

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

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: Python, PyTorch, GAN, Gemini LLM, ChromaDB, RAG, Aug 2025-Oct 2025
Bhopal, India

- 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.

CardiaSynth: Synthetic Data for Cardiac Diagnostics, Python, CTGAN, VAE, Table Diffusion, ML algorithms Jan 2025-May 2025
Bhopal, India

- 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.

SkinSight: Intelligent Skin Type Detection System, Python, CNN, ResNet-50, Haar Cascade, Raspberry Pi-5 June 2024- Nov 2024
Bhopal, India

- 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.

Achievements

Health Hackathon Semi Finalist Feb 2025
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

Smart India Hackathon Finalist Nov 2024
Participated at the SIH 2024 and reached the finals under the hardware section by building a waterless spittoon station

1st Place winner, Cranes Varsity Sep 2024
Certified as the top performer in industrial training on IoT devices using Raspberry Pi from Cranes Varsity, Bengaluru

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 Nov 2024
Bhopal, India
Presented and published research work on the utilization of Machine Learning in alerting cardiac issues

International Conference on Emerging Trends in Engineering, Science and Management, 2025 April, 2025
Bhopal, India
Presented and published a device for the dermatological and skincare industry for real time skin type detection