ARCHITA SHRIVASTAVA

LinkedIn: www.linkedin.com/in/archita-shrivastava-696b4525

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

Email: architashrivastava2022@vitbhopal.ac.in

Bhopal, India

Phone no: 9098299140

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

- Developed automated ETL workflows using Python (Pandas, NumPy) to process large-scale IPL datasets, reducing preprocessing time by 70%.
- Implemented and benchmarked supervised & unsupervised ML models (K-Means, Logistic Regression, Random Forest, Linear Regression), optimizing hyperparameters to attain ~88% accuracy.
- Constructed interactive dashboards with Matplotlib and Seaborn, equipping stakeholders with actionable insights on player performance and team strategies.
- Delivered a Sports Analytics: Predicting IPL Match Outcomes with ML using feature engineering (strike rate, economy rate, win-loss history), recording ~85% forecast accuracy.

PROJECTS

Smart Vision System for Real-Time Vehicle Analytics

May 2025 - June 2025

- Implemented a YOLOv8-based detection system for 12+ vehicle classes and 767+ images, achieving 86.8% mAP, 92.2% precision, and 81.1% recall—including low-light robustness.
- Deployed a Streamlit + OpenCV dashboard for real-time vehicle counts and monitoring, designed with enterprise-style analytics.
- Enhanced inference speed and accuracy, balancing model performance for edge deployment.
- Synthesized business insights from detection results with automated reports, data visualizations, and summary tables to drive data-driven decisions.

VitalAI: Scalable Healthcare Prediction API

September 2024 - December 2024

- Engineered end-to-end predictive models for Diabetes, Heart Disease, and Blood Sugar using XGBoost, SVM, and CatBoost, achieving ROC-AUC up to 0.88 and ensuring interpretability with LIME and SHAP.
- Applied advanced feature engineering (BMI–Pulse Pressure ratios, polynomial & interaction terms) and EDA with correlation analysis, raising model F1 scores by 15–20% over baseline.
- Designed modular ML pipelines with preprocessing (imputation, scaling, encoding), serialized via joblib, ensuring scalable and reproducible training-to-inference workflows.
- Launched models as RESTful APIs using FastAPI, enabling real-time healthcare predictions and seamless integration into enterprise digital health platforms.

Intelligent Conversational System on PDF Files

March 2024 - April 2024

- Developed an NLP-driven semantic search system using LangChain, Faiss, and PyPDF2 to extract and interpret information from unstructured PDF documents.
- Executed vector-embedding-based retrieval, enabling context-aware answers beyond simple keyword search and improving interpretability for complex queries.
- Built an interactive Streamlit + Gemini Q&A interface, enabling users to query 10+ page documents conversationally and extract insights in real time.
- Simplified large-scale document review workflows (audits, contracts, compliance), attaining 75%+ retrieval accuracy and reducing manual analysis effort by over 60%.

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 AI, understanding core AI 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.