Aditya Kumar Singh Delhi, India

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About Myself

Passionate Computer Science student with a focus on **AI/ML** and a robust foundation in **Data Structures and Algorithms**. My skills extend to modern advancements, including familiarity with **Generative AI** and **Large Language Models**. I am adept at designing optimized systems and solving complex problems through **Python** and **C++** proficiency, algorithmic rigor, and collaborative problem-solving.

Education

Bachelor of Technology in Computer Science Engineering (CGPA : 8.18)	2021 - 2025
Bennett University, Uttar Pradesh	
CBSE, Class XII (79%)	2021
Bharti Public School, Delhi	
CBSE, Class X (93.8%)	2019
Bharti Public School, Delhi	

Skills

Programming: C++, Python, Java, SQL, MySQL, MongoDB
Technical Skills: AI/ML, GenAI, Large Language Models(LLM), Retrieval-Augmented Generation(RAG), Data Analysis
Tools and Platforms: Jupyter, Google Colab, VS Code, Google Sheets, Excel, Git and GitHub
Frameworks and Libraries: Flask, RestAPIs, TensorFlow, Pandas, Numpy, Matplotlib, Streamlit
Soft Skills: Communication, Teamwork, Time Management, Attention to Detail, Problem Solving

Experience

AI Intern, Alexion Techno Pvt. Ltd. September 2025 - Present

- Developed a Proof of Concept (POC) for an AI-powered Q/A chatbot using Python, LangChain, and Streamlit, designed to support CBSE curriculum queries via Retrieval-Augmented Generation (RAG) over NCERT textbooks.
- Engineered a full-stack solution integrating Flask REST APIs for document processing and AI inference, enhancing accessibility with voice input capabilities using SpeechRecognition.
- Collaborated with the team to implement FAISS vector stores and Ollama/Groq LLM integration, delivering a scalable prototype to improve educational support efficiency.

Projects

EDUVISION - AI Career Advisor July 2025
(*Python, Streamlit, Sentence Transformer, KNN, TF-IDF, Lightcast API*)

- Implemented an interactive Streamlit web app that extracts skills from user-uploaded resume via Lightcast Open Skills API and provided top-2 job recommendations using SBERT embeddings and a KNN model.
- Built a course recommendation engine leveraging TF-IDF vectorization and cosine similarity on a 850-course dataset, delivering top-5 relevant courses according to the top job recommended.
- Implemented text extraction pipelines for PDF and DOCX resumes using PyPDF2 and python-docx, achieving 98% text-parsing accuracy after regex-based cleaning and normalization.

Sign Language Detection June 2024
(*Python, OpenCV, Tensorflow Object Detection API, LabelImg*)

- Built a real-time sign-language detection pipeline using TensorFlow Object Detection API and OpenCV, achieving 87% mean Average Precision on a custom gesture dataset. Self annotated the custom dataset via LabelImg.
- Applied transfer learning on a pre-trained SSD-MobileNet model; implemented data augmentation to improve generalization under varied lighting and backgrounds.
- This project highlights the potential of deep learning to create more accessible technology for the deaf and hardof-hearing community.

Certifications

Deep Learning with Tensorflow	2022
AWS Machine Learning Foundations	2022