Sarthak Garg

Location: Karnal, Haryana, India | Phone: +91 90342 20003 | Email: sarthakgarg7124@gmail.com linkedin.com/in/sarthakgarg1204 | github.com/sarthakgarg1204 | Portfolio: sarthakgarg1204.github.io Full-Stack Developer & AI/ML Enthusiast | MERN Stack | SIH 2024 Winner

# Summary

Full Stack Developer and AI/ML Enthusiast with hands-on experience in building scalable web applications using the MERN stack and developing AI-based backend systems using Python and machine learning libraries. National winner of Smart India Hackathon 2024. Proficient in RESTful APIs, backend optimization, responsive UI design, and data-driven dashboards. Familiar with TensorFlow, Scikit-learn, Pandas, and Flask for AI/ML model integration and deployment. Strong communicator and problem-solver with experience in Agile methodology and cross-functional collaboration.

# **Technical Skills**

- Languages: JavaScript (ES6), Python
- Frontend: React.js, Tailwind CSS, Responsive Design
- Backend: Node.js, Express.js, REST APIs
- Database: MongoDB, PostgreSQL

• ML Tools: Scikit-learn, Pandas, NumPy, matplotlib

• Analytical Thinking

- Tools: Git, GitHub, Postman, AWS (Beginner)
- Platforms: Windows, Ubuntu
- Concepts: Agile, Scrum

#### Soft Skills

- Team Collaboration
- Problem-Solving
- Effective Communication
- Adaptability
- Leadership
- Time Management

# **Projects**

# AI-Powered Postal Delivery System (Capstone)

Frontend & ML Lead and Backend Assist

Mar 2024 – Present

- Designed AI-based route optimization algorithms, improving postal delivery efficiency by 18%.
- Built scalable backend APIs managing 5000+ records; ensured secure, efficient data flow.
- Led analytics feature delivery and cross-team communication for actionable insights.

# Carbon Nigrani – SIH 2024 Winner

Full-Stack Developer

Nov 2023 – May 2024 GitHub

- Developed a carbon emission monitoring platform for Indian coal mines; won Smart India Hackathon 2024.
- Built real-time dashboards, carbon sink estimation modules, and intuitive user workflows.
- Practiced Agile methodology and contributed to team leadership; reduced manual data entry by 30%.

#### MERN Chat App with Google Gemini API

Full-Stack Developer

Sep 2023 – Jan 2024

 $\operatorname{GitHub}$ 

- Created a real-time chat app using MERN stack, Socket.io, and Gemini API.
- $\bullet$  Improved user engagement by 25% via responsive UI, secure authentication, and smooth communication.
- Collaborated in Agile sprints, consistently meeting deadlines.

#### Experience

AI and Green Skills Internship — Edunet Foundation (AICTE and Shell)

Remote | Apr 2025 - May 2025

- Built and deployed an ML-powered Crop and Fertilizer Recommendation System (kropgenie.streamlit.app) using Decision Trees and Scikit-learn.
- Suggested optimal crops and fertilizers based on soil and environmental conditions
- Gained hands-on experience in Python, Seaborn, Matplotlib, and machine learning pipelines.
- Selected among top 1% nationwide for demonstrating AI-based sustainable agriculture innovations.

#### Education

#### B.Tech in Computer Science and Engineering

Seth Jai Parkash Mukand Lal Institute of Engineering and Technology, Radaur, Haryana

Expected Graduation: 2026 CGPA: 7.494 (Till 5th Semester)

#### Certifications

- Career Essentials in Generative AI Microsoft/LinkedIn: Generative AI, Prompt Engineering
- Virtual Internships Goldman Sachs, Walmart, AWS: Software Engineering, Cloud Services

#### Achievements

• Winner, Smart India Hackathon 2024 – Led a national-winning team among 1500+ teams.