Stella (Yuk Tong) Lau

(She/Her/Hers)

336.675.7476 | yuktong.stella.lau@gmail.com | ytlau1@uci.edu | linkedin.com/in/stella-lau | stellau852.com

EDUCATION

University of California, Irvine **M.S. Computer Science** 09/2021-06/2023(Expected)
University of Washington, Seattle **B.S. Electrical Engineering** (***Cum Laude***) 09/2018-12/2020
Seattle Central College, Seattle **A.S. Computer Engineering** 09/2016-12/2018

TOOLS

Java, **Python**, **C**, **JavaScript**, **CSS**, **HTML**, **Database Management** (SQL, MYSQL), **Node.js**, **React**, **Angular, Bootstrap**, **Figma**, **Project Management, Regex**

RELEVANT RESEARCH, Teaching, & LEADERSHIP EXPERIENCE

Teaching Assistant (User Interaction Software) @ UCI 09/2022-Current

- Holding office hours and teaching quiz sessions once per week for a front-end web development course that teaches the basics of HTML, CSS, Angular, and web accessibility principles.

Software Engineer Intern @ UCI Student Center 07/2022-Current

- Self-learning iOS development.
- Studying existing code of the ZotFinder application that provides an interactive map of UCI.
- Designing and implementing a new feature for ZotFinder that displays accessible point-to-point directions using the GPS data collected with a GPS module that I built. (Currently in the data collection phase).

Graduate Student Researcher Intern @ UCI 06/2022-Current

- Analyzing course accessibility guidelines of 20 different public universities.
- Coming up with different guidelines that help UCI instructors with creating accessible course content.

Reader/Grader (Internet Applications Engineering) @ UCI 03/2022-06/2022

- Holding office hours once per week and grading assignments for a full-stack web programming class that teaches the basics of HTML, CSS, JavaScript, React, JQuery, MYSQL, JDBC, Express, and Node.js.

Research Assistant @ *Social & Technological Action Research Group* 09/2021-Current

- Thesis: using crowdsourcing data to implement a semi-real-time map with ADA accessible routes.

Disability Inclusion Chair @ *Associated Graduate Students at UCI* 09/2021-06/2022

- Accessed and addressed issues that students with disabilities face.
- Worked with the Disability Services Center, Basic Needs Hub, and other resources on campus to identify students' needs and improve current resources or policies.
- Organized events that promote equity, diversity, and inclusion on campus.

Volunteer Computer Science Teacher @ TEALS 06/2021-06/2022

- Co-teaching public high school students "Introduction to CS" in **Python** using the CMU CS Academy CS1 curriculum.
- Fostering interest in computer science, creativity, resilience, and problem-solving skills in students.

Research Assistant @ *Make4All Laboratory* 01/2021-06/2021

- Prototyped a reimagination of knitting loom to make loom knitting easier for everyone. The 3-D printed loom prototype had conductive sensors built with copper tape connected to an Adafruit Feather microcontroller to detect whether the user made a "purl" or "knit" stitch and help users to maintain the tension of the yarn.
- Attended the **ACM CHI 2021** conference.

Undergraduate Research Assistant @ *Sensor, Energy and Automation Laboratory* 06/2020-06/2021

- Edited research documents and proposals.
- Developed project management tools with **Google Sheets**, **Google App Scripts (JavaScript)**, and **Slack API** that allow lab leaders to check on overall project status and how every member is keeping up with their tasks. The tools increased overall lab productivity (percentage of tasks that has been recently updated) from **67% to 95%**.

Undergraduate Research Assistant @ *Networks and Mobile Systems Laboratory* 10/2019-01/2020

- Researched appropriate technologies to apply to adult sleep monitoring.
- Developed an Android application with **Java** that works with Raspberry Pi components for adult respiratory rate monitoring.

RECENT PROJECTS

Software Development & Embedded Systems/ IoT Development

Stella's Personal Page Link: https://github.com/Stellau/stella-personal-page

Tools & Skills: *AWS Amplify, HTML, CSS, TypeScript, Angular, Responsive Web Design*

Built this project to share about myself, my projects, recent updates after teaching myself Angular. I also deployed this project with AWS Amplify and made sure that this page is accessible and looks good on a variety of devices.

Stellar Amateur (Personal Blog) *In Progress*

Tools & Skills: *AWS Amplify, Elastic Beanstalk, Aurora, HTML, CSS, Bootstrap, Angular, Node.js, MYSQL, Figma, Responsive Web Design*

Creating a full-stack webpage to share my hobbies and recipes. Building the frontend with Angular and hosting it with AWS Amplify. Building the backend with Node.js and hosting it with AWS Elastic Beanstalk. Building a database with MYSQL on AWS Aurora to store my recipes and so on.

SmartCrib (Capstone Project: Baby Monitor Prototype) Link: https://courses.cs.washington.edu/courses/cse475/20au/

Tools & Skills: *Arduino, IoT, C++, Analog & Digital Sensors, React.js, SCSS, Bootstrap*

Built our project's concept design and website, organized the report, led the technical development of communication between the microcontroller and the Internet, and helped with breathing rate and pulse extraction.

Color Detector

Link: https://github.com/Stellau/ColorDetector

Tools & Skills: *SystemVerilog, Verilog, ModelSim, GPIO, Terasic Digital Camera, DE1_SoC*

Implemented this color detector by collecting data using a Terasic digital camera with GPIO interface connected to a DE1_SoC board, processing the data by averaging and analyzing the RGB elements, and displaying the result on a 7-segment display.

RELEVANT CLASSES

Data Structure and Algorithms (**Java**) **|** Web Programming (**JavaScript, HTML, CSS, Node.js, MYSQL**) **|** Computer Programming I-II (**Java**) **|** Principles of Operating Systems (**Linux**, **C**) **|** Introduction to Data Management (**SQL, Java, AWS, Azure**) **|** Hardware/Software Interface (**Linux**, **C, X86-64**) **|** Continuous and Discrete Time Linear System (**Python**) **|** Introduction to Embedded Systems (**C**) **|** Introduction to Artificial Intelligence (**Python**) **|** Distributed Computer Systems (**C**) | Advanced Data Structures