

Siddharth Paliwal

+91 7014206483 | paliwalsiddharth4@gmail.com | LinkedIn - [SiddharthPaliwal01](#) | Github - [SiddharthPaliwal01](#)

EDUCATION

Vellore Institute of Technology

Integrated M.Tech in Artificial Intelligence

CGPA: 7.66/10

Coursework: Data Analysis, SW Engineering, OS, Data Structures, Algorithms, AI

St. Anne's Senior Secondary School (CBSE)

Intermediate (Class XII)

Matriculation (Class X)

Bhopal, MP

Aug 2021 - Aug 2026

Jodhpur

July 2020 - May 2021

April 2018 - May 2019

WORK EXPERIENCE

Artificial Intelligence Research Intern

October 2024 – December 2024

Defence Research and Development Organisation (DRDO)

DLJ, Jodhpur

- Tasked with generating realistic Indian facial images using GANs, leveraging deep learning frameworks like PyTorch and TensorFlow, to augment sensitive datasets for defence applications in synthetic imagery, enhancing computer vision capabilities.
- Delivered high-quality synthetic facial images for surveillance enhancement and simulation training applications.

PROJECTS

ChatBook | LLM Powered Assistant

February 2025

Skills: Python, LLM, ChromaDB, LangChain, RAG, Streamlit

- Built a real-time chat assistant that processes any uploaded book or document using Gemini 2.0 Flash LLM achieving 78% faster response times than GPT-4o with high accuracy.
- It also uses ChromaDB as it is faster compared to conventional databases for the vector search task, and is also used for efficient storage and retrieval of book content.
- Integrated LangChain with RAG to manage multi-turn conversations and complex question flows.

MediLink | Doctor-Patient Connection Platform

May 2024

Skills: HTML, CSS, JavaScript, LangChain, LLM, Pinecone

- Co-built a web platform (with two teammates) that enables rural patients to schedule appointments and consult doctors via secure audio/video calls.
- Implemented responsive web interface with real-time audio/video calling capabilities, reducing appointment scheduling time by 25%.
- Integrated AI-powered symptom assessment tool using LangChain and medical knowledge base, improving initial patient screening accuracy.

AttendEase | AI Facial Recognition System

March 2023

Skills: Python, OpenCV, Local Binary Patterns Histograms, Tkinter, Pillow Library

- Developed an AI-driven attendance system using Local Binary Patterns Histograms for facial recognition, cutting manual marking time by 30% and offering a scalable solution for any institution.
- Created an OpenCV-powered interface for real-time video processing with 90% accuracy.

TECHNICAL SKILLS

Programming Languages: Java, Python, R, SQL, HTML, CSS

Frameworks & Libraries: Flask, Matlab, TensorFlow, PyTorch, FastAPI, OpenCV, Transformer, GANs, LangChain

Databases: MySQL, MongoDB, ChromaDB, Pinecone

Tools: Git, GitHub, Docker, Figma, Linux

ADDITIONAL

Certifications: Generative AI with LLMs (Coursera); Applied Machine Learning in Python (University of Michigan); Public Speaking Professional Certificate (Toastmasters); Docker Foundations Professional Certificate (Docker);

Languages: English (Fluent); Hindi (Native)

Hobbies & Interests: Graphic Designing(Blender, Adobe Creative Suite, Canva), Chess, Volleyball, Reading