

Deo Sagar Kumar

Email: deosagar150@gmail.com | Phone: +91 8789425130 | [LinkedIn](#) | [GitHub](#)

EDUCATION

Bachelor of Technology in Computer Science Engineering

2022 – 2026

Vellore Institute of Technology

CGPA: 8.95/10.0

Higher Secondary Certificate (Class 12)

2021

DAV Public School Hazaribag, Jharkhand

Percentage: 91%

Secondary School Certificate (Class 10)

2019

DAV Public School Tapin North, Ramgarh, Jharkhand

Percentage: 92.8%

TECHNICAL SKILLS

Programming Languages: Python (Expert), SQL, JavaScript, TypeScript, C++, C, HTML, CSS

LLM & Generative AI: Hugging Face Transformers, Groq API, LangChain, LangGraph

RAG & AI Agents: Retrieval-Augmented Generation (RAG), Vector Databases (FAISS, Chroma), Sentence Transformers, Multi-Agent Workflows, Autonomous AI Agents

Databases: SQL, NoSQL (MongoDB, Document Stores), Vector Databases

Machine Learning & AI: TensorFlow, PyTorch, Scikit-learn, Computer Vision (OpenCV, MediaPipe)

Web Frameworks & APIs: Streamlit, Gradio, FastAPI, Flask, RESTful APIs, Node.js, Express.js

Frontend Technologies: React.js, Next.js, Angular.js, Tailwind CSS, Bootstrap

Developer Tools & Cloud: Git/GitHub, Docker, Postman, Azure (Exposure), Cloud AI/ML Services

PROFESSIONAL EXPERIENCE

Web Developer Intern

Feb 2025 – Apr 2025

Raklyar Enterprises

Remote

- Built and optimized responsive UI components using Next.js and React.js for improved scalability.
- Reduced page load time by 40% and enhanced Core Web Vitals through front-end performance tuning.
- Integrated secure backend APIs for real-time image uploads and cross-device live preview.
- Collaborated in Agile sprints with design and backend teams to deliver production-ready features.

PROJECTS

DocuMind AI – Multi-PDF RAG Chatbot | *Generative AI, LangChain, FAISS, Streamlit*

GitHub Repository

- Developed a GenAI-powered chatbot enabling real-time Q&A across multiple PDF documents.
- Implemented Retrieval-Augmented Generation (RAG) pipeline using LangChain for contextual grounding.
- Utilized FAISS vector database for efficient semantic retrieval and similarity search.
- Encoded document chunks with Sentence Transformers to generate dense vector embeddings.
- Extracted and processed document text using PyPDF2 for chunk-level semantic representation.
- Designed an interactive Streamlit interface and secured configurations via `python-dotenv`.

Hasthakshar – Indian Sign Language Recognition System | *Deep Learning, Computer Vision*

GitHub Repository

- Developed a real-time ISL recognition system using TensorFlow, PyTorch, and OpenCV.
- Achieved 90% classification accuracy across 26 gesture classes with optimized CNN architecture.
- Implemented skeletal keypoint extraction via MediaPipe for precise gesture tracking and efficient training.

ACHIEVEMENTS AND CERTIFICATIONS

- IBM Certified Generative AI Developer (2025) – Scored 90%; validated skills in LLMs, RAG, and GenAI system design.
- 1st Runner-Up, Zelestra X AWS ML Ascend Challenge (2025) – Ranked top 3 among 1500+ national teams.
- Top 100, Amazon ML Challenge (2025) – Recognized for advanced model optimization and innovation.
- Top 10 Finalist, Odoo Hackathon (2025) – Selected from 20,000+ participants for GenAI prototyping.

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

- Social Media Co-Lead, Eureka Club– Directed outreach for Advitya 2025, engaging 5K+ students through digital campaigns.
- CCL Merit Scholar (2022–2024) – Recognized for sustained academic excellence and technical distinction.