KARRTIK GUPTA

karrtikgupta9@gmail.com | +91-9821726242 | Portfolio Website | LinkedIn | GitHub

Education

Punjab Engineering College (Deemed University)   Chandigarh, India
B.Tech, Electronics & Communication Engineering (CGPA: 9.14/10) 2023 – 2027 *Minor Specialization in Artificial Intelligence (GPA: 10.0/10)*

Technical Skills

AI/ML: LLMs (Gemini API, LangChain), Agentic AI Workflows, Scikit-learn, Pandas, NumPy, YOLOv8, ByteTrack, Streamlit, Prompt Engineering
Languages: Python, C++, JavaScript
Backend: Node.js, Express.js, RESTful APIs, FLASK
Databases: PostgreSQL, MySQL, Firebase (NoSQL)
Developer Tools Cloud: Git, GitHub, Microsoft Azure
Core Concepts: Data Structures Algorithms, Object-Oriented Programming (OOP)

Professional Experience

Edunet Foundation (Microsoft-AICTE Initiative)   Remote
AI Intern   May 2025 – June 2025

- Designed and executed end-to-end AI workflows on Microsoft Azure, from data ingestion and preprocessing to model training, validation, and performance analysis.
- Gained hands-on experience in deploying production-oriented AI systems, focusing on creating scalable and well-documented classification and regression models for enterprise use cases.

Projects

AI Summary Pro – GenAI Problem Solver   *Python, Gemini API, Prompt Engineering*
Link

- Developed an AI agent using the Gemini LLM to implement AI-driven automation, transforming unstructured user problems into structured, actionable technical summaries.
- Engineered advanced prompt strategies to create a robust agentic workflow, enabling the system to handle ambiguous inputs and deliver consistently high-quality outputs for documentation and problem-solving.

VoiceCart — Voice-First E-commerce Platform   *React, Node.js, Express.js, LLM*
Link

- Architected an AI-first system that allows users to manage their shopping cart using natural language, creating a seamless, voice-driven e-commerce experience.
- Built an intelligent backend agent with Express.js and the Gemini LLM to interpret conversational commands, demonstrating a practical application of agentic AI in a real-world workflow.

End-to-End Vehicle Pedestrian Tracking System   *YOLOv8, ByteTrack, Streamlit, Python*
Link

- Managed the full AI project lifecycle from research to prototyping by fine-tuning a custom YOLOv8 model on over 10,000 images to achieve 92% mAP for real-time object detection.
- Deployed the system as an interactive prototype using Streamlit, showcasing the ability to translate complex computer vision research into a functional, user-facing application.

Leadership Experience

Entrepreneurship and Incubation Cell, PEC   Chandigarh, India
Joint Head, E-Summit '25   2025

- Directed the end-to-end system building and operational execution for a summit serving 2,000+ participants in a fast-paced, startup-style student organization.

PEC Chandigarh   Chandigarh, India
Sub Head, Startup Fair '24   2024

- Demonstrated strong problem-solving skills by optimizing event logistics and company onboarding workflows, boosting pre-event coordination efficiency by 30%.