ARCHITA SHRIVASTAVA

Linkedin: www.linkedin.com/in/archita-shrivastava-696b45251

GitHub: https://github.com/archita-prog

Mobile: +91 9098299140

EDUCATION

Vellore Institute of Technology

B.Tech in Computer Science; GPA: 8.23

Delhi Public School Kolar Road

Class - XII (CBSE), Grade: 87.8%

Delhi Public School Kolar Road

Class -X (CBSE) ,Grade - 89%

March 2021 - May 2022

Bhopal, India

November 2022 - May 2026

Email: architashrivastava2022@vitbhopal.ac.in

March 2019 - May 2020

Bhopal, India

Bhopal, India

TECHNICAL SKILLS

Languages: Python, SQL, C++

● Machine Learning: Classification, Regression, XGBoost

- Deep Learning Frameworks: Tensorflow, CNNs, LangChain
- NLP & Generative AI: FAISS, Vector Stores, Tokenization, Text Classification
- Computer Vision: OpenCV, Image Processing, Object Detection
- Data Processing & Analytics: Pandas, NumPy, Matplotlib, Seaborn
- Cloud & Deployment: AWS, Streamlit, Flask

EXPERIENCE

Data Science and Analytics Intern | Zidio Development

January 2025 - February 2025

- O Automated data preprocessing and analysis pipelines in Python, reducing manual processing time by 70%.
- Applied 4+ ML algorithms (e.g., K-Means, Logistic Regression) to test model accuracy and cluster patterns, achieving up to 88% prediction accuracy.
- Ocollaborated with a team of 3 interns to deliver a mini data science solution on time and presented findings to senior developers.

PROJECTS

YOLOv8 -Real Time Object Detection

- May 2025 Present
- O Developed a real-time object detection system using **YOLOv8** and **OpenCV** to analyze video files, achieving high detection detection accuracy across multiple object classes.
- Processed video frames and applied bounding boxes using OpenCV and Ultralytics enabling efficient multi-class object tracking in real time.
- O This project demonstrates deep learning integration for practical computer vision tasks.

Asteroid Classification using XGBoost

September 2024

- O Developed an **XGBoost**-based classification model to predict hazardous asteroids.
- Achieved **92% accuracy** on NASA's asteroid dataset by optimizing hyperparameters.
- O Engineered and selected critical features to improve model precision, minimizing false positives in hazardous object classification.

Intelligent Conversational System on PDF Files

March 2024 - April 2024

- O Used NLP techniques like **tokenization**, **text classification**, and **keyword matching** to identify and extract key sections from PDF documents using **PyPDF2**, **Faiss**, and **Vector Store**.
- Implemented semantic search by converting PDF content into vector embeddings and enabling context-aware responses through LLM-powered text generation.
- Developed interactive conservation python app using Streamlit, LangChain, and Google Generative AI to generate human-like responses from PDFs.

CERTIFICATIONS

Marketing Analytics (NPTEL)

May 2025

- Scored 81% (Top 5% of 1544 candidates).
- Covered Marketing metrics, data analysis, regression, segmentation, CLV, A/B testing.

AWS Solutions Architect- Associate Certification Program (Ethnus)

April 2025

- Gained expertise in designing highly available, cost-efficient, and scalable cloud architectures.
- Hands-on knowledge of VPC, EC2, S3, RDS, IAM, Load Balancing, and Auto Scaling.

Artificial Intelligence (SmartInternz)

April 2025

- O Built a deep learning model using CNNs/ViTs to classify jellyfish species, aiding marine biodiversity monitoring.
- Aimed to assist marine biologists and conservationists in biodiversity research and population monitoring.

EXTRA CURRICULARS

Social Work Intern | Kshitiksha Foundation

June 2023 - July 2023

- O Volunteered at Kshitiksha Foundation to distribute food, plant trees, and care for stray animals, promoting sustainability and social welfare.
- O Participated in digital literacy initiatives, tutoring 10 students on using online learning platforms and software, thereby bridging the digital divide and enriching educational experiences in the most vulnerable community.