

# VIRAG JAIN

 +91-8103083090  viragjain12@gmail.com

 <https://www.linkedin.com/in/viragjain13/>  <https://github.com/Viraaag>

## EDUCATION

### VIT Bhopal University

B.Tech in Computer Science and Engineering, Specialization in Cloud Computing and Automation

Sep 2022 - July 2026

CGPA: 8.13

- Relevant Coursework: Cloud Computing Architecture, DevOps and Automation, Machine Learning, Big Data Analytics, Distributed Systems, Data Mining and Warehousing, Business Intelligence

## WORK EXPERIENCE

### Data Science Intern

Feb 2025 - March 2025

#### Unified Mentor

- Conducted comprehensive analysis on tobacco use and mortality data using Python and statistical modeling techniques
- Developed predictive models for retail sales forecasting using machine learning algorithms, achieving 82% R-squared accuracy
- Performed exploratory data analysis on 10K+ grocery sales records, identifying key patterns and trends in consumer behavior
- Built end-to-end data pipelines for processing healthcare and retail datasets, implementing ETL processes for data quality assurance

## PROJECTS

### Pothole Detection System – CNN-based Road Safety Tool

Aug 2024 - Sep 2024

- **Tech Stack:** Python (Pandas, NumPy, Scikit-learn, Matplotlib), TensorFlow, Keras, OpenCV
- Developed a CNN model achieving 92% accuracy in classifying pothole vs. plain road images
- Implemented real-time webcam detection, reducing manual road inspection by 60%
- Prepared infrastructure for future YOLOv3 object detection integration, improving precise pothole localization

### SoilSense – AI-Powered Crop Recommendation System

Oct 2024 - Dec 2024

- **Tech Stack:** Python, Flask/FastAPI, IoT Sensors, AWS/Firebase, Scikit-learn, NumPy, Pandas
- Worked on a crop recommendation system leveraging real-time soil data from sensors, improving crop selection accuracy by 40%
- Automated real-time monitoring and recommendations, reducing manual soil testing and decision-making time by 60%
- Integrated Flask/FastAPI backend with cloud-based data storage for scalable and secure processing of soil parameters

### MovieMate – Hybrid Movie Recommendation System

Jun 2025 - Aug 2025

- **Tech Stack:** Python, FastAPI, React, Tailwind CSS, Scikit-learn, Surprise (SVD), TF-IDF, Groq API
- Built a hybrid recommender system (TF-IDF + SVD) improving prediction relevance by 35%
- Integrated Groq API for unseen movies, reducing cold-start issues by 20%
- Designed a React + Tailwind frontend with 100ms UI response time for real-time usability

## TECHNICAL SKILLS

- **Languages/Tools:** Python, SQL, Tableau, Power BI, Excel, ETL
- **Libraries/Frameworks:** Pandas, NumPy, Scikit-learn, Matplotlib, Flask
- **Big Data & Cloud:** PySpark, Hadoop, Hive, HBase, Apache Airflow, AWS, Git, Docker

## ACHIEVEMENTS

- Competed in Flipkart Grid 6.0, reaching top 200,000 participants out of millions in India's largest engineering challenge
- Solved 136+ data structures and algorithms problems on LeetCode, demonstrating strong problem-solving capabilities
- Maintained 8.13 CGPA while actively participating in technical clubs and organizing campus technology events

## CERTIFICATIONS

- Data Analytics Job Simulation on Forage - Deloitte Australia (2025)
- Oracle Cloud Infrastructure 2025 Certified Data Science Professional – Oracle (2025)

## LEADERSHIP AND CAMPUS ENGAGEMENT

### Vice President, Cloud Zone Club, VIT Bhopal University

Oct 2023 - July 2024

- Led the Cloud Zone Club as Vice President, organizing 12 technical sessions with an average of 50 participants per session
- Fostered awareness about iOS development, cloud technologies, and DevOps through comprehensive technical workshops

### Core Member, D2C Igniters Club, VIT Bhopal University

Jan 2024 - Jan 2025

- Spearheaded organization of three major technology showcases, attracting over 500 students across university
- Ignited entrepreneurial spirits through interactive workshops that fostered creativity and innovation in tech development