

VINAY KUMAR

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[LinkedIn](#) [GitHub](#) [GeeksforGeeks\(DSA\)](#) [Portfolio](#)

EDUCATION

Delhi Technological University

2024 – 2028

B.Tech in Electrical Engineering

CGPA: 9.4 (Semester 1)

- Relevant Coursework: Data Structures and Algorithms, OOPs, Circuit Theory, Digital Electronics, Signals and Systems

IIT Madras

2024 – 2028

BS in Data Science and Machine Learning

CGPA: 8.25 (Sem 1), 7.5 (Sem 2)

- Completed Foundation Level with Certification
- Core focus: Data Science, Machine Learning, Python, Statistics, DBMS

EXPERIENCE

Locomotive Engineering Intern – Indian Railways

Jun 2025 – Jul 2025

TKD Electric Loco Shed, New Delhi

- Worked in Electrical division, focusing on traction motors and braking systems
- Assisted in TCAS testing as part of KAVACH anti-collision system deployment
- Studied relay logic, contractor systems, and power converters in real-world setup
- Collaborated with engineers on preventive maintenance of electronic subsystems

PROJECTS

Jadu AI

GitHub: [JADU-AI](#)

AI Chat Assistant – Full-stack

Next.js, Node.js, APIs

- Developed a real-time, full-stack AI assistant using Next.js and LLM-based APIs
- Engineered secure prompt-response logic with scalable backend and clean UI

MoodTunes

GitHub: [Mood-Tunes](#)

Mood-based AI Music Recommender

Gemini API, YouTube API

- Built an emotion-based music recommender using Gemini + YouTube API integrations
- Designed responsive UI with auto playlist curation based on user input

Vyom – ISRO Bot

GitHub: [Vyom-ISRO-Bot](#)

ISRO-focused AI Knowledge Assistant

LLM, Graphs

- Created an AI chatbot to answer ISRO-specific queries using a domain knowledge graph
- Visualized space mission data and filtered responses for domain relevance

SpeedoDrive – Car Rental Platform

GitHub: [SpeedoDrive](#)

Full-stack Web Application

HTML, CSS, JS, Node.js

- Developed complete rental platform with user auth, booking engine, and admin panel
- Used Node.js backend with vanilla JS frontend and modular design structure

EcoSentinel – Wildlife NGO Website

GitHub: [EcoSentinel](#)

Public NGO Platform

HTML, CSS, JavaScript

- Built awareness-driven website for wildlife NGO with interactive UI components
- Optimized for responsiveness and accessibility using JS and semantic design

TECHNOLOGIES & SKILLS

- **Languages:** C, C++, Python, JavaScript, HTML, CSS, JAVA
- **Web Dev:** Node.js, Express.js, Flask, Next.js, React (Basic)
- **Databases/APIs:** MongoDB, SQL, Firebase, Gemini API, OpenAI API, REST APIs
- **AI/ML (Learning):** NumPy, Pandas, Matplotlib, Scikit-learn; familiar with model training, data preprocessing, and visualization
- **Tools:** Git, GitHub, VS Code, Linux
- **Soft Skills:** Leadership, Discipline, Teamwork, Problem Solving

ACHIEVEMENTS & CERTIFICATIONS

- Winner – Research Forge Hackathon, DTU (2024)
- Winner – Physics Hackathon (PhysIQ) 2024
- Runner-up – BAH 2025 Hackathon (ISRO theme), multiple inter-college events Tech Events
- Certificate of Completion – Foundation Level, IIT Madras
- Active Member – IEEE Society and Neural AI Tech Team (DTU)
- Gold (U17) and Silver (U19) – State-level Athletics