Anushka Mandekar

email: mandekar.anushka@gmail.com | Ph: 9175122746 | GitHub: https://github.com/AnushkaM443

Education:

VIT Bhopal University

- BTech in Computer Science and Engineering with minors in Health Informatics
- Cumulative GPA: 8.33 (Expected Graduation: May 2026)

12th Standard

- Nasik Presidency Junior College, Nashik, Maharashtra
- Cumulative GPA: 10 (June 2021)

10th Standard

- Wisdom High International School, Nashik, Maharashtra
- Cumulative GPA: 9.25 (July 2019)

Technical Skills:

- Tech Stack: Python, SQL, DBMS, Microsoft Excel, Git, Django, Selenium, Web Scraping.
- Data Science: Machine Learning Fundamentals, Statistics, EDA, Data Cleaning, Feature Engineering, Data Visualization.

Projects:

- **Travel Itinerary generating website (March 2024)**: Web Development, Personalization Algorithms
  - Led development of a full-stack web app that generated personalized travel itineraries by analyzing 1M+ real-time datasets and user preferences. Integrated data from 1,050+ destinations and 1,500+ restaurants to curate optimized plans using rule-based filtering, behavioral logic, and Google Maps API for geolocation mapping.
  - Identified a critical gap in travel planning caused by scattered data and generic recommendations; developed a platform delivering real-time, personalized itineraries, reducing planning time by 70% and significantly enhancing efficiency, cost-effectiveness, and user satisfaction.
  - Tech Stack: Python (Django), MySQL, HTML, CSS, JavaScript, Google Maps API

- **Malaria Detection GUI (August 2023):** Machine Learning, Computer Vision, Deep Learning
  - Spearheaded development of an AI-driven GUI for automated malaria detection, leveraging deep learning-based image classification on 27,000+ blood smear images. Conducted comparative analysis of VGG-19 and custom CNNs to optimize accuracy, and integrated predictive analytics into an intuitive interface for early, reliable diagnosis.
  - Addressed the need for faster, accurate malaria diagnosis by leveraging AI to analyze thousands of blood smear images, reducing misdiagnosis by over 40% and enabling early intervention in high-risk, low-resource settings.
  - Tech Stack: Python (Pandas, NumPy, Keras, TensorFlow, Scikit-learn, Seaborn), VGG-19 , Tkinter

- **Urban Growth Forecasting and Zoning Optimization System (December 2024 – April 2025):**
  - Developed a geospatial AI-powered platform for urban planning within a 100 km radius of VIT Bhopal, integrating 3,000+ remote sensing data points, 8 government reports, and census data from 1961 to 2011. Designed four predictive models for land use optimization, population growth forecasting, water scarcity risk detection, and traffic flow analysis.
  - Addressed challenges of unplanned urbanization and resource misallocation by equipping planners with real-time geospatial insights and AI-driven forecasts, supporting data-backed, sustainable, and inclusive urban development.
  - Tech Stack: Python (Pandas, NumPy, Scikit-learn, Matplotlib), QGIS, Google Earth Engine.

Extracurricular Activities:

- Core Marketing Team Member, Health-O-Tech Club: Orchestrated 5 health awareness campaigns, reaching over 500 students via strategic outreach for Health-O-Tech Club.
- Engineered a prototype at American Express Hackathon for automated financial planning, integrating real-time spend analysis and simulating a 15% increase in user savings by optimizing spending patterns.
- Chief Editor, School's Newspaper (3 years): Led a 15 member team and boosted readership by 30%
- Demonstrated excellence in public speaking and debate in school, earning 2-time Debate Champion status and Orator of the Year recognition.
- Directed successful Farewell and Sports Day events, managing logistics for over 500 attendees and supervising a team of 20 volunteers.

Certifications:

- IAMNEO Data Science using Python
- INSPIRE Scholarship for higher education by DST, Maharashtra - Recognized for academic excellence in STEM fields