

# Mansi gupta

Computer Science Undergraduate | AI & ML Enthusiast | Building Multi-Agent Systems

- https://mansi-gupta2006.github.io/Portfolio/
- https://github.com/Mansi-Gupta2006
- in linkedin.com/in/mansi-gupta-831300294

### PROFILE

### Computer Science Undergraduate | AI Research & Development Enthusiast | Hackathon Finalist

Passionate about Artificial Intelligence and emerging technologies, with hands-on experience in building advanced Multi-Agent Systems using LLMs (RAG, Gemini, AutoGen, CrewAI). Contributed to research-driven projects.

### PROFESSIONAL EXPERIENCE

06/2025 - 08/2025 France

## Under Prof. Jean-Baptiste Rouquier, (France)

AI Research Intern

- Conducted research on multi-agent systems and human-in-the-loop learning models using large language models and retrieval-augmented generation (RAG).
- Explored the design of **interactive AI agents** for educational use cases, focusing on real-time response evaluation and agent memory.

04/2024 – 01/2025 Delhi, India

#### **SmartEdge**

Intern

- Contributed to the development of **AI-driven web platforms** focused on PropTech and sustainability (Tonomous Project).
- Participated in the Google GenAI Hackathon, developing a multi-agent learning assistant (Gadfly) using RAG, Gemini, and AutoGen.

07/2024 – 08/2024 Lucknow, India

### Soft Pro India

Inter

- Developed backend services using Java with Spring Framework for an online portal.
- Collaborated with a cross-functional team and implemented RESTful APIs for seamless integration

### PROJECTS

### Gadfly

A Socratic Multi-Agent AI Learning Assistant

Developed  $Gadfl\gamma$ , a Socratic AI learning assistant using multi-agent architecture with RAG, Gemini, AutoGen, and CrewAI. Focused on enhancing student engagement through intelligent dialogue and real-time context management. Presented at the **Google GenAI Hackathon** under SmartEdge.

#### **Parth**

A Multi-Agent Socratic Framework for Personalized Learning

Parth is a research-driven AI project developed under **Prof. Jean-Baptiste Rouquier**. It explores multi-agent systems using LLMs (RAG, Gemini, AutoGen) to deliver personalized, Socratic-style learning experiences. The project focuses on intelligent dialogue flow, agent coordination, and adaptive educational support.

#### **EcoZero**

Emission Analysis and Sustainability Reporting Platform

Developed *EcoZero in contribution*, a government-aligned web platform for carbon emission calculation, analysis, and reporting. Worked on full-stack development, interactive UI/UX, and real-time data visualization to support sustainable practices.

#### Sanketa: Gesture Control

Hand Gesture Recognition System for Human-Computer Interaction

Sanketa is a computer vision-based project that enables gesture-controlled interaction using a webcam. Utilized **MediaPipe** and **OpenCV** to detect and interpret hand gestures for controlling system functions, aiming to enhance accessibility and human-computer interaction.

### Live Face Detection Model

Real-Time Face Detection Using Computer Vision

Developed a real-time face detection system using **OpenCV** and **Haar Cascade Classifiers**. The model captures live video feed via webcam, detects faces instantly, and highlights them with bounding boxes, demonstrating the fundamentals of object detection in computer vision.

### Nalanda Open University E-gyan

Web-Based E-Learning Portal for Nalanda Open University

Contributed to the development of **E-Gyan**, an e-learning platform for Nalanda Open University during a live internship project. Worked on **Java with Spring Framework** to build and deploy modules for course access, student management, and admin functionalities, supporting remote education delivery.

### Other Projects access GitHub

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2023 – 2026 Bachelors of Computer Application

Lucknow, India Modern Girl's College affiliated to University of Lucknow

3 Years Course

2021 – 2023 **10+2 High School & Intermediate** 

Lucknow, India Rani Laxmi Bai School

Commerce+ Information Practices

# SKILLS

AI/ ML • • • • • Large Language Models (LLMs), RAG, Gemini,

Large Language Models (LLMs), RAG, Gemini, AutoGen, CrewAI, NLP

Web Development 
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Spring Framework, Flask, Bootstrap, Responsive

UI/UX Design

Data Handling

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JSON, APIs, Real-time Data Processing

Database
MySQL

### **Programming Languages**

Python, Java, JavaScript, HTML, CSS

Multi-Agent Systems

Context Managers, Socratic Agents, Agent Coordination

Computer Vision

OpenCV, MediaPipe, Haar Cascade

Team Collaboration

### **Cognitive Flexibility**

# **CERTIFICATES**

- Top 5 Finalist Google GenAI Hackathon 2025
- Java with Spring Framework Internship Certificate
- Azure AI Fundamentals