

Roshan Mohan

+1 (510) 993-6995 / Berkeley, CA / www.roshan-mohan.com / roshan-mohan@berkeley.edu / [LinkedIn](#)

EXPERIENCE

Lead Product Design Engineer

Nunam

A technology company backed by Audi, pioneering advancements in lithium-ion battery energy storage.

Apr 2019 - Jun 2023

Bangalore, India

- Led the end-to-end design, analysis, prototyping, and production of three battery energy storage products, working cross-functionally with Industrial Design, Thermal Design, Embedded Systems, and Reliability teams.
- Successfully deployed over 1 MWh of portable and stationary energy storage products for major clients, including Audi, across South Asia and Europe.
- Designed a structural battery pack for Audi's 3-wheeler pilot project, meeting strict safety and performance standards.
- Collaborated with vendors and manufacturing teams to streamline processes, cutting assembly time by 40% and part costs by 15%.
- Responsible for CAD, technical drawings, manufacturing processes, sourcing, assembly, and subsystem integration.
- Developed mechanical systems and components for high-volume manufacturing, including sheet metal, injection-molded, and machined parts.
- Specific experience in designing for laser welding and ultrasonic bonding.

Mechanical Design Engineer

Biodesign Innovation Labs

A med-tech startup supported by the Government of India.

Oct 2017 - Apr 2019

Bangalore, India

- Developed the mechanical design of *Respiraid*, a Class 3 critical care medical device.
- Managed design conception to production ramp-up, holding a US Patent (No 20200261672) for the electro-mechanical drive design.
- Designed a Continuous Positive Airway Pressure (CPAP) delivery kit for the treatment of children under five with pneumonia at 1/5th the cost of competitor products.
- Conducted design reviews, tolerance analysis, and file releases to ensure successful product launch.
- Collaborated with component suppliers from China and India, ensuring manufacturability while meeting cost and performance goals.

Design Engineer

Nunam

- Conducted user research in remote villages in India without access to electricity to understand the challenges faced by local communities, informing the design and features of an energy storage solution.
- Designed and prototyped a 500Wh solar-powered battery pack tailored for off-grid use, successfully preparing it for field testing.

Feb 2017 - Oct 2017

Bangalore, India

EDUCATION

University of California Berkeley, College of Engineering

Master of Design in Engineering

- Distinguished Scholar Award, 2023
- Design Engineer for UC Berkeley College of Journalism's Public News Kiosk Project
- Graduate Student Instructor for the Department of Nuclear Engineering (ENGIN 125)
- Masters Thesis: Designing Hardware for Environmental Sustainability

Berkeley, California

Expected Graduation: Dec 2024

Mahatma Gandhi University

Bachelor of Mechanical Engineering

- Outstanding Performance Award, 2016

Kerala, India

Graduation Date: May 2016

SKILLS

- **Design**- 3D modeling: Creo, NX, Fusion 360, SolidWorks; Drafting in ASME Y14.5M, Geometric Dimensioning and Tolerancing, AutoCAD.
- **Analysis**- FEA: Ansys, SolidWorks Simulation, DFM, DFMEA, SPC: Minitab, LCA.
- **Advanced Prototyping**- 3D Printing: Fusion Jet, SLM, SLA, SLS & FDM; Silicone Casting; Laser Cutting, Arduino, Raspberry Pi, Python.
- **Fabrication**- CNC Machining, Sheet-metal, Milling, Water-jet cutting, Injection Molding- Soft and Hard Tooling, Casting, Woodworking, Metalworking, Electroplating, Welding.