# DEBADRITA DEY

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#### **EDUCATION**

### VIT BHOPAL UNIVERSITY

Bachelor of Technology; Computer Science; CGPA: 8.88

## KHANTURA GIRLS HIGH SCHOOL

Class XII; Percentage:91.6%

Bhopal, Madhya Pradesh September 2022 - June 2026

Kolkata, West Bengal

June 2021

## Projects

**ADIRA** | Gemini API,NLP,React.js, Next.js,Firebase,GCP|Link

February 2024 – April 2024

- Built a microservices backend on Firebase for a RAG chatbot, auto-scaling to serve 100+ real-time AI inference requests per second.
- Designed a fault-tolerant system managing 6.5K+ ops, using caching to ensure low-latency LLM responses and 24/7 uptime.
- Led end-to-end development, integrating a Gemini LLM with a Next.js UI and building essential services like secure auth and payments.

SwasthAIMitra | Python, Scikit-learn, Pandas, Streamlit | Link

July 2025 – August 2025

- Developed and deployed a health recommendation web app using Python and Streamlit, integrating a Scikit-learn model for real-time predictions on Streamlit Cloud.
- Implemented an SVC model for disease prediction, building a data pipeline with Pandas to process and vectorize raw user-input symptoms for model inference.
- Built a responsive UI that translates complex ML model outputs into simple, actionable health recommendations (diet, workout, etc.) to enhance user experience.

## **EXPERIENCE**

Project Intern

June 2023 – July 2023

New Delhi, India

- Omdena New Delhi • Led the data collection and preprocessing team for a novel audio-based health AI project, defining the strategy to source, evaluate, and process diverse cough sound datasets for a severity classification model.
  - Designed and managed the implementation of a data preprocessing pipeline to clean and structure raw audio files, addressing critical challenges like the severe class imbalance found in the COUGHVID dataset.
  - Delivered a high-quality, model-ready dataset that formed the foundational input for all subsequent feature extraction and model training, directly enabling the development of the cough detection and severity models.

### Technical Skills

Languages: Java, Python, C/C++, JavaScript, R, HTML, CSS, MySQL (RDBMS)

AI & Machine Learning: Deep Learning, Generative AI, TensorFlow, PyTorch, Scikit-learn, NLTK, Spacy

Web Frameworks: React.js, Node.js, Django, Flask, FastAPI

Data & Visualization: Pandas, Numpy, Seaborn, Matplotlib, Power BI, Tableau

Developer Tools & Platforms: Git, Docker, Google Cloud Platform (GCP), Amazon Web Services (AWS), VS Code,

PvCharm, IntelliJ

Soft Skills: Communication, Analytical Thinking, Problem-Solving, Collaboration

## Achievements

- Secured a Top 50 rank (Semi-finalist) out of 200+ teams in the Amazon Sambhav Hackathon '24.
- Achieved semi-finalist status in Smart India Hackathon (2024, 2023) and Adobe India Hackathon '25.
- Actively contributed to GirlScript Summer of Code'23.

## Volunteer Experiences

## Finance and Sponsorship Lead at E-Cell VIT Bhopal

Secured and managed relationships with 10+ sponsors, leveraging strong negotiation skills to fund key event goals.

#### PR and Outreach Team Member of Health-O-Tech VIT Bhopal

Executed outreach strategies for student events, reaching an audience of over 10,000 to drive engagement.