Kaung(Ken) Kyaw Khant

San Diego, CA | (347) 571-3313 | k2012khant@gmail.com

EDUCATION

University of California San Diego (UCSD)

Bachelor of Science - Electrical Engineering (B.S.EE)

San Diego, CA

Pasadena, CA

Aug 2024 - Dec 2026

Pasadena City College

Associate in Science Degree, Electrical Engineering Emphasis (AS), Mathematic (AS-T),

Jun 2022 - Aug 2024

Physic (AS-T), Social and behaviorl Sciences (AA)

PROFESSIONAL EXPERIENCES

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.

2025 - present NASA MIND

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.

Triton Robotic (Robomaster competition)

2024 - present **UCSD**

- Designed and implemented electronic components for competitive robotics systems, ensuring reliability and performance in real-world testing.
- Created and optimized circuit schematics for power and signal management.
- Developed and fabricated custom PCB boards to integrate sensors, motor drivers, and control modules.

EnVision (Art & Engineering Maker Studio)

2024 - 2025 UCSD

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

SKILLS

Hardware & Circuit Design: PCB design, Circuit analysis, Power distribution systems, Embedded motor control,

Soldering (through-hole & surface mount), Continuity testing, Multimeter, Transistor, PID control

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

Programming & Software: C++, C, MATLAB, Arduino, Git, LTspice/Pspice (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 COURSES

Digital Design (ECE 25, ECE 111), Analog Design (ECE 35, 107), Circuits & Systems (ECE 45, 65, 100),

Programming in C/C++ (ECE 15, 17), Semi conductor (ECE 139, 103), Signals & Systems (ECE 103, 101)

SCHOLARSHIPS & AWARDS

PCC Foundation Scholarship Award Lancer For Life

Honor Scholarship Award Pasadena City College Honor Program Robert Westerbeck Scholarship Robert and Adrienne Westerbeck

Dean's List



