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 Principles, Programming Languages, Probabilistic Programming & Relational Learning, Data Mining, Machine Learning (IP)
- **Honors:** Upsilon Pi Epsilon, Dean's Honors (Fall '18, Winter '19, Spring '19, Fall '19, Spring '20, Fall '20)
- **GPA:** 3.989

TECHNICAL SKILLS

- Programming languages: C/C++, Python, PHP, SQL, OCaml, HTML, CSS, JavaScript
- Frameworks/Tools: React.js, Express.js, Node.js, Flask, Docker, Git, MongoDB, Firebase, Keras

EXPERIENCE

Networked & Embedded Systems Lab, UCLA   October 2019 – Present
Undergraduate Research Assistant

- Worked on an **XAI** (explainable AI) project exploring end-users' preferences in different explanation methods in various domains using **Python** with **Keras** (paper has been accepted to **NeurIPS 2020**)

Statistical and Relational Artificial Intelligence Lab, UCLA   January 2020 – Present
Undergraduate Research Assistant

- Implementing optimizations for the probabilistic programming language **Dice** in **OCaml**

Facebook, Inc.   June 2020 – September 2020
Software Engineering Intern

- Worked on improving ranking systems and recommendation infrastructure for Facebook Events notifications aimed at growing the Events product using primarily **Hack (PHP)** and **SQL**

ACM Cyber, UCLA   October 2018 – Present
Co-President

- Leads officer team on creating workshops for novices interested in **cybersecurity** at UCLA
- Created Capture the Flag questions in topics like cryptography and reverse engineering and websites for workshops using **Flask, Python, Docker, Rust, PostgreSQL**
- Organized events such as CTF After Nights and California CTF 2019 by handling food logistics for up to 50 people and communicating with various school departments

PROJECTS

Probabilistic Graphic Generator 2020   April 2020 – June 2020

- Created a graphic generator that can produce aesthetic minimalist graphics of new and unique colorings given an arbitrary image in a team of four using **K-means, probabilistic factor graphs, and MCMC sampling**

MeetMe   December 2019 – January 2020

- Designed UI/UX of an event scheduler heavily inspired by When2Meet using **React.js**, **Express.js**, 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

Aetla   June 2019 – October 2019

- Designed and developed a course-planning web application using **React.js, Express.js,** and **Node.js** 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