Pranay Kiran
Code + Mechanical = My Engineering Advantage

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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

Experience

Design Manager (Mechanical Design)   2023 – Present
RES 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

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

Education

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

Spoken: Telugu, Hindi, English, French (basic)
Programming: Python, Perl, PHP, Go, SQL/MySQL, Java (basic), JavaScript (basic), C/C++ (basic)

Roles of Interest

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