# Emily O'Neal

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## **Activities**

**Dance Suit:** Building and programming an LED light-up dance suit.

Society of Women Engineers: Outreach committee member. Building and Engineer

volunteer.

**Girls Who Code:** Club Founder at Pacific Collegiate School

White Hat: Active member.

Cipher workshop teacher.

## **Studio Dancer:**

Performer, choreographer, and teacher.

**Girls Teaching Girls to Code:** High School
Liaison.

#### **Education**

## **UNDERGRADUATE STUDIES (June 2021)**

Cal Poly San Luis Obispo - BS in Computer Science / Minor in Dance

Major GPA: 4.0/4.0 - Dean's List

**Relevant Courses:** Calculus 2 | Computer Security | Public Speaking | Computer Science - Python | Data Structures | Calculus 3 | Linear Algebra | Technical Writing

## HIGH SCHOOL DIPLOMA (June 2017)

Pacific Collegiate Charter (#1 Public School in California - US News and World Report)

Relevant Courses: Multivariable Calculus | AP Calculus BC | AP Computer Science | AP Physics 2

Awards / Honors: Top Math Student Graduating Class | Presidential Community Service Award

(2016 & 2017) | NCWIT Award for Aspirations in Computing (2016-Runner-Up), 2017-Winner)

Senior Capstone Project: Created curriculum for and ran a seminar at Pacific Collegiate Charter

## **Experience**

#### TECHNICAL ASSISTANT | BLACK GIRLS CODE (Summer 2018)

• Lead the implementation of Summer Camp curriculum to 25-30 young women ages 9-12.

and Scotts Valley Middle. Promoted computer science as a necessary tool for every student.

 Taught basic programming concepts with Python and Scratch. Used Raspberry Pis to control cameras, LEDs, buttons, and Sense Hats. Built a motion responsive maze game.

## ORGANIZER | SLO HACKS (2017-Present)

- Coordinated 3 hackathons over the course of a year running for 60 hours, raising 40k+ and catering to more than 400 university students.
  - Operations designed hacker experience, scheduled mentors, organized workshops
  - Outreach managed social media, promoted event, created social media challenges
  - Sponsorship (current team) contacting companies with the goal of raising 70k+

#### CURRICULUM DEVELOPER & EDUCATOR | CODE NATURALLY (2016-2018)

- Developed curriculum, designed educational presentations, and created lesson plans for educators. Worked with many team members to create curriculum to teach JS Processing
- Taught JS Processing to students from 2<sup>nd</sup> to 9<sup>th</sup> grade at multiple schools. Teaching environments ranged from one-on-one interactions to classroom lectures.

## PYTHON DEVELOPER | MARINE SPACE STATION (Spring 2017)

- Built a program with the Pandas library todetermine the relationships between environmental factors (rainfall, temperature, and turbidity) and E. Coli levels on Santa Cruz beaches to predict the levels of water contamination as a final project for Multi-Calculus.
- Worked with large databases from the Marine Space Station to make real-time predictions.

## ANDROID DEVELOPER | WE HACK TOO (July 2016)

- Won first place with an Android App, Dough Nut, that uses a picture analyzing API to teach money-management skills to young Adults.
- Planned, designed, programmed, and pitched the app in just two days.
- Integrated a calendar on Android Studio for saving and organizing pictures by date

## **Skills**

## Languages:

Java | Python | JavaScript | Processing JS | CSS | HTML

#### Tools:

IntelliJ | Android Studio | Pandas | Cloud 9 | Invision

#### Other:

Project Management | Event Coordination | Public Speaking | Teaching

# Leadership

## FOUNDER | SANTA CRUZ TEEN ENTREPRENEUR CHALLENGE (2016-Present)

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

## OFFICER | WISH (Women In Software and Hardware) (2018-Present)

- Campus Officer developing events, study sessions, workshops, technical talks that foster a
  healthy and supportive community for women in computer science fields.
- Community Officer planning off-campus events that inspire the next generation of computer science students, targeting minorities in tech fields.

## TEACHER / VOLUNTEER | BROOK KNOLL ELEMENTARY SCHOOL (2016)

 Taught computer science in multiple 2<sup>nd</sup> grade classrooms. Promoted gender diversity by showing the versatility of technology and making it relevant to all types of students.