

MELANIE WONG

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EDUCATION

University of California, Santa Cruz

- **M.S. Computer Science and Engineering**, Expected Sept. 2020 – June 2021
- **B.S. Computer Science** with Highest Honors, Cum Laude, Sept. 2017 – June 2020. GPA: 3.83/4.00
- **Graduate Coursework**: Network Security, Seminar on Networks
- **Undergraduate Coursework**: Algorithms & Data Structures, Software Engineering, Computer Security, Distributed Systems, Web Applications, Machine Learning, Coding for Social Good

WORK EXPERIENCE

Global Technology Summer Analyst | Bank of America

June 2020 – Present

- Software Engineer Intern for the Global Banking and Markets Technology Team

Undergraduate Researcher | UC Santa Cruz Engineering

Sep. 2019 – Present

- Proposed, designed, and developing web security service using compact data structures in C++
- Analyzing collected data using Python libraries to evaluate performance and memory efficiency

Undergraduate Research Lead | UC Santa Cruz Tech4Good Lab

Mar. 2019 – Present

- Leading web development team to build platforms for community engagement
- Developing applications using Angular and Firebase from Figma high-fidelity prototypes

Economics Lab Lead Programmer | UC Santa Cruz LEEPS Lab

May 2020 – Present

- Designing and developing software to support research in an experimental economics lab
- Implementing web platforms for conducting experiments using oTree, Python and Javascript

Computation Intern | Lawrence Livermore National Laboratory

June – Sep. 2019

- Designed and developed a web application using React for tracking laser facility maintenance
- Implemented REST API in Java, API calls using Axios, and redesigned UI for improved usability
- Utilized Jenkins and Atlassian Bamboo for automated builds and deployments

PROJECTS

Distributed Key-Value Store

- Implemented a fault-tolerant key-value store in a team of 4 using Python, Flask, and Docker

LiveColor (Mobile App)

- Built an Android application in Java that allows picking, editing, and saving colors from captured images

Daily Messages

- Automated daily SMS using Java, Microsoft Azure Functions, and Twilio's API to receive customized weather reports

Multi-threaded HTTP Server

- Developed a REST server in C++ to handle simultaneous HTTP requests, with request logging and FIFO caching

Production Network Simulation

- Built a multi-level production network using Mininet topology and Python
- Implemented firewalls and routing between subnets using switches and a POX controller

JPMorgan Chase & Co. Code for Good (2nd Place)

- Created a mobile application using React to track and gamify volunteering for the nonprofit Green City Force

TECHNICAL SKILLS

- **Programming**: Experience with Java, C++, Python, JavaScript, TypeScript, HTML, CSS, SCSS; Familiar with Go, SQL
- **Frameworks**: React, Angular, Vue, Polymer, Express, Flask
- **Technologies**: Linux/Unix, Git, Node.js, Docker, Kubernetes, Google Cloud Platform, AWS

ACTIVITIES & AWARDS

Building Belonging Fellowship Award

May 2020 – Present

- Lead programmer to develop software for conducting research projects in experimental economics

Goldman Sachs Engineering Essentials Fellow

May 2019

- Created a stock visualization application using React, Jersey RESTful web services, JSON, and Maven

Rewriting the Code Fellow

June 2019 – Present

NCAA Track & Field Athlete – Sprinter & Hurdler

Sept. 2017 – Jan. 2020