

## Summary

Multidisciplinary engineer with 5+ years of professional experience in aerospace, robotics, automation, and full-stack development. Proven expertise in establishing lithium battery production lines, automating manufacturing processes, and delivering product solutions from design to deployment.

## Skills

**Engineering:** Mechanical Design, Aerospace Analysis, Robotics & Automation, Thermal Battery Design, Manufacturing Setup

**Software:** Python, Perl, PHP, Go, SQL/MySQL, Django, Flask, DevOps/Server Automation

**Electronics/IoT:** ESP32, Arduino, PCB Design, IoT Firmware & Systems

**CAD:** NX, SolidWorks, Fusion 360, FreeCAD

**Analysis:** Structural (FEA), Fluid/Aero (CFD)

**Soft Skills:** Project Management, Cross-disciplinary Leadership, Quick Learner, Mentoring

Robotics Thermal Batteries Automation IoT DevOps

## Programming Languages

Python, Perl, PHP, Go, SQL/MySQL, Java (basic), JavaScript (basic), C/C++ (basic)

## Experience

### Design Manager (Mechanical Design)

2023 – Present

Renewable Energy Systems Limited

- Delivered full-scale lithium production capability
- Increased throughput with IoT-guided automation
- Improved reliability via glovebox and argon dryer designs
- Led design of thermal batteries, jigs, and glovebox systems
- Established lithium battery production line (civil, automation, gloveboxes)
- Introduced IoT & robotics for automated assembly

### Technical Chairperson

2022 – 2023

MLR CIE Incubation Center

- Mentored student startups and prototypes
- Organized workshops and demos, improving innovation culture

### Secretary

2018 – 2021

Service to Mankind (NGO)

- Improved administration and event execution
- Strengthened record management and stakeholder coordination

## Projects

**Assembly Guidance System & Robotic Arm Automation**

IoT guidance LEDs for operators, scaled to a robotic arm with AI-assisted sequencing.  
ESP32, Custom PCB, Firmware, Robotics

- Reduced training needs
- Eliminated errors
- Boosted throughput

**Lithium Plant Establishment**

End-to-end lithium line setup: gloveboxes, argon dryer towers, process automation.

- Built in-house lithium capability
- Improved safety and reliability

**Full-Stack Banking Application**

Startup project: built and maintained full banking platform with DevOps automation.

- Production-ready system
- Automated deployment
- Secure user flows

**Hydrogen Fuel Cell Prototype**

Academic project on automotive fuel cell stack design and integration.

**Achievements**

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- Established lithium battery production line from scratch
- Automated assembly with IoT & robotics
- Delivered production-ready banking application
- Contributed to Android ROMs & NGO systems

**Education**

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**Matriculation** — Genius High School  
9.3 / 10 (GPA)

**Intermediate** — Sri Chaitanya Junior College  
73% (Percentage)

**B.Tech Mechanical Engineering** — MLR Institute of Technology  
7.8 (GPA)

**M.Tech Aerospace Engineering (in-progress)** — MLR Institute of Technology  
1 year completed

**Languages**

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**Spoken:** Telugu, Hindi, English, French (basic)

**Roles of Interest**

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Mechanical Design Lead, Robotics & Automation Engineer, Aerospace Structures Engineer