Yu-Hsi (Ellie) Cheng

ellieyhc@gmail.com • (916) 597-6366 • linkedin.com/in/yu-hsi-ellie-cheng • github.com/ellieyhcheng

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 (IP)
- Honors: Upsilon Pi Epsilon, Dean's Honors (Fall 2018, Winter 2019, Spring 2019, Fall 2019, Spring 2020)
- **GPA:** 3.987

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
- 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