Diya Goswami

diya13goswami@gmail.com
6909371878
https://github.com/diyagoswamihere
https://www.linkedin.com/in/diya-goswami-74a6a7250/
Agartala, India

Education

B. Tech, Vellore Institute of Technology Bhopal Bhopal, India
Computer Science and Engineering with specialization in Health Informatics holding a current CGPA of 8.98

Skills

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

Internship

Software Engineer Intern, YugaYatra Retail (OPC) Private Limited Dec 2025

Developed websites and applications using AI tools, work on real-time projects, assist in freelancing tasks, manage e-commerce seller portals, and collaborate with teams using modern development and design tools.

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

JHU & VITB Health Hackathon 2025 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 2024 Finalist Nov 2024
Participated at the SIH 2024 and reached the finals under the hardware section by building a waterless spittoon station

1st Place Awardee, 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

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

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

Publications & Conferences

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

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