PHILLIP LEWIS WANG

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY **Aug 2024 - PRESENT**
- B.S. in Electrical Engineering & Computer Science (EECS) **3.83 GPA**
- *Regents' and Chancellor's Scholar*

UNIVERSITY OF CALIFORNIA, IRVINE **Sept 2022 - Jun 2024**
- B.S. in Electrical Engineering | *Specialization in Semiconductors and Optoelectronics*

Relevant Coursework: Engineering Probability, Signals and Systems, Network Analysis, Advanced C Programming, Structure and Interpretation of Computer Programs, Data Structures and Algorithms, Computer Architecture, Microfabrication Technology

PROJECT & WORK EXPERIENCE

Electrical and Computer Engineering Intern, *XCMR* **Jun 2025 - Aug 2025**
- Led hardware development for ultraviolet/VUV-based device aimed at improving pathogen detection and health security in hospitals
  - Selected components, designed schematic and developed bill of materials; validated circuits in LTspice; designed a 4-layer low-speed PCB in KiCad 9.0 integrating a power supply, ADC, photocoupler, photodiodes, and transimpedance amplifiers.
  - Strategically placed decoupling capacitors and separated analog/digital domains to minimize coupling and EMI.

Avionics Engineer, *UCI Rocket Project (Solids)* **Jul 2023 - Jun 2024**
- Developed and tested RF circuits and systems needed to launch at 10,000ft, recover rocket and record telemetry data
  - Designed PCB for a central control unit that integrated sensors (accelerometer, barometer, temperature, magnetometer), microcontroller, MOSFETs, and electric matches to deploy drogue and main parachutes.
  - Optimized signal integrity by minimizing trace intersections and reducing noise coupling

E-SONIC (Engineering Symphonic Orchestra New Instrument Competition) **Nov 2023 - Jun 2024**
- Fabricated and coded an EEG-controlled synthesizer that detects specific brainwave thresholds to evoke music chords using an OpenBCI repository. Received $2,000 funding in college-wide competition.

Chem-E Car, *Electrical Lead* **Sep 2022 - Jun 2024**
- Led electrical sub-team to fabricate and program an embedded system that connected chemical and mechanical components. Powered by a self-created lead-acid battery that detected iodine clock reaction to stop the car.
  - Utilized Light Dependent Resistors, MOSFETs, H-Bridge Integrated Circuit, Servos, Linear Actuator, Motors
- Won **1st place** in Western Regionals Competition April 2024 out of all California and Arizona colleges

LEADERSHIP

Secretary, OPS (Open Project Space) Member — *IEEE@UCI* **Apr 2023 - Jun 2024**
- *Secretary* — Facilitate weekly meetings, communicate with 100+ faculty and IEEE members, expand organization's presence
- *OPS* — Completed embedded system projects such as Weather Station, 555 Timer Piano, and "iPoduino" using integrated circuits, breadboarding, soldering, microcontrollers, C++, PCB design, and serial communication protocols (SPI, I2C, UART).

Concertmaster (Violinist) — *California All-State Honor Orchestra, UCI Symphony Orchestra* **Dec 2020 - Jun 2023**

AWARDS
- Regents' and Chancellor's Scholarship, Dean's Honor List, 1st Place Chem-E Car Western Regionals 2024, Presidential Volunteer Service Award, National School Orchestra Award

AFFILIATIONS
- Eta Kappa Nu (Mu Chapter), IEEE, AIAA, UCI Chem-E Car, UCI Rocket Project, Lee Nano-Optics Research Lab, UCB Symphony Orchestra, UCI Symphonic Orchestra (Concertmaster), UCI Club Volleyball

SKILLS & HOBBIES

Equipment Experience: Oscilloscope, Spectrum Analyzer, Signal Generator, Soldering, Power Supply, Multimeter
Programming Languages: C, C++, Java, Python, VHDL, Scheme, SQL
Simulation/Design: LTSpice, Ansys Lumerical, SOLIDWORKS, PCBA Design (KiCad, Altium), Vivado