

SIDDHANT PATIL

+91 8767594017 | siddhantpatil1543@gmail.com | LinkedIn | GitHub | Portfolio | LeetCode

EDUCATION

Savitribai Phule Pune University

B.E. in Artificial Intelligence & Data Science | GPA: 8.5/10

Pune, India

2022 – 2026

PES Modern English Medium School | Ashok Vidyalaya Jr. College

10th: 96.20%, 12th: 78.83%

Pune, India

2008 – 2022

EXPERIENCE

IndoAI Technologies Private Limited

Machine Learning & AI Intern (Onsite)

Pune, India

Jun 2024 – Mar 2025

- Designed autonomous ML systems to automate predictive models with Power BI dashboards for actionable insights.
- Built a YOLOv8 fire & smoke detector (92.6% mAP) on 6,391 images over 200 epochs for real-time hazard monitoring.
- Leveraged DeepStack for custom vehicle & person detection (98% accuracy) on 10,000+ images; deployed to Raspberry Pi & Jetson Nano via ARM64, OpenCV, TensorFlow Lite.
- Worked on projects including Facial Recognition (OpenCV), Crowd Analysis, Road Safety Systems, Violence Detection (YOLO + Pose Estimation), and Automatic Number Plate Recognition, achieving 90%+ accuracy across all applications.

CoDE Club PESMcoe – Club of Data Engineers

Co-Technical Head (Full-Time)

Pune, India

Oct 2023 – Oct 2024

- Utilized popular Python libraries such as NumPy, Pandas, OpenCV, TensorFlow, and Scikit-learn to drive hands-on sessions, motivating 60+ students to explore AI, ML, and data science.
- Overseeing and managing club activities related to technology and development, leading to a 120% growth in technical support engagement during my tenure.

PROJECTS

Care Vault: Women & Child Safety AI (1st Place, Magnitude1.0 National Hackathon) [Demo](#) | [GitHub](#) 2024

- Hand gesture emergency alert system using OpenCV achieves 93% accuracy on a 5-class, 1440-sample dataset (precision: 83–100%, recall: 86–98%, F1-score: 90–97%) for accessible digital interface control.
- Missing person identification with real-time facial recognition system using Python, OpenCV, and face_recognition, processes every 2nd frame, applies 0.6 threshold, draws boxes, encodes to JPEG, sends multi-threaded email alerts.
- Violence detection using real-time YOLO-pose estimation and XGBoost, processing every 3rd frame with 0.55 confidence to trigger instant emergency alerts for high-risk incidents.

DocuMentor AI: AI-driven intelligent document analysis and conversational platform [Demo](#) | [GitHub](#) 2025

- Developed DocuMentor AI a multimodal system to ingest and summarize documents, processing 10+ file types (PDF, DOCX, images), improving query accuracy by 35% with Retrieval-Augmented Generation (RAG-based) memory and vector search (ChromaDB).
- Implemented multimodal Data ingestion (PyMuPDF, pytesseract OCR, SentenceTransformers), speeding up document retrieval by 80%.
- Built an agentic planner for complex query decomposition, cutting response time by 40%, integrated Gemini for context-aware LLM responses.
- Utilized Python, LangChain, Flask and ChromaDB, creating a scalable chatbot handling 200+ documents with 90% accuracy.

TECHNICAL SKILLS

- **Languages:** Python, Azure ML, C/C++, SQL, HTML, CSS, JS
- **Machine Learning:** Pandas, NumPy, Scikit-learn, Matplotlib
- **Deep Learning & Computer Vision:** YOLOv8, OpenCV, TensorFlow, PyTorch, Agentic AI (LangChain, Pinecone)
- **Tools:** Docker, GenAI, VS Code, PyCharm, Power BI, Excel, Roboflow, LLaMA, Tableau, CI/CD for ML, Git / GitHub, Flask

ACHIEVEMENTS

- Magnitude1.0 National Hackathon Winner (Team Leader)
- Smart India Hackathon National Level Finalist – Top 6 of 500+ teams
- BOROSA – BOSCH Road Safety Hackathon 2025 Finalist – Top 18 of 320+ teams
- Judge & Core Organizer, IndoVate Sprint 2025 Hackathon at MKSSS Cummins College of Engineering for Women
- 2× ProStart PreSIH Winner (Software) & 7× Hackathon Finalist