

Simran Singh

simmran345@gmail.com | +91 8250041393 | Noida, India
github.com/simmrannn

Professional Summary

B.Tech student with hands-on experience in backend development, RESTful API development, and AI/ML projects. Skilled in Python, JavaScript, Node.js, Express.js, MongoDB, and AWS. Developed 20+ RESTful APIs during Smart India Hackathon and worked on AI-powered and computer vision projects. Seeking software development opportunities to apply technical and problem-solving skills.

Technical Skills

Languages: Python, JavaScript

Backend: Node.js, Express.js, REST APIs, Flask, FastAPI

Databases: MySQL, MongoDB

AI/ML: TensorFlow, Scikit-learn, OpenCV

Generative AI: LLMs, Prompt Engineering, RAG

Cloud: AWS (S3, EC2, IAM, SNS, CloudWatch)

DevOps & Tools: Linux, Git, Docker, Kubernetes, GitHub Actions

Projects

NeuroSense – AI-Powered Cognitive Risk Screening and Monitoring

Final Year Project

- Developing an AI-assisted screening platform that combines brain MRI analysis with memory and attention assessment results to support early cognitive risk screening.
- Exploring CNN-based deep learning architectures, including ResNet-50 and VGG-16/19, for MRI image classification.
- Working on MRI preprocessing and model integration using Python, TensorFlow/Keras, OpenCV, and relevant neuroimaging tools.
- Planning Grad-CAM-based visual explanations, Low/Moderate/High risk categorization, and historical assessment monitoring through a Flask-based application.

Hand Gesture Controller

Python, OpenCV

- Developed a system to control computer functions and applications using real-time hand gestures captured through a webcam.
- Implemented real-time hand tracking and gesture recognition for mouse movement, clicking, and volume control.

Waste Segregation Monitoring System for Urban Local Bodies

Smart India Hackathon

- Worked as Backend Developer on the core system architecture for Urban Local Bodies (ULBs) in Punjab.
- Developed 20+ RESTful APIs using Node.js and Express.js for real-time data ingestion and status updates.
- Used AWS EC2 and S3 for application hosting and file storage, and designed MongoDB schemas for data storage.
- Delivered a functional prototype during a 36-hour hackathon sprint focused on civic waste management.

Certifications & Virtual Job Simulations

Deloitte – Technology Job Simulation (Forage)

October 2026

- Completed practical tasks in Coding and Development.

Achievements

- Smart India Hackathon (SIH) 2025 Finalist** – Backend Developer for a waste segregation monitoring system.
- Team Lead – Galgotias International Hackathon:** Led team coordination, solution development, and project presentation.

Education

Galgotias College of Engineering and Technology

B.Tech in Electronics and Communication Engineering

2023 – 2027

Noida, India