Kartikesh Singh

+91 8960349313 | kartikesh879@gmail.com | GitHub | LinkedIn | Lucknow, Uttar Pradesh

ABOUT ME

B.Tech Computer Science student at VIT Bhopal University with expertise in data analysis, machine learning, and front-end development. Experienced in computer vision algorithms, AI solutions and full stack development with responsive front end

EDUCATION

Vellore Institute of Technology, Bhopal — **Madhya Pradesh, India**
B.Tech - Computer Science and Engineering – **CGPA: 7.91** — Oct 2022 – Oct 2026

- **Specialization:** Computer Science CORE
- **Coursework:** Operating Systems, Computer Networks, Database Management Systems (DBMS), Theory of Computation (TOC), Data Structures and Algorithms, Machine Learning, Amazon Cloud Practitioner

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C++, SQL, JavaScript, HTML/CSS
- **Tools & Platforms:** Git/GitHub, Excel, Tableau, Streamlit, MLflow
- **Libraries & Frameworks:** pandas, NumPy, Matplotlib, Seaborn, TensorFlow, PyTorch, Scikit-learn, XGBoost
- **Specializations:** Computer Vision, Machine Learning, Data Analysis, Web Development

EXPERIENCE

Data Analyst Intern - Preprod Corp — **Sep 2024 - Nov 2024**

- Implemented computer vision algorithms using YOLO for real-world traffic optimization, increasing traffic pattern detection efficiency by 40%
- Developed and fine-tuned ML models with performance tracking using MLflow, reducing debugging time by 30%
- Processed streaming data using Apache Kafka and performed image manipulation with 4+ custom convolutional kernels for edge detection tasks
- Collaborated in 10 Agile Scrum sprints, enhancing data enrichment pipelines and improving data quality accuracy by 30% through streamlined preprocessing and validation techniques

PROJECTS

AutoML Streamlit App [GitHub]

- Engineered comprehensive AutoML platform that processes CSV/XLSX formats, reducing model development time by 70%
- Architected a data preprocessing pipeline for automated data cleaning and custom transformations, enhancing data quality by 40% and reducing model training time by 25%.
- Integrated multiple ML models with user-selectable options and side-by-side comparison, achieving up to 85% accuracy across classification and regression tasks
- Build dashboard with for real-time visualization of models metrics and performance insights
- **Technologies:** Python, Streamlit, Pandas, NumPy, Scikit-learn, XGBoost, TensorFlow, Matplotlib, Seaborn

Social Media Engagement Analysis Bot - Supermind Hackathon [GitHub]

- Engineered automated web scraping pipeline using RapidAPI to collect data from Instagram processing 100+ posts daily
- Developed engagement analytics system with Python to calculate metrics like reach, interactions, and content performance, improving user insights by 85%
- Designed data pipeline using AstraDB for storing and real-time content analysis
- Built interactive AI chatbot that analyzes user's social media performance and provides actionable content strategy recommendations
- **Technologies:** Python, Langflow, AstraDB, RapidAPI,Streamlit

Anime Otaku - Chat Platform for Anime Enthusiasts [GitHub]

- Architected a full-stack anime community website with 10+ dedicated community rooms, enabling real-time chat for 200+ users using WebSockets with ¡100ms latency
- Implemented real-time chat updates and user authentication for secure, seamless interaction across all community rooms
- **Technologies:** JavaScript, React, Tailwind CSS

ACHIEVEMENTS

- **Hackathon Achievement:** Placed 3rd out of 40 teams in a competitive hackathon (August 2024).
- **Competitive Programming:** Tackled more than 300 problems on LeetCode and GFG.

CERTIFICATIONS

- **GenAI** - *IBM*
- **JLPT N5** - *Japanese Language Proficiency Test*
- **Deep Learning** - *Jeremy Howard*
- **HTML, CSS, and Javascript for Web Developers** - *Coursera*

LANGUAGES AND INTERESTS

Languages: English (Fluent) | Hindi (Fluent) | Japanese (Beginner)
Hobbies: Blogging and Novel Reading |Playing Guitar |Traveling and Exploring New Cultures