



# RITURAJ SINGH

## PROFESSIONAL SUMMARY

Analytical and self-driven B.Tech CSE student at VIT Bhopal (CGPA: 8.42), specializing in AI & ML. Skilled in Python, SQL, TensorFlow, and PyTorch, with hands-on experience in predictive modeling, data analysis, and real-world projects like medical imaging, GenAI planner, and vehicle price prediction. Eager to solve complex business problems with data at scale.

## PROFESSIONAL EXPERIENCE

### AI Intern

#### Intern | TATA STEEL UISL | Jamshedpur, India

May 2025 - June 2025

- Led and completed an internship project to "Detect and Identify Speeding Vehicles," applying technical analysis and problem-solving skills.
- Demonstrated self-motivation and reliability in an independent project setting under the guidance of the HR Learning and Development team.

## PROJECTS

### AI College Companion (Personal Project)

React.js, Node.js, Express, MongoDB, Gemini API

- Built a full-stack GenAI academic planner that parses PDFs to create personalized study schedules.
- Included features for task tracking, time-slot management, and cloud data storage.

### COVID-19 Detection & Segmentation

Chest X-ray Dataset | U-Net, PyTorch, TensorFlow, OpenCV

- Trained a U-Net model to perform semantic segmentation of COVID-19 infections in chest X-rays.
- Achieved 98.97% accuracy and a 0.927 Dice score via an end-to-end image processing and training pipeline.

### Used Car Price Predictions

Kaggle Vehicle Dataset | Linear Regression, Random Forest, XGBoost

- Performed full EDA on used vehicle listings with visualization and business insights
- Built and compared multiple ML models to predict resale price
- Evaluated performance using  $R^2$ , RMSE, MAE; improved accuracy via XGBoost.

## CERTIFICATIONS & VIRTUAL EXPERIENCES

- **Gen AI using IBM Watsonx** | AdroitProlearn (IBM Developer Skills Network) | Issued: June 2025
- **Deloitte Australia Data Analytics & Forensic Technology** | Forge Simulation
- **Tata Data Visualisation -Virtual Internship** | Forge Simulation
- **AWS APAC Solutions Architect -Virtual Internship** | Forge Simulation

## CONTACT

- 🏠 Jamshedpur, India 831011
- 📞 +91 9939369546
- ✉️ rituraj25082004@gmail.com
- 🌐 [Linkedin](#)
- 🌐 [Github](#)

## EDUCATION

### VIT Bhopal University | Bhopal, India

Bachelor of Technology (B.Tech), Computer Science & Engineering (AI & ML)

- Expected Graduation: May 2027
- Current CGPA: 8.42/10.0

### DAV Public School | Bistupur, India

- CBSE, Higher Secondary (12th Standard) | January 2023 | 86.4%
- CBSE, Secondary (10th Standard) | January 2021 | 95%

## SKILLS

- **Languages:** Python, Java, C++
- **Machine Learning/Data Science:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, XGBoost
- **Web Development:** React.js, Node.js, Express.js, HTML, CSS
- **Databases:** MongoDB, MySQL
- **Tools & Platforms:** Git, GitHub, IBM Watsonx, Gemini API, OpenCV