Jiaqi Zhu

jiaqizhu@ucsb.edu ❖ davidwuya.com ❖ (805)259-5847 ❖ Santa Barbara, CA

EDUCATION

University of California, Santa Barbara 2019 - Expected December 2022
B.S., Physics *Santa Barbara, CA*
Relevant courses: Advanced Analog and Digital Electronics, Scientific Computing and Programming, Electromagnetism, Complex Analysis, Algorithms, Quantum Mechanics, Linear Algebra, Differential Equations.

WORK & RESEARCH EXPERIENCE

UCSB Experimental Cosmology Group May 2021 – Present
Development Technician and Undergraduate Research Assistant *Santa Barbara, CA*
- Responsible for designing, implementing, assembling and verifying power, RF and embedded control systems for the Group's various projects using Altium Designer.
- Responsible for and participated in projects which received high accolades from NASA.
  o One of seven teams nationwide advancing to NASA's Watts on the Moon Challenge's Phase 2, Level 2, and receiving $200,000 in NASA funding to develop a high-power, low-loss, and long-distance power transmission and energy management system on the Moon.
  o One of fifty teams nationwide advancing to the second stage in NASA's MINDS Challenge to design a high efficiency Lunar dust mitigation system.
- One of three undergraduate students hired by the Group in Summer 2022 for their exceptional work.
- Oversaw and directed the overhauling Wafer-scale Spacecraft project and its codebase transition from C to MicroPython for lower barrier of entry.
- Assembled and troubleshooted various PCBs using reflow oven, precise electronics measurement equipment and performed fault analysis and component level repair as needed.
- Mentored new students to become productive members of the Group.
- Collaborated with the Lab Technician and other teams to ensure on-time completion of projects.

AIA Information Technologies, Co., Ltd. May 2020 – October 2020
Software Engineering Intern *Guangzhou, China*
- Led the development of an in-house optical character recognition and information extraction system based on Tesseract, SpaCy and various other frameworks, with more than 80% successful identifications, greatly reducing the need for manual review.
- Assisted in the development of SAS Viya based data visualization project for industrial clients.
- Oversaw data classification on client information for preparation of use in machine learning applications.

INVOLVEMENT

UCSB Amateur Radio Club 2021 - Present
Member and Operator *Santa Barbara, CA*
Responsible for organizing and managing the Club's various transceivers, antennas and amateur radio equipment, in addition to recruiting new members to the ARC. Also participated in Contests as operator.

SKILLS

- **Skills:** Electronics Engineering: Embedded, RF and power system design; EDA software including Altium Designer and KiCad; Rapid prototyping and proof-of-concept system design; Board-level soldering, assembly, testing and repair including failure analysis using standard bench electronics tools (e.g. scopes, multimeters); Python, C++ and Verilog Programming; Proficiency in English, Chinese Mandarin and Cantonese; Research and writing.