

Melissa Chang

melissaschang.github.io | <https://www.linkedin.com/in/uclamelissa/> | Sunnyvale, CA

EDUCATION

Bachelor of Science in **Electrical Engineering**, GPA: 3.79/4.0
University of California, Los Angeles

Sept 2020 - June 2022

RELEVANT SKILLS

- Programming/firmware: C/C++, Python, Matlab, LaTeX, JSON, Linux, Git.
- Software: Altium, Quartus, Modelsim, Circuitmaker, LTspice
- Coursework: Circuits I/II, Intro to Digital Design, Control Systems, Principles of Semiconductor Device Design, Data Structures & Algorithms in C/C++, Electromagnetics, Neural Signal Processing, Signals and Systems

WORK EXPERIENCE

Product Marketing Engineering Intern

Texas Instruments, Remote

June 2020 - current

- Writing a script to automate the creation of graphs describing customer base from sales data.
- Reviewing competitive landscape and building strategies to address gaps.
- Worked across cross functional team members to present a product proposal for a top customer to the Ethernet product line manager.
- Contributed technical docs, how-to video clips, and sales collateral for Ethernet PHY products.

Researcher in Blockchain and Internet of Things (IoT) Forensics

Partnership between Boatrax and Florida International University, Miami, FL June 2019 - Sept 2019

- Researched the costs and benefits of blockchain technologies to securely log IoT data in an undergraduate research program despite zero initial background in Blockchain.
- Coded a smart contract in Solidity and Python to develop a decentralized app in Ethereum to process and record boat sensor information from a Raspberry Pi.
- Documented the process in a [technical report](#) in IEEE format and presented my results to Professors and kids.

Business Applications Intern

San Jose, CA

June 2018 - Aug 2018

- Developed a prototype application in Python connecting Salesforce with Dialogflow to allow company members to perform Salesforce tasks with their voice assistant devices.
- [Documented](#) the application system testing process and wrote a guide for re-creating the application.

EXTRACURRICULARS

Powertrain Engineer

Bruin Supermileage Vehicle Team, Los Angeles, CA

March 2021 - Present

- Designing a logic circuit in Quartus to control three UCC27712 gate drivers for our brushless DC motor controller in a team of three.
- Incrementally testing the BLDC motor controller logic circuit using ModelSim.
- Improving the schematic design of last year's brushed DC motor controller in Altium by adding transient protection and thermostat.

Electrical Engineer

Formula One Racing Team, Davis, CA

Sept 2019 – March 2020

- Collaborated with 3 team members in Circuitmaker on the PCB layout of the Power Electronics Interface board that controls the battery AIRs and the shutdown circuit of our vehicle.