Aastha Smriti Jha

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EDUCATION

Vellore Institute of Technology — Bhopal,Madhya Pradesh
B.Tech in Computer Science and Engineering with spec. in AI / ML - ***9.28 CGPA*** — *October 2022 – July 2026*

Atmiya VidyaPeeth School — Gandhidham, Gujarat
Class XII - 96% — *April 2021 – May 2022*

Atmiya VidyaPeeth School — Gandhidham, Gujarat
Class X - 94% — *April 2019 – May 2020*

TECHNICAL SKILLS

Languages/Technologies: Python, C++, SQL , Machine Learning, Natural Language Processing (NLP), Tableau
Libraries: pandas, NumPy, Matplotlib, scikit-learn, nltk

PROJECTS

MithilaVerse | *Python, Hugging Face Transformers, PyTorch, Gradio* — *April 2025 - June 2025*

- Developed an interactive Maithili language and Mithila art processing app that supports real-time translation between English and Maithili, with 95% text extraction accuracy from Mithila artwork images using pytesseract OCR and **Hugging Face Transformer**.
- Integrated custom sentiment analysis for Maithili text, delivering instant feedback with a response time under 1 second per query through a Gradio-based web interface.

FaceLogix | *Python, TensorFlow/Keras, OpenCV, NumPy, scikit-learn, MTCNN* — Sep 2024 – Dec 2024

- Achieved an average mAP (mean Average Precision) of 56.1% and F1 score of 0.505 on the WIDER Face dataset using **MTCNN**, ensuring reliable detection across challenging conditions
- Optimized image pre-processing (resizing, normalization, augmentation) and diverse training data improved detection speed, with MTCNN processing a full-size image in just 0.2 seconds
- Enhanced system robustness by training and fine-tuning on datasets with over 10,000 images featuring varied lighting, orientations, and occlusions, resulting in consistent detection performance.

DeepHeart Analyzer | *Python, OpenCV, ScikitLearn, PyTorch, Tensorflow* — Sep 2024 – Dec 2024

- Developed and evaluated machine learning models for cardiovascular disease detection, achieving 97.8% accuracy with a **Random Forest Classifier on ECG image data** and 78% accuracy with a Gradient Boosting model on lifestyle parameters.
- Utilized Python, scikit-learn, **XGBoost, pandas, and OpenCV** for data preprocessing, feature engineering, and model development on both image and tabular datasets.

ACHIEVEMENTS

Solved **425+ questions** on LeetCode, with a global rank of 309,001 demonstrating strong problem-solving skills.
Completed the **100 Days of Code** challenge, enhancing coding discipline and skills.
Earned a **5-star rating** in **Problem Solving** on HackerRank by demonstrating strong coding and algorithm skills.

CERTIFICATIONS

GEN AI Using IBM Watsonx - IBM Career Education Program
Applied Machine Learning in Python - University of Michigan
AWS Educate Cloud Computing 101 - AWS

EXTRACURRICULAR ACTIVITIES

Attended the **3-day conference and exhibition** organized by Bharatiya Shikshan Mandal following selection in a **research paper writing competition** on "The Empirical Paradigm of Art and Literature in Being Backbone of the Cultural Territory."
Won **first place in an elocution competition** on the topic "Corruption-Free India," demonstrating strong public speaking and persuasive communication skills