

KISHORE S

kicha2166@gmail.com | +91 99624 45742 | Chennai, Tamil Nadu

[LinkedIn](#)

EXECUTIVE SUMMARY

Second-year Electrical and Electronics Engineering student with hands-on experience in embedded systems, sensor-based prototyping, and hardware innovation. Passionate about aerospace and avionics, with a long-term goal of contributing to launch vehicle development at organisations such as ISRO and DRDO. Seeking research and technical opportunities to build expertise in propulsion systems, avionics hardware, and aerospace electronics — areas I am actively working towards through academic projects and independent research.

TECHNICAL SKILLS

- Hardware & Embedded Systems: Arduino, ESP32, Prototype Development
- Sensors & Instrumentation: Sensor Integration, Signal Processing, Acoustic Systems
- IoT & Edge Computing: IoT Architecture, Edge Devices, Real-Time Monitoring
- Power Systems: Fundamentals of Electrical Distribution, Switchgear, Transformer Systems
- Programming: Basic C Programming
- Certifications: IoT Edge Computing and IoT Analytics – Infosys Springboard (Mar 2026)
- Programming in C – Infosys Springboard (Dec 2024)
- Programming in Java – Infosys Springboard

SOFT SKILLS

- Communication & Public Speaking (Emcee Sub-Lead, Debates, MUNs)
- Leadership & Team Collaboration (Marketing Wing Member, Cultural Events)
- Problem Solving & Research Thinking
- Mentorship & Academic Guidance (Peer-to-Peer Mentoring – 2 assigned students)
- Pitching & Presentation (Certificate in Pitching)
- Multilingual: English, Tamil

PROFESSIONAL EXPERIENCE

Industrial Trainee – NCTPS (North Chennai Thermal Power Station, Stage II)

Dec 4 – Dec 19, 2025

Role: Industrial Trainee

Responsibilities:

- Gained in-depth exposure to large-scale thermal power generation and electrical distribution infrastructure across Stage II of NCTPS.
- Studied the operational principles of switchgear systems including circuit breakers, isolators, and bus-bar arrangements in high-voltage environments.
- Observed and understood transformer maintenance procedures including oil testing, winding inspections, and cooling system checks.
- Explored switchyard operations, including substation layout, current and voltage transformers, and protection relay systems.
- Learned about control room operations, load flow management, and real-time monitoring of grid parameters.
- Studied the basics of thermal generation — boiler, turbine, and generator (BTG) cycle — and their integration into the power grid.
- Submitted a comprehensive final internship report on the last day (Dec 19, 2025) covering all technical observations.

Impact:

- Completed a 16-day structured industrial training covering the full spectrum of thermal and electrical power systems.
- Developed practical understanding of real-world power plant operations, bridging classroom theory with industry application.

PROJECTS

Distributed Acoustic Sensing (DAS) Prototype

April 2026

- Developed a prototype based on distributed acoustic sensing principles for real-time event monitoring.
- Integrated microphone array and signal processing techniques for acoustic event detection and localization.
- Explored applications relevant to structural health monitoring and security systems — areas that intersect with avionics sensor technology.
- Secured 1st Place at the Institutional Innovation Council (IIC) Research Day.

Paradox in Using Adaptive Control in Avionics

2026 – Present

- Investigating the paradox of adaptive control in avionics, where controller adaptability must improve performance while preserving predictable and certifiable behaviour.
- Studying the trade-off between real-time parameter adaptation, robustness, stability, and safety constraints in avionics control systems.
- Developing the concept through control-system analysis and simulation as an ongoing research study.

Digital Twin for Future Fault Prediction in Avionics

2026 – Present

- Developing a MATLAB-based digital twin simulation of an avionics system to model operating behaviour and identify potential future faults.
- Using simulated system states and performance trends to study early fault signatures and predict possible failures before they occur.
- Ongoing work focused on fault modelling, simulation, and predictive maintenance concepts for avionics systems.

EDUCATION

B.E. Electrical & Electronics Engineering (2nd Year, Ongoing)

Expected 2028

Sri Venkateswara College of Engineering, Chennai

CGPA: 8.29 | 4th Semester GPA: 8.48

Class XII – Vivekananda Vidhyalaya

2023

Score: 82.2%

Class X – Vivekananda Vidhyalaya

2021

Score: 84.6%

AWARDS & ACCOMPLISHMENTS

- 1st Place – IEEE Pitching Competition – Phobos Model
- 1st Place – Research Day conducted by Institutional Innovation Council (IIC), SVCE — DAS Prototype Project
- Winner – Multiple MUN (Model United Nations) events
- Winner – Inter-College Debate Competitions
- Certificate in Pitching – Recognised for entrepreneurial communication and idea presentation
- Emcee Sub-Lead – College-level cultural events team
- Member – College Marketing Wing, Cultural Outreach Team
- Peer-to-Peer Mentor – Assigned to guide 2 students academically under the college's peer mentoring programme