Diya Shah

🔾 github.com/diyashah13 👂 Burhanpur, Madhya Pradesh

Education

VIT Bhopal University, Bhopal, Madhya Pradesh

Expected graduation: May 2026

B.Tech in Computer Science (AI & ML)

CGPA: 8.9/10

Macro Vision Academy, ♥ Burhanpur, Madhya Pradesh

 12^{th} CBSE: 81.8% (2022)

 10^{th} CBSE: 93.0% (2020)

Projects

PDF Whisperer - AI-Powered Document Summarization System

Feb 2025 - Mar 2025

- Engineered an AI system to summarize and answer questions on legal/academic PDFs using Hugging Face transformer models (flan-t5-large, longformer).
- Added OCR support and compatibility with .docx and .txt files, enabling 95%+ document type coverage.
- Enabled multi-user document-based Q&A with context memory, reducing response time to under 3s on GPU.
- Built modular backend in Python and deployed a Streamlit UI with exportable results (TXT/PDF), used by 25+ test users with 98% satisfaction.

Plant Malady Detection using CNN

Jan 2024 - May 2024

- Designed and trained a custom CNN to detect plant diseases from 15,000+ annotated images.
- Achieved 98.54% training accuracy and 95.73% validation accuracy using TensorFlow and OpenCV.
- Applied preprocessing, augmentation, and evaluation (F1-score: 0.95) to ensure model generalizability.
- Deployed Python-based prediction tool and tested on real-time images for multiple plant species.

Diet Recommendation System using ML

Aug 2023 - Nov 2023

- Built a web app that provides personalized diet plans based on BMI, BMR, and activity level using Scikit-learn.
- Integrated FastAPI backend with Streamlit UI for real-time dietary suggestions and visual breakdown.
- Collected and analyzed feedback from 100+ users, improving recommendation accuracy and UI.
- Achieved 93% satisfaction score from users and ensured modularity for future fitness app integrations.

Certifications

- Reinforcement Learning NPTEL (Jan Apr 2025)
- Privacy and Security in Online Social Media NPTEL (Jan Apr 2024)
- Machine Learning Specialization Coursera (Jan 2024)
- Computer Vision with OpenCV E-Vityarthi (Dec 2024)

• Python Essentials for AI – E-Vityarthi (May 2023)

Extracurriculars and Achievements

- Attended Science and Technology Fest at MANIT Bhopal (Jan 24, 2023).
- Volunteered at blood donation camp, VIT Bhopal University.
- Research paper "Understanding the Constraints of YOLO in Pedestrian Recognition: Issues and Innovations" selected for Research Paper Award by VIVIBHA 2024.

Technical Skills

Programming Languages: Python, Java, C++, SQL

Libraries & Frameworks: pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, Hugging Face, OpenCV, FastAPI

Tools: Jupyter, Git, VS Code, Excel, PowerPoint

Concepts: Image Classification, Summarization, Reinforcement Learning Soft Skills: Problem Solving, Teamwork,

Communication, Agile Development

Additional

Languages: English, Hindi, Gujarati