

Mitul Jain

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Pune, Maharashtra, India

SUMMARY

AI & Data Science undergraduate at MIT World Peace University with a **CGPA of 9.11/10**, specializing in **Agentic AI, Generative AI**, Computer Vision, and RAG systems. Developed an industrial visual inspection agent at **Tata Technologies** achieving **97.76% inspection accuracy**, a secure multi-agent enterprise platform with **91% retrieval accuracy across 700K+ vectors**, and an offline RAG tutoring system with approximately **1.3s latency**. Published research in the **International Journal of Computing and Digital Systems (IJCDs)**, with experience in LLM orchestration, semantic retrieval, and end-to-end AI application development.

EDUCATION

MIT World Peace University, Pune, India - B.Tech in CSE (AI & Data Science), CGPA: **9.11/10** Expected 2028
Ascent International Sr. Sec. School, Udaipur, India - Class XII (CBSE), 81% 2023
Rajasthan Board, Udaipur, India - Class X, 98% 2021

WORK EXPERIENCE

AI Intern, WeIntern Pvt. Ltd. September 2026 - Present

- Contribute to **AI/ML development**, researching algorithms and implementing practical AI-driven solutions.
- Apply **Python, analytical problem-solving, and AI frameworks** to technical tasks while collaborating with team members to deliver project milestones.

Agentic AI Intern, Tata Technologies January 2026 - April 2026

- Developed an on-premise **YOLOv8 Visual Inspection Agent** using **Python and OpenCV** to detect and classify industrial defects and automate inspection, re-inspection, and escalation decisions.
- Achieved **97.76% inspection accuracy** under variable lighting, sensor noise, and class imbalance, connecting visual detection with structured inspection decisions.

PUBLICATIONS

Real-Time Sign Language Recognition Using CNN and MediaPipe with Enhanced Background Adaptation and Contextual Translation August 2026
International Journal of Computing and Digital Systems (IJCDs) - [IJCDs Publication](#) | [ResearchGate](#)

- Achieved **97-99% accuracy** with sub-100 ms inference latency; developed **background adaptation** for robust recognition under changing lighting and cluttered backgrounds.

PROJECTS

SecureGPT - Secure Multi-Agent Enterprise AI ([GitHub](#)) 2026

- Architected a fully on-premise, **zero-data-egress** platform using **LangGraph, Qdrant, FastAPI, and Docker**, coordinating four specialist agents for document analysis, code execution, vision, and meeting intelligence.
- Achieved **91% retrieval accuracy** using **hybrid dense retrieval and BM25** across a **700K+ vector store** containing 7,000+ docs.
- Integrated **sandboxed code execution**, department-level access controls, and secure grounded Q&A.
- Designed a **model-agnostic architecture** supporting interchangeable open-weight LLMs through Ollama for local inference without cloud-based data processing.

XplainAI - Explainable Multi-Agent Decision System ([GitHub](#)) 2026

- Developed an **11-stage agent graph** for the IIIT Pune Hackathon (PS01), coordinating **intent detection, task planning, and live-data integration**.
- Built an interactive **reasoning tree** using **React and Python** to visualize decision paths and explain why candidate answers were accepted or rejected.
- Implemented **structured agent communication** and **intermediate-result tracking** to improve workflow traceability, debugging, and transparency across multi-step AI decision-making processes.

PyMentor - RAG-Based Intelligent Tutoring System ([GitHub](#)) 2025

- Developed an **offline RAG pipeline** using **FFmpeg, Whisper, BGE-M3 embeddings, and Llama 3.2** to transform lecture videos into a context-grounded Q&A tutor.
- Implemented a custom **NumPy/Joblib vector index** for semantic retrieval and private on-device inference, achieving approximately **1.3s response latency** without cloud dependency.

SKILLS

Programming	Python, C++, SQL, JavaScript
Machine Learning	Scikit-learn, Regression, Classification, Clustering, Feature Engineering, Model Optimization
Deep Learning & CV	TensorFlow, Keras, CNNs, YOLOv8, OpenCV, MediaPipe, Object Detection, Image Processing
Generative AI	LLMs, RAG, Prompt Engineering, BGE-M3, Vector Search, Qdrant, Whisper, Ollama
Agentic AI	LangGraph, Multi-Agent Systems, Agent Orchestration, Tool Calling, Query Routing
Tools & Frameworks	FastAPI, Flask, MongoDB, Express, React, Node.js, Docker, Git, REST APIs

CERTIFICATIONS & ACHIEVEMENTS

- Smart India Hackathon (Internal Round, MIT-WPU)**: Placed among the **Top 100 teams** university-wide.
- Data Science, ML, Deep Learning & NLP Bootcamp**, Krish Naik (Udemy), 99 hours, June 2026.
- Data Analytics Job Simulation**, Deloitte Australia (Forage) | **AI Professional Certificate**, Unified Mentor.
- McKinsey.org Forward Program** | **GitHub Fundamentals**, Microsoft.