KAUNG KHANT (KEN)

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SUMMARY

Electrical Engineering student at UC San Diego (Electronic Circuits & Systems depth) with hands-on experience in robotics, embedded systems, PCB design, and CAD. Skilled in circuit design, power systems, and system integration through projects with NASA MINDS, Caltrans, and Triton Robotics. Strong background in C++, C, and hardware prototyping, with proven ability to collaborate on complex, cross-disciplinary engineering challenges.

EDUCATION

University of California (UCSD) • Bachalor in Electrical Engineering (present)

Professional Experience

NASA MIND — 2025 - present

Innovative New Designs for Space (INDS) (NASA MINDS)

- Designed and prototyped an autonomous inspection micro-robot for space habitat maintenance, integrating embedded systems, sensors, and motor control for microgravity
- Led mechanical CAD design in SolidWorks/Onshape for chassis and component layout, optimizing size and weight distribution

Cal Tran Hovermap Bot — 2025 - present

- Led mechanical CAD and electrical systems for a Hovermap LiDAR inspection robot, optimizing chassis design, payload capacity (30+ lbs), and maneuverability in confined spaces.
- Developed embedded motor control, power distribution, and sensor fusion to meet Caltran requirement.

Triton Robotic (Robomaster competition) — 2024 - present

UC San Diego (San Diego, CA)

- Designed and implemented electronic components for competitive robots
- Designing the circuit in EASYEDA
- Collaborated with team members to troubleshoot circuitry and improve system efficiency

EnVision (Art & Engineering Maker Studio) — 2024 - 2025

UC San Diego (San Diego, CA)

- Assist student with Laser Cutting, 3D printing with purse, and surface and through hole soldering
- Supervising the maker space

Skill

Hardware & Circuit Design: PCB design (EasyEDA), Circuit analysis, Power distribution systems, Embedded motor control, Soldering (through-hole & surface mount), Continuity testing

CAD & Mechanical Design: SolidWorks, Onshape, AutoCAD, 3D printing, Laser cutting, Mechanical prototyping

Programming & Software: C++, C, MATLAB, Arduino, Git, LTspice (circuit simulation), Verilog (coursework)

Robotics & Embedded Systems: Raspberry Pi, Arduino, Sensor integration (LiDAR, IMU, camera), Servo/motor driver implementation, Firmware development

Collaboration & Leadership: Technical documentation, Cross-functional teamwork, Project supervision

Relevant Course

Digital Design (ECE 25, ECE 111), Analog Design (ECE 35), Circuits & Systems (ECE 45, 65), Programming in C/C++ (ECE 15, 17), Semi conductor (ECE 139), Signals & Systems (ECE 103, in progress)