Anushka Mandekar

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

Education:

Bachelor of Technology in Computer Science and Engineering, Minor in Health Informatics

- Vellore Institute of Technology Bhopal University
- Cumulative GPA: 8.42 (Expected Graduation: May 2026)

12th Standard

- Nasik Presidency Junior College, Nashik, Maharashtra
- Cumulative GPA: 9.55 (June 2021)

10th Standard

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

Technical Skills:

- Programming and Tools: Python, SQL, DBMS, Microsoft Excel, VBA, Git, Django, Canva, Microsoft PowerPoint
- Data Science: Machine Learning Fundamentals, Statistics, A/B Testing, EDA, Data Cleaning, Feature Engineering, Data Visualization.

Projects:

- **Travel Itinerary generating website (March 2024)**: Web Development, Personalization Algorithms
  - Identified a critical gap in travel planning caused by scattered data and generic recommendations.
  - 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.
  - Reduced user planning time by 70%, 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
  - Addressed the need for a faster, more accurate malaria diagnosis in high-risk, low-resource settings.
  - 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.
  - Achieved our goal by performing end-to-end data analysis including exploratory data analysis, statistical profiling, and model evaluation, reducing misdiagnosis by over 40% and enabling early intervention.
  - Tech Stack: Python (Pandas, NumPy, Keras, TensorFlow, Scikit-learn, Seaborn), VGG-19 , Tkinter

- **Urban Growth Forecasting and Zoning Optimization System (December 2024 – April 2025):**
  - Solved challenges of unplanned urbanization and resource misallocation by building forecasting models in Python to estimate population and infrastructure needs. Developed a data intelligence system to help local planners 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. Conducted zoning optimization and risk analysis for traffic congestion and water supply using spatial tools like QGIS and Earth Engine.
  - Tech Stack: Python (Pandas, NumPy, Scikit-learn, Matplotlib), QGIS, Google Earth Engine.

Extracurricular Activities:

- 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
- Google Digital Marketing & E-commerce P Certificate
- IMARTICUS Learning Investment Banking Operation
- INSPIRE Scholarship for higher education by DST, Maharashtra - Recognized for academic excellence in STEM fields