Diya Goswami

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SKILLS

- **Programming Languages:** Java, C++, Python
- **Libraries and Frameworks:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Keras, Matplotlib
- **Tools:** Git, GitHub, Jupyter, Google Colab
- **Other Skills:** Data Structures, Problem Solving, Machine Learning, Deep Learning, Generative AI

EDUCATION

Auxilium Girls' School

High School — 96.2 Percentage — 2020

Auxilium Girls' School

Higher Secondary — 95.2 Percentage — 2022

VIT Bhopal University

B. Tech Computer Science and Engineering — 9.00 CGPA — 2026
Specialization in Health Informatics

PROJECTS

AI-Augmented Cardiac Risk Prediction using Synthetic Data Generation Techniques

- Built a synthetic data generation pipeline using CTGAN, VAE, and Table Diffusion to augment imbalanced heart disease datasets.
- Trained and evaluated multiple ML models including SVM, XGBoost, CNN, and an ensemble model to improve diagnostic accuracy.

SkinSight: Intelligent Skin Type Detection System

- Engineered a real-time skin type detection system using CNNs and Haar Cascade classifiers, achieving 80.38% accuracy across dry, normal, and oily skin types.
- Integrated TensorFlow, OpenCV, and Raspberry Pi 5 with a Logitech C920 webcam to deploy a fully functional edge device for image-based skin analysis. Designed for applications in personalized dermatology, cosmetics recommendation, and telemedicine.
- Demonstrated at ETESM-2025

AgriVision: AI-Powered Plant Disease Detection System

- Built and fine-tuned a MobileNetV2 deep learning model using the PlantVillage dataset, achieving 95% validation accuracy in classifying plant diseases from leaf images.
- Enabled real-time, AI-driven crop health monitoring to support precision agriculture and sustainable farming practices, contributing to improved food security.

Beatwiser: Real-Time Pulse Monitoring and Diagnostic System

- Developed an intelligent system for heart health monitoring by implementing and comparing various machine learning models, including XGBoost, to optimize diagnostic accuracy. Built a data-driven pipeline to detect pulse anomalies in real-time, enabling early warning signals for potential heart-related conditions.
- Contributed to model evaluation, feature engineering, and system testing for robust performance in practical healthcare settings.
- Shared results at ICDCC 2024

CO- CURRICULAR

- **Smart India Hackathon 2024 Finalist**
  Worked on the project of Waterless Spittoon Stations and reached the finals of the internal round of SIH.
- **Health Hackathon JHU & VITB Finalist**
  Presented a project on a geographical location sensitive hospital locator and first aid system.
- **Core Member, Eureka Club, VIT Bhopal**
  Explored diverse research topics and real-world datasets as part of the Research and Development team.
- **Open-Source Contributor**, GitHub
  Contributed to machine learning and data science projects by implementing models, improving code efficiency, and documenting workflows.