ARCHITA SHRIVASTAVA

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

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

EDUCATION

Vellore Institute of Technology

B.Tech in Computer Science, CGPA: 8.40

Delhi Public School Kolar Road

Class XII (CBSE)

Delhi Public School Kolar Road

Class X (CBSE)

November 2022 - May 2026

Mobile: +91 9098299140

Email: architashrivastava2022@vitbhopal.ac.in

Bhopal, India

March 2021 - May 2022

Bhopal, India

March 2019 - May 2020

Bhopal, India

TECHNICAL SKILLS

Machine Learning(Supervised & Unsupervised Techniques, Model Evaluation, Hyperparameter Tuning) TensorFlow, OpenCV AWS, Streamlit, Flask, Python, SQL,C++

EXPERIENCE

Data Science and Analytics Intern | Zidio Development

January 2025 - February 2025

- · Engineered automated ETL pipelines in Python (Pandas, NumPy), handling large-scale IPL datasets and reducing preprocessing time by 70%.
- · Implemented and benchmarked supervised & unsupervised ML models (K-Means, Logistic Regression, Random Forest, Linear Regression), optimizing hyperparameters to achieve ~88% accuracy.
- · Built interactive dashboards using Matplotlib & Seaborn, enabling stakeholders to explore trends in player performance, win probabilities, and team strategies.
- Deployed a Sports Analytics: Predicting IPL Match Outcomes with ML using feature engineering (strike rate, economy rate, win-loss history), achieving ~85% forecast accuracy.

PROJECTS

Smart Vision System for Real-Time Vehicle Analytics

May 2025 - June 2025

- · Designed a production-ready YOLOv8 pipeline using Roboflow + OpenCV, enabling accurate detection across 12+ object classes, even under low-light conditions, improving model robustness for real-world applications.
- · Deployed an interactive end-to-end application with Streamlit, delivering real-time analytics (class-wise vehicle counts, and visual insights) that mimic enterprise-scale monitoring dashboards.
- · Optimized model performance for efficiency, balancing accuracy with inference speed to ensure scalability on resourceconstrained environments.
- Translated raw detections into business intelligence, building automated reporting (summary tables, visualizations) to support data-driven decision-making.

VitalAI: Scalable Healthcare Prediction API

September 2024 - December 2024

- · Developed ML models for Diabetes, Heart Disease, and Blood Sugar prediction using XGBoost & SVM, with ROC-AUC and SHAP explainability. Applied advanced feature engineering (BMI, pulse ratios, polynomial/interaction terms) to enhance predictive accuracy.
- · Applied exploratory data analysis (EDA) and correlation heatmaps to validate clinical features and ensure medically interpretable model outcomes.
- · Developed modular preprocessing pipelines with imputation, scaling, and encoding, serialized with joblib to ensure consistent training-to-inference workflows.
- · Deployed ML models via FastAPI, exposing REST APIs to support real-time healthcare prediction services with easy integration into digital platforms.

Intelligent Conversational System on PDF Files

March 2024 - April 2024

- Engineered an NLP-driven conversational system capable of extracting and interpreting information from unstructured PDF documents using LangChain, Faiss, and PyPDF2.
- · Implemented semantic search with vector embeddings, enabling context-aware responses instead of keyword-based retrieval.
- Deployed an interactive Streamlit app integrating Google Gemini for human-like Q&A on corporate/technical documents.
- Applications include automating document analysis and insight extraction for audits, contracts, catalogs, and manuals.

CERTIFICATIONS

AWS Solutions Architect - Associate Certification(Ethnus)

April 2025

• Demonstrating proficiency in designing secure, scalable, and cost-optimized cloud architectures and hands-on experience with AWS services including EC2, VPC, Route 53, IAM (users, groups, policies), CloudWatch, and RDS.

Getting Started with Artificial Intelligence (IBM)

April 2025

· Gained foundational knowledge in Al, understanding core Al concepts, machine learning principles, and practical applications.

EXTRA CURRICULARS

Social Work Intern | Kshitiksha Foundation

June 2023 - July 2023

· Contributed to social and environmental causes by planting trees on barren land, distributing food to underprivileged children, and caring for stray animals.