

# Raj Mansuriya

+91 7249373220 | rajmansuriya1@gmail.com | [linkedin](#) | [Github](#)

## Technical Skills

**Languages/Technologies:** C++, Python, SQL, Machine Learning, Computer Vision, Tableau, Data Analytics, Visual Studio, Power Automate, Excel

**Libraries/Models:** Pandas, NumPy, Tensorflow, Sklearn, Keras, Matplotlib, BeautifulSoup, Selenium, Large Language Model (LLM), Retrieval Augmented Generation (RAG).

**Subjects:** OOPs, DBMS, OS, DSA, Machine Learning, Artificial Intelligence, Deep Learning, Artificial Neural Network, Cloud Computing.

## Experience

Data Science Intern | **VisaKwik**

Jan 2024- Jun 2024

- Developed a web scrapping model using BeautifulSoup and Selenium to extract visa forms from government websites, fine-tuning pre-trained language models for accurate parsing.
- Created and deployed a Language Model to verify visa application documents, optimizing student learning journeys on the app with data-driven insights.
- Designed a LLM model for verifying visa application documents across 60+ countries and 4+ visa categories, achieving a 94% accuracy rate.
- Developed VisaGPT with a Retrieval-Augmented Generation (RAG) model for real-time web data scraping, integrating GPT for real-time updates and improved user experience.

## Projects

**Artificial Intelligence Based Road Inspection System for Efficient Maintenance and Repair in India** 📁 (Apr 2023 – Jun 2023)

- Description: Developed an AI-driven road inspection system using YOLOv8 to detect road defects, revolutionizing road maintenance in India.
- Technology: Computer Vision, Deep Learning, Machine Learning.
- Role: Curated datasets and trained the YOLOv8 model for an advanced road inspection system.

**Harnessing Machine Learning for Parkinson's Disease Detection** 📁 (Dec 2023)

- Description: Developed a Parkinson's disease detection model using XGBoost, achieving a 94.87% accuracy, highlighting expertise in machine learning and medical data analysis.
- Technology: Numpy, Scikit-learn, Pandas, XGBoost, Feature Scaling.
- Utilized Python libraries for data preprocessing, model training, and evaluation, demonstrating a result-oriented approach to healthcare challenges.

**Water Quality Monitoring Using Satellite Imagery and GIS Techniques in Bhopal** 📁 (Feb 2023 – Apr 2023)

- Description: Enhanced water quality monitoring in Bhopal using satellite imagery, identifying key parameters and creating a real-time visualization dashboard.
- Technologies: Remote Sensing, Google Earth Engine, GIS techniques for spatial data analysis and visualization.
- Role: Led satellite imagery acquisition and integrated GIS data for comprehensive water quality monitoring.

## Education

Board	Tenure	Educational institution	CGPA/Percentage
Integrated Mtech (CSE) in AI & ML	Sept 2020 – Present	Vellore Institute of Technology, Bhopal	8.65/10
Class XII	May 2020	Sadguru Gadage Maharaj College, Karad	67.69%
Class X	May 2018	Holy Family Convent High School, Karad	86%

## Certification:

- Applied Machine Learning in Python-University Of Michigan Coursera, Nov 2021
- Google Cloud Digital Leader, Dec, 2023
- Google Data Analytics Professional Coursera, Apr 2023

## Achievements

- Presented a **Research paper titled "Inspection of 3-D Model of Human Body using Augmented Reality"** at the International Conference on Intelligent Healthcare and Computational Neural Modelling (ICIHCNN - 2023), showcasing expertise in healthcare technology.
- Presented a paper titled **"Analysis of Vector Borne Diseases and Curability Facilities across India"** utilizing Tableau dashboards to visualize trends of 29 states across India.

## Responsibilities & Extracurricular .

- Volunteer Coordinator for Seminar and Workshop on Software Packages for Optimization Techniques organised by International relations office, VIT Bhopal. (2 Feb, 2023)
- As an Unnat Bharat volunteer, actively involved in rural development by addressing local challenges through sustainable and innovative solutions under the flagship program launched by the Government of India.

## Hobbies

- Cycling and Swimming
- Playing Sports – Football, Cricket, Basketball, Badminton, Chess.

## Languages

- English, Hindi, Gujarati, Marathi