# Pinaki Priya

Auliabad, Bhagalpur, Bihar 853201

## **Professional Summary**

Computer Science Engineering student skilled in Java, Python, DSA, MERN stack, and Django. Experienced in AI/ML projects, REST APIs, and backend development with a focus on building efficient, real-world applications.

#### Education

## VIT Bhopal (2022 – 2026)

Bachelor of Technology in Computer Science and Engineering [CGPA: 8.93]

Bhopal, Madhya Pradesh

## Technical Skills

Languages: Java, Python, JavaScript, MySQL, HTML/CSS, Bash

Frameworks & Tools: Django, Node.js, MERN stack, Git/GitHub, Postman, Android Studio

Technologies: REST APIs, AI/ML, DL, IoT, Agile, Linux (Ubuntu), Packet Tracer

Cloud & Platforms: Microsoft Azure, Google Cloud, IBM SkillsBuild

## **Projects**

Life+ | AI-Powered Healthcare Data Optimization

08/2023 - 10/2023

- Developed an AI-driven medical data platform using Python and scikit-learn, improving system stability by 30% and implementing a tumor detection model with 85% precision and 90% recall for early diagnosis.
- Designed interactive Matplotlib dashboards that enhanced data comprehension by 40%, while Agile implementation boosted team productivity by 20% through optimized development cycles.

### Diabetic Retinopathy Detection | Deep Learning

03/2024 - 05/2024

- Engineered a hybrid deep learning system using EfficientNetB3 and InceptionV3, achieving 98-99% accuracy on 3,500+ retinal images through advanced transfer learning techniques, while improving processing speed by 50% via real-time analytics integration.
- Developed an automated assessment pipeline that standardized medical image evaluation, reducing quality assurance time by 40% and ensuring consistent diagnostic outcomes across healthcare providers.

#### Assistive Object Detection | IoT + AI |

08/2024 - 04/2025

- Designed an IoT-optimized navigation system using MobileNet SSD v3 (benchmarked against YOLOv4/v5/v8 and Faster R-CNN) trained on augmented COCO dataset with custom obstacle classes (manholes, stairs, etc.), achieving 92% detection accuracy on Raspberry Pi hardware.
- Engineered a complete data pipeline for annotation/preprocessing and deployed the real-time audio alert system, reducing obstacle collision incidents by 60% in user trials while maintaining ;2W power consumption on edge devices.

## Achievements

**IBM Cybersecurity Analyst**: Certified in SIEM, threat detection, and foundational network security concepts. **Ethnus Internship**: Completed MERN stack internship with A grade (92/100); developed a full-stack CRUD application using MongoDB, Express, React, and Node.js.

Postman API:Earned Student Expert badge by completing Postman's REST API development and testing challenge. India Space Lab: Completed winter internship focused on Drone Technology, CubeSat systems, and space-tech

entrepreneurship.

Microsoft Azure & Google: Earned 8 badges and 1 trophy in Azure OpenAI modules; completed the 'Bits and Bytes of Computer Networking' course by Google.

Cybersecurity Exposure: Gained hands-on experience during 1-month internship under The Red Users.

**Hackathons & Quizzes**: Participated in 38+ coding contests, hackathons, and technical quizzes; recognized for analytical skills, teamwork, and innovation.

## Extracurricular

**Hackathon & Workshop Organizer**: Led five hackathons and ten tech workshops for 200+ students, fostering peer learning and generating 50+ GitHub projects.

ML Workshop, VITronix IEEE: Strengthened applied AI skills through hands-on model training and deployment sessions.

**DEVTALK Podcast Member**: Participated in team-led podcast sessions focused on tech awareness and communication. **IoT Quiz Winner, Cranes Varsity**: Won 1st place in a 2-day IoT challenge, showcasing problem-solving with Raspberry Pi and embedded systems.