

VARSHA SINGH

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CAREER OBJECTIVE

Motivated and detail-oriented Computer Science Engineering student with strong foundations in Java, data structures, and machine learning. Eager to apply AI and data-driven solutions to real-world problems. Seeking opportunities to contribute, learn, and grow as a Machine Learning Engineer.

EDUCATION

Vellore Institute of Technology, Amaravati (VIT AP University) <i>Bachelor of Technology in Computer Science</i>	Sept. 2022 - Present Cgpa: 8.38
Loyola High School, Patna, Bihar, India <i>PMC with Information Technology</i>	June 2019 - July 2021 Score: 81%
Sunbeam School Lahartara, Varanasi, UP, India	2017-2019 Score: 94%

PROJECTS

Smart QR Tools using Python & Flask

- Created a tool that converts text into QR codes and generates UPI payment QR codes for easy transactions.
- Used Flask to build the backend logic and integrated front-end UI for user input.
- Applied qr code and segno libraries for QR generation.

Pothole Detection using YOLO & Drone Video

- Developed a model to detect potholes in aerial drone footage using YOLOv5.
- Preprocessed video data and labeled potholes with bounding boxes for model training.

Smart Blood Donation App with ML-based Donor Matching

- Designed and developed a smart web app to connect blood donors and recipients with real-time location-based filtering.
- Built a machine learning model to predict donor eligibility using health and history data.
- Integrated Google Maps API for proximity-based donor search and Flask backend for API management.

SKILLS

- **Technical Skills:** Python, Java, SQL, Matlab, Flask, Android Studio, Tableau, Git, Power BI
- **Soft Skills:** Leadership, Advocacy, Mentoring, Public Speaking, Written Communication, Empathy, Strategic Thinking, Creativity, Problem-Solving, Event Planning
- **Languages Known:** English (C1-Advanced), Hindi (C2-Mastery), French (B1-Intermediate), Japanese (A1-Beginner)