

SIDHESHWAR SHARMA

AI/ML ENGINEER

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[LinkedIn](#) • [GitHub](#) • [LeetCode](#) • [GeeksforGeeks](#)

PROFESSIONAL SUMMARY

AI/ML Engineer with hands-on experience in **Large Language Models (LLMs)**, **Retrieval-Augmented Generation (RAG)**, and multimodal AI systems. Skilled in building end-to-end ML pipelines, from data cleaning to deployment. Experienced in applying Generative AI for practical applications like document Q&A, speech-to-text grammar evaluation, and gesture recognition. Passionate about solving challenges in multilingual NLP and scalable AI workflows.

WORK EXPERIENCE

Machine Learning Intern

Defence Research and Development Organisation (DRDO) - ACEM, Nashik

June 2025 - Present

- Designed ML pipelines to predict material properties from experimental data.
- Applied feature engineering using physical equations and statistical methods.
- Achieved strong accuracy ($R^2 = 0.98$ standard, 0.99 with Repeated K-Fold Cross Validation).
- Contributed to an upcoming research paper with DRDO scientists.

TECHNICAL SKILLS

Languages:	Python, C++
ML/DL:	TensorFlow, Scikit-learn
Generative AI:	Hugging Face Transformers, LangChain, LlamaIndex, OpenAI API, Prompt Engineering
Vector Databases:	FAISS, Chroma
Multimodal AI:	Whisper, OpenCV, MediaPipe
Deployment:	Streamlit, Git, Docker

PROJECTS

PDF Question Answering using RAG

[GitHub](#)

Python, LangChain, LlamaIndex, OpenAI GPT-3.5, Streamlit

- Built a RAG system that answers queries based on uploaded PDF documents.
- Implemented embeddings, semantic search, and chunk-based parsing for retrieval.
- Designed a responsive Streamlit UI for smooth user interaction.

Automated Grammar Scoring Engine

[GitHub](#)

Python, Whisper, Librosa, spaCy, DistilBERT, Random Forest

- Developed an audio-based grammar scoring pipeline (speech-to-text + grammar analysis).
- Used Whisper for transcription, spaCy + LanguageTool for syntax checks, and DistilBERT embeddings.
- Rated grammar fluency and correctness on a scale of 0 to 5.
- Achieved $R^2 = 0.94$ and Pearson correlation = 0.44 with expert scores.

Sign Language Recognition System

[GitHub](#)

Python, OpenCV, MediaPipe, Scikit-learn

- Created a real-time gesture-to-text translator using computer vision.
- Achieved 90%+ accuracy across 20+ custom gestures.
- Implemented live feedback loop for smooth user interaction.

EDUCATION

Bachelor of Technology (B.Tech) in Computer Science

Sep 2022 - Oct 2026

DY Patil International University, Pune

CGPA: 7.5

Senior Secondary (Class 12 - CBSE)

May 2022

Kendriya Vidyalaya, Nashik

Percentage: 81%

ADDITIONAL INFORMATION

Languages:	English, Hindi, Marathi
Soft Skills:	Communication, Problem-Solving, Adaptability, Team Collaboration
Problem Solving:	Competitive Coding, DSA, Time & Space Optimization
Certifications:	Full Stack Web Development (100xDevs by Harkirat Singh)