GUDI VISHNU TEJA

+91 7075988377 gudivishnuteja@gmail.com linkedin.com/in/gudi-vishnu-teja github.com/gudivishnuteja

Education

Amrita Vishwa Vidyapeetham **2021 Sep - 2025 May**
Bachelor of Technology - Computer Science and Engineering (Artificial Intelligence) *Chennai, Tamil Nadu*

Technical Skills

Programming Languages: Python, SQL, JavaScript, HTML/CSS.
Technologies and Frameworks: TensorFlow, PyTorch, React.js, MongoDB, Firebase, MATLAB.
Core Competencies: Data Structures and Algorithms, Object-Oriented Programming, Database Management System.

Internship

AI and Data Analytics Intern **Dec 2024 - Jan 2025**
AICTE, Shell India Markets Pvt. Ltd. & Edunet Foundation.

- Completed 4-week internship solving real-world AI/data analytics problems using Python (Pandas, scikit-learn) for preprocessing and ML model building on datasets with 1000+ records.

Projects

AI-Based Smart Accident Detection System | *YOLOv8, Computer Vision, Twilio API* **Nov 2024**

- Developed a real-time accident detection system to improve emergency responsiveness by analyzing CCTV traffic footage using deep learning.
- Trained YOLOv5/YOLOv8 models on over 2,000 annotated video frames for high-precision crash detection.
- Reduced false positives by 35% by applying temporal filtering and object motion tracking.
- Integrated Twilio API to automate emergency alerts and reduce average dispatch time.
- Achieved 89% precision in accident identification and reduced emergency response time by 40%.

Job Now Web Platform for Job Search and Recruitment | *MERN Stack, AWS EC2* **Jun 2024**

- Job Now is a web application that connects job seekers with recruiters to simplify job searching and hiring processes.
- Built using the MERN stack (MongoDB, Express, React, Node.js) for both frontend and backend development.
- Designed separate dashboards for job seekers to apply for jobs and for recruiters to post and manage applications.
- Implemented secure user authentication using JWT and stored data in MongoDB Atlas.
- Deployed the application on AWS EC2 using Docker for reliable cloud hosting.

Traffic Signal Control System | *Deep Q-Network (DQN), SUMO, OpenAI Gym* **Dec 2023**

- Built an adaptive traffic light control system using Deep Q-Network (DQN) to optimize vehicle flow at intersections in urban scenarios.
- Simulated 4-way intersection traffic in SUMO with real-time feedback using TraCI and OpenAI Gym.
- Implemented custom reward functions, experience replay, and epsilon decay to improve agent training over 10,000 episodes.
- Compared results with fixed-timing and rule-based controllers to measure traffic efficiency.
- Reduced average vehicle waiting time by 28% and queue length by 22% compared to traditional signal plans.

Publications

• **14th International on Cloud Computing, Data Science & Engineering** **Jan 2024**
Paper: Deep Learning Based Calorie Estimation in Indian Food

• **International Conference on Advances in Electronics, Computers and Communications** **Sep 2023**
Paper: Stroke Prediction Using Machine Learning

Certifications

- AWS Cloud Technical Essentials (AWS)
- Data Science (Coursera)
- People and Soft Skills for Professional and Personal Success (Coursera)
- TCS Master Craft Data Plus (TCS iON)

Achievements

- Special appreciation in Code in Unknown Language at Tantrotsav Jun 2023
- Finalist in Smart Digital Hackathon Oct 2022