Anushka Mandekar

mandekar.anushka@gmail.com | (+91) 917-512-2746 | LinkedIn | Github

Education

VIT University Sehore, M.P

Bachelor of Technology in Computer Science CGPA: 8.42 Expected Graduation: 2026

Technical Skills

Programming and Tools: Python (Pandas, NumPy, scikit-learn, Seaborn), SQL, DBMS, Microsoft Excel (Power Query, Power Pivot), Power BI, Git, Google Workspace.

Data Science: Machine Learning Fundamentals, Statistics, A/B Testing, EDA, Data Cleaning, Data Visualization.

Projects

Urban Growth Forecasting and Zoning Optimization System (April 2025): Python, Google Earth Engine

- Solved challenges of unplanned urbanization and resource misallocation by building forecasting models in Python to estimate population and infrastructure needs.
- Designed and deployed 4 predictive models (population, land use, road networks, water demand) using 556 satellite datasets (667GB+), 3,000+ samples across a 100 km² region.
- Achieved 20% higher prediction accuracy, equipping local planners with integrated, sustainable insights that improved long-term resource allocation and quality of life.

Travel Itinerary generating website (March 2024): Python (Django), MySQL, HTML, CSS, JavaScript, Google, Maps API

- Identified a critical gap in travel planning caused by scattered data and generic recommendations.
- Led development of a full-stack platform analyzing 1M+ real-time datasets and integrating 1,050+ destinations & 1,500+ restaurants using rule-based filters, behavioral logic, and geolocation mapping.
- Reduced user planning time by 70%, enhancing efficiency, cost-effectiveness, and user satisfaction.

Malaria Detection GUI (August 2023): Python, VGG-19, Tkinter

- Addressed the need for a faster, more accurate malaria diagnosis in high-risk, low-resource settings.
- Spearheaded development of an AI-driven GUI for malaria diagnosis using predictive analytics and deep learning-based image classification on 27,000+ blood-smear images, comparing VGG-19 with custom CNNs.
- 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.

Co-curricular 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.
- AI Researcher and Developer Omdena Nepal Local Chapter (2023): Collaborated with a global team of 52 researchers to develop a web-scraping pipeline, providing and showcasing data-driven insights that led to actionable recommendations on media inclusivity for media outlets.

Extra-curricular Activities

- Chief Editor, School's Newspaper (3 years): Led a 15-member team and boosted readership by 30% by revitalizing content and newspaper design.
- Demonstrated excellence in public speaking and debate in school, earning 2-time Debate Champion status and Orator of the Year recognition.
- Core Marketing Team Member, Health-O-Tech Club, university: Organized 5 health awareness campaigns, reaching 500+ students.

Certifications

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