Alan Zhang

alanszhang@berkeley.edu— (510) 604 0566 — alanszhang.com — github.com/alanszhang

EDUCATION

University of California, Berkeley   Expected Graduation: May 2019
B.A. in Computer Science, with a minor in Linguistics   GPA: 3.2

Courses: Computer Security (ongoing), Natural Language Processing (ongoing), Operating Systems, Computer Architecture, Networking Architecture, Algorithms, Data Structures, Machine Architecture, Advanced Linear Algebra, Discrete Math & Probability, Teaching CS

EXPERIENCE

Cisco Meraki / Software Engineering Intern   Summer 2018

- Added AES-256 support to the Meraki Cryptography API.
- Updated Meraki AutoVPN to have AES-256 as a negotiable encryption algorithm.
- Improved security on a service used on thousands of networks of varying sizes worldwide.

Berkeley Emergent Space Tensegrities Lab / Undergraduate Researcher   May 2017 - Present

- Research a new design of space robots based off a 6-bar tensegrity structure.
- Provide direction and lead software engineering for the whole lab.
- Redesigned an extensive software stack and communication protocol for robots.
- Created a flexible and stable API for developing and testing automatic-rolling algorithms.
- Designed user interfaces for robot testing and for demonstrations of punctuated rolling.

Pioneers in Engineering (PiE) / Advisor   August 2015 - Present

- Lead a student-run engineering outreach 501(c)(3) that develops skills through a hands-on realistic engineering experience.
- Communicate with and analyze the needs of the 20+ schools and teachers, and 300+ students.
    - Use new knowledge to iteratively reshape the focus of the events PiE hosts.
    - Revamp holistic and engaging STEM programs including the flagship Robotics Competition.
- Managed a team to design, create, and build a game and modular field for the PiE Robotics Competition hosted on UC Berkeley campus for under-served Bay Area high schools.
- Solidified PiE's Fall Competition as an annual event, and laid foundation for year-round workshops in order to increase continuous engagement with our community.
- Other/Former roles: Director of Programs, (Fall 2017-Spring 2018), Project Manager (June 2016-Present), Event Coordinator (June 2016-Present), Game Designer (August 2015-Present)

UC Berkeley Course Staff / EE 16A Lab TA   January 2018 - Present

- Teach two lab sections of 50 students each, per week.
- Created and tested course material.

SKILLS

Languages   Python, C/C++, Java   **Web**   HTML/CSS
Misc   Arduino, Git, Design and Prototyping (experience in maker spaces and machine shops)
Interests   Computer Architecture, Systems Engineering, Inclusivity and Diversity, STEM Education
Activities Cal Ultimate, Running, Mentoring for Computer Science Mentors