Dev Bansal

EDUCATION

VIT Bhopal University

June 2026

B. Tech. Computer Science Engineering

Current GPA: 8.55

Tagore International School, Bhopal, M.P.

Jul 2020 - Jul 2021

C.B.S.E (Class XII)

Percentage: 94.4%

Tagore International School, Bhopal, M.P.

Jul 2018 - Jul 2019 Percentage: 91.14%

C.B.S.E (Class X)

SKILLS

Languages: Python, Java, C++, SQL, JavaScript, HTML/CSS

Tools: Git/GitHub, Excel, Tableau, Streamlit

Libraries: pandas, NumPy, Matplotlib, Seaborn, TensorFlow, PyTorch

EXPERIENCE

Preprod Corp — Data Analyst Intern (Online)

Aug 2024 – Nov 2024

- Implemented **computer vision algorithms** using **YOLO** for real-world traffic optimization, resulting in improved traffic flow analysis
- Developed and fine-tuned **ML models** with performance tracking using **MLflow**, enhancing model accuracy and maintainability
- Processed streaming data using **Apache Kafka** and performed image manipulation with **kernels** for edge detection tasks
- Collaborated in **Agile Scrum** sprints, working on data processing and enrichment pipelines to improve data quality

PROJECTS

AutoML Streamlit App

Aug 2023

- Engineered a comprehensive AutoML platform using **Streamlit** that processes multiple data formats (**CSV/XLSX**), reducing model development time by **70**%
- Implemented robust data preprocessing pipeline utilizing **Pandas** and **NumPy**, featuring automated cleaning and custom transformation options
- Integrated advanced ML models from **Scikit-learn**, **XGBoost**, and **TensorFlow**, achieving **85**% accuracy across various classification and regression tasks
- Developed interactive dashboards with Matplotlib and Seaborn for real-time visualization of model metrics and performance insights

Social Media Engagement Analysis Bot — Supermind Hackathon | Python, Langflow, AstroDB Jan 2024

- Engineered automated web scraping pipeline using **RapidAPI** to collect data from **Instagram**, **Twitter**, and **Reddit**, processing **100+** posts daily
- Developed engagement analytics system with **Python** to calculate metrics like reach, interactions, and content performance, improving user insights by 85%
- Implemented data pipeline using **Langflow** and **AstroDB** for storing and processing social media data, enabling real-time content analysis

• Built interactive AI chatbot interface that analyzes user's social media performance and provides actionable content strategy recommendations

PathSarthi: Smart Navigation Aid for Visually Impaired | Computer Vision, IoT, Python Nov 2024 - Present

- Leading development of an economical smart cane (PathSarthi) using Raspberry Pi, integrating ultrasonic sensors and HD camera for comprehensive obstacle detection
- Created and annotated custom dataset of 2000+ Indian road images including vehicles, potholes, and infrastructure for model training
- Implemented real-time object detection using **MobileNet** architecture achieving **85**% accuracy, optimized for low-latency performance on edge devices
- Engineered multi-modal alert system combining **computer vision**, proximity sensors, and audio feedback for enhanced safety, reducing navigation risks by **70**%

ACHIEVEMENTS

Hackathon Achievement

August 2024

- Placed 4th out of 40 teams in competitive hackathon, demonstrating exceptional teamwork, creativity, and rapid problem-solving skills
- Developed innovative project under time constraints, showcasing adaptability and technical innovation

Competitive Programming

- Solved 100+ problems on LeetCode and GeeksforGeeks, highlighting strong analytical skills and algorithmic problem-solving in Java and Python
- Enhanced proficiency in data structures, dynamic programming, and system design through consistent practice

Additional

Languages: English(Fluent); Hindi(Fluent), Japanese(Beginner)

Certifications/Training: JLPT N5; FullStack DS and AI by NareshIT; Bits and Bytes of Computer

Networking; Cloud Computing and Marketing Analytics by NPTEL

Hobbies: Blogging and Novel Reading; Playing the Ukulele; Traveling and Exploring New Cultures