

EMILY O'NEAL

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EDUCATION

BS IN COMPUTER SCIENCE - CAL POLY STATE UNIVERSITY, SAN LUIS OBISPO

JUNE 2021 (EXPECTED)

Concentration in Interactive Entertainment, Minor in Dance, GPA: 3.3

Courses: Data Structures, Systems Programming, Discrete Structures, Computer Organization, Object-Oriented Programming, Computer Security, Computer Science – Python, Stats, Calculus 3, Linear Algebra, Technical Writing, Public Speaking

EXPERIENCE

EMBEDDED SOFTWARE ENGINEERING INTERN, CISCO [SAN JOSE]

SUMMER 2019

Developed test automation and execution of next generation routing products for the Service Provider Network System segment. Implemented an internal testing framework to increase code coverage in the networking layer, specifically the ACL and QoS. Gained experience with large shared code bases and specific frameworks for scaling.

TECHNICAL ASSISTANT , BLACK GIRLS CODE [OAKLAND]

SUMMER 2018

Lead the implementation of Summer Camp curriculum to 25-30 underrepresented young women. Taught basic programming concepts with Python by using Raspberry Pis to control cameras, LEDs, buttons, and Sense Hats. Expanded the curriculum by building a template motion responsive maze game with a Raspberry Pi to teach conditionals.

ORGANIZER, SLO HACKS [SAN LUIS OBISPO]

2017– 2019

Coordinated 6 hackathons over the course of two years - raising 70k+ and serving over 400 university students. Designed hacker experience, scheduled mentors, organized workshops, managed social media, and contacted companies.

CURRICULUM DEVELOPER & EDUCATOR, CODE NATURALLY [SANTA CRUZ]

2016 – 2018

Developed curriculum, designed educational presentations, and taught JS Processing to hundreds of students. Shaped the company's commitment to providing students of all backgrounds and interests with relevant and engaging material as one of the first three employees by emphasizing project-driven learning.

PROJECTS

UNIX SHELL, CAL POLY [SAN LUIS OBISPO]

SPRING 2019

Created a shell using C system calls to support core bash features including redirection, signals, file system navigation, pipes. Wrote a parser to dynamically read, decipher, and error handle user input from the command line. Interacted directly with the operating system to re-create the functionality of a unix terminal.

HACKATHONS, JUNCTION [ESPOO, FINLAND] AND CAL HACKS [BERKELEY].

WINTER 2018

Integrated the Google Maps API to create automatically generated routes based on certain, user criteria. Developed algorithms to translate the data given by Google Cloud's natural language processing API into searchable phrases.

THE RAIN OF TERROR, MARINE SPACE STATION [SANTA CRUZ]

SPRING 2017

Built regression models with Pandas Library to determine the relationships between environmental factors (rainfall, temperature, and turbidity) and E.coli levels on Santa Cruz Beaches to predict the levels of water contamination. Worked with large data bases from the Marine Space Station to make real-time predictions.

LANGUAGES / SKILLS / INTERESTS

- Python, Java, C, Assembly, JavaScript, CSS, HTML, R, BASH, LINUX/UNIX
- Collaboration with GitHub and Slack, NLP with Google Cloud, Data Analysis with Pandas and Ggplot
- IoT, Human-Computer Interaction, Augmented Reality, Computer Science Diversity Outreach, Event Coordination, Dance

LEADERSHIP

FOUNDER, ENVISION

SPRING 2019

Spearheaded the collaboration of two on-campus clubs to run a high school hackathon for students along the central coast. Directed over 20 organizers across five teams, 30 volunteers, and 75 students to organize Cal Poly's first high school hackathon.

OFFICER, WISH (WOMEN INVOLVED WITH SOFTWARE AND HARDWARE)

2018 - PRESENT

Tech Officer – leading technical projects teams, currently working on a Bluetooth controlled robot. Campus Officer - organized events that foster a healthy and supportive community for women in computer science fields. Community Officer - planned off-campus events that inspire the next generation of computer science students, targeting minorities.

FOUNDER, SANTA CRUZ TEEN ENTREPRENEUR CHALLENGE

2016 - 2018

Conceived, organized, and lead this highly successful hackathon for two consecutive years. Raised a total of \$12,000, benefiting over 200 7th-12th graders in the Santa Cruz Area. Connected innovative companies with teens, inspiring them to use technology to be the leaders and innovators of the future