey**, controlling peripherals using C

### ACM Cyber, UCLA

October 2018 – Present

*Capture the Flag Director*

- Created Capture the Flag questions in topics like cryptography and reverse engineering and websites for workshops using **Flask, Python, Docker, Git, Linux**
- Organized events such as Capture the Flag Nights and California CTF 2019 by handling food logistics for up to 50 people and communicating with various school departments

### Aetla

June 2019 – Present

*Software Developer*

- Designed and developed a course-planning web application using **React** and **Express** for UCLA students to efficiently and conveniently plan their curriculum
- Built all the **frontend** features, including a planner page with drag and drop course cards and course search for organizing courses
- Designed and implemented **backend API** that queries **MongoDB Atlas** database to feed planner with users', courses' and plans' data, utilized **Firebase Authentication**, and connected backend with frontend
- Implementing **anonymous sessions** for more versatile user experience, allowing them to make course plans without making accounts

### MeetMe

December 2019 – January 2020

*Software Developer*

- Designed UI/UX of an event scheduler heavily inspired by When2Meet using **React, Express, and Firebase**
- Emphasized user friendly UI such as being mobile friendly and enabling touch on web and mobile
- Utilized the package **Moment.js** to efficiently work with date, time, and time zones

### ResearchUCLA, UCLA

January 2019 – June 2019

*Software Developer*

- Developed a website in **React.js, HTML, CSS** in a team that provides students with information about research opportunities, news, and faculty centered around AI and machine learning at UCLA
- Implemented the navigation bar, adding **dynamic mobile responsiveness** by detecting screen widths and scaling components appropriately

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## ENGINEERING PROJECTS

### CodeSprint, UCLA

5 May 2019

*Competitor*

- Designed algorithms finding the optimal path for a frog to eat the most bugs on a grid-formatted pond and finding the optimal decision in a game of collecting coins given limitations on moves in coding competition hosted by **UCLA ACM ICPC**
- Ranked top 3 in team round, top 10 in individual round