

SIMRAN SONANIYA

AI/ML Engineer | Computer Vision | Generative AI

Indore, India • +91-9575261938 • simransonaniya77@gmail.com • github.com/Simransonaniya • linkedin.com/in/simransonaniya

PROFESSIONAL SUMMARY

Results-driven CSE student specializing in AI/ML with hands-on experience building end-to-end intelligent systems. Proficient in YOLOv8 computer vision, deep learning with TensorFlow/Keras, and Generative AI with LLMs and RAG pipelines. Experienced deploying production-grade applications on Streamlit, Render, and AWS S3.

TECHNICAL SKILLS

Languages	Python, SQL, Java, C
AI / ML	YOLOv8, SORT Tracking, Kalman Filter, Classification, Regression, Collaborative Filtering
Deep Learning	CNN, Neural Networks, TensorFlow, Keras
Generative AI	LLMs, RAG, Prompt Engineering, OpenAI API, Groq API, LangChain, Agentic AI
CV & Vision	OpenCV, Image Processing, Object Detection, Multi-Object Tracking
Tools & Cloud	Streamlit, Render, AWS S3, Git, GitHub, VS Code, Power BI, Tableau

PROJECTS

TrackVision AI — Sports Multi-Object Detection & Tracking | [GitHub](#) | 2026

Python | YOLOv8 | SORT | Kalman Filter | OpenCV | Streamlit | Render

- Built end-to-end CV pipeline detecting and tracking multiple players in sports videos using YOLOv8 + SORT, achieving 90%+ detection confidence at 30+ FPS.
- Implemented persistent unique ID assignment handling occlusion, motion blur, and scale variation with Kalman Filter-based motion prediction.
- Deployed modular Streamlit app on Render with real-time metrics, configurable parameters, and video download functionality.

Olympic Analysis Web App | [GitHub](#) | 2025

Python | Pandas | Streamlit | Plotly | AWS S3

- Built interactive Streamlit app analyzing 120+ years of Olympic data across 200+ nations with dynamic filtering by year, country, and sport.
- Performed EDA with Pandas; integrated AWS S3 for scalable cloud data storage and created interactive Plotly dashboards for medal and participation trends.

Agentic AI Chatbot | [GitHub](#) | 2026

Python | Groq API (LLaMA3) | LLMs | RAG | LangChain | Streamlit | Render

- Developed intelligent agentic AI chatbot with autonomous multi-step reasoning and dynamic decision-making using LLMs and RAG architecture, reducing hallucinations by 40%.
- Integrated Groq API with LLaMA3 for blazing-fast inference; designed agent workflows with persistent memory and prompt engineering for multi-turn conversations.
- Deployed interactive chat interface on Render with real-time streaming responses and configurable model/system prompt controls.

EDUCATION

B.Tech in Computer Science Engineering | Oriental Institute of Science and Technology, Bhopal | 2022 – 2026

CGPA: 7.74 • Class XII: 81.8% • Class X: 84.3%

ADDITIONAL INFORMATION

- Actively seeking AI/ML Engineer roles and internship opportunities in Computer Vision, Generative AI, and Deep Learning.
- Passionate about building production-ready AI systems with clean, modular, and well-documented code.