

# Diya Goswami

 diya13goswami@gmail.com

 <https://github.com/diyagoswamihere>

 Agartala, India

 6909371878

 <https://www.linkedin.com/in/diya-goswami-74a6a7250/>

## Education

### B. Tech, VIT Bhopal University

Computer Science and Engineering specialization in Health Informatics with current CGPA of 8.98

Bhopal, India

## Skills

Java, Python, C++, SQL, Machine and Deep Learning, Generative AI, NLP, LLMs, RAG, LangChain, ChromaDB, Tableau, Excel, GitHub

## Projects

### EchoRetail: Retail Feedback Analysis with AI

- Built a GAN-based engine to generate 10,000+ synthetic retail transactions for scalable, privacy-safe analytics.
- Implemented a RAG pipeline using Gemini, ChromaDB, and LangChain for instant insights from 10k+ customer reviews.
- Developed an NLP suite with sentiment analysis and BERTopic clustering to extract actionable customer patterns.

Aug 2025-Oct 2025

Bhopal, India

### CardiaSynth: Synthetic Data for Cardiac Diagnostics

- Python, CTGAN, VAE, Table Diffusion, ML algorithms
- Created a multi-model synthetic data generator using CTGAN, VAE, and Table Diffusion to balance cardiac datasets.
  - Built an ensemble ML framework achieving more than 85% accuracy and significant F1-score improvement.
  - Reduced false negatives by 25% through optimized evaluation, improving model reliability for risk prediction.

Jan 2025-May 2025

Bhopal, India

### SkinSight: Intelligent Skin Type Detection System

- Python, CNN, ResNet-50, Haar Cascade, Raspberry Pi-5
- Developed a lightweight CNN and ResNet-50 and Haar Cascade system running real-time on Raspberry Pi 5 with more than 80% accuracy.
  - Used TensorFlow Lite quantization for sub-second inference on edge hardware.
  - Integrated hardware-software components (LED lighting, mirror display) for consistent clinical-grade skin analysis.

June 2024- Nov 2024

Bhopal, India

## Achievements

### Health Hackathon Semi Finalist

Participated at VIT Bhopal University in collaboration with John Hopkins University and was among the top selected teams with our presentation of an Emergency Hospital Locator and First Aid solution

Feb 2025

### Smart India Hackathon Finalist

Participated at the SIH 2024 and reached the finals under the hardware section by building a waterless spittoon station

Nov 2024

### 1<sup>st</sup> Place winner, Cranes Varsity

Certified as the top performer in industrial training on IoT devices using Raspberry Pi from Cranes Varsity, Bengaluru

Sep 2024

## Certificates

- Google Data Analytics
- FutureSkills Generative AI Fluency
- Problem Solver DSA by FacePrep
- VITYarthi Fundamentals of AI and ML
- Career Essentials in Data Analysis by Microsoft and LinkedIn

## Extracurricular

### Eureka Club, VIT Bhopal

Research Team Core Member  
Participated and contributed in numerous new innovative research related work along with organizing multiple events with 100s of participants

### Fine Arts Club, VIT Bhopal

Member  
Participated in collaborative and engaging activities showcasing creativity, communication and networking skills

## Co-curricular

### Problem Solving and Data Structures and Algorithms

Codeforces rating of 651, Codechef rating of 1008, Leetcode rating of 1580 and solved more than 700 questions on GFG and Leetcode comprising of the various data structures including LinkedList, Stacks, Queue, Graphs etc.

### GirlScript Summer Of Code 2025

Participated in a open-source development program for women in tech

## Publications & Conferences

### International Conference on Data Computation and Communication, 2024

Presented and published research work on the utilization of Machine Learning in alerting cardiac issues

Nov 2024

Bhopal, India

### International Conference on Emerging Trends in Engineering, Science and Management, 2025

Presented and published a device for the dermatological and skincare industry for real time skin type detection

April, 2025

Bhopal, India