GIRISH NANDANWAR

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OBJECTIVE

Aspiring software engineer with a solid foundation in problem solving and a passion for learning new tools and technologies. Looking for an opportunity to apply skills in a real-world solution while growing both technically and professionally.

ACHIEVEMENTS

- **Winner of SIH25 winning a cash prize of 1.5 Lakhs rupees.**
- **Stage 2 Winner at Bhashini Maha Hackathon winning a cash price of 70 thousand rupees.**
- **Finalist at 2 National Level Hackathons.**
- **Knight at LeetCode max rating of 1881.** Leetcode-Profile
- **3 star at CodeChef with a max rating of 1702.** Codechef-Profile
- **Specialist at Codeforces with a max rating of 1451.** Codeforces-Profile
- **Solved over 1000+ problems on data structures and algorithms across major coding platforms.**

PROJECTS

Madat - Voice-Based Emergency Reporting System — Source Code

Technologies: React, NodeJS, Mongo DB, Bhashini API

- Developed a web platform enabling users to report emergencies via voice messages in regional languages with automatic location sharing for emergency responders.
- Integrated Bhashini APIs for real-time speech-to-text transcription and translation, ensuring messages are understandable to emergency response officers.
- Designed a decision-support dashboard for officers to view translated messages and dispatch services (police, ambulance, firefighter) accordingly.

Desktop Agent - Voice-Based desktop Automation System — Source Code

Technologies: Python, PySide6, Gemini API

- Developed a continuous voice-controlled Windows automation agent using Python, PySide6, and Gemini API, enabling autonomous execution of multi-step desktop operations.
- Designed a JSON-driven command engine with context retention and self-planned task workflows, supporting application control, file management, and GUI interaction.
- Implemented real-time speech recognition with a thread-safe UI feedback system, providing live transcription, status updates, and automated error handling.

Adaptive Traffic Signal Timer — Source Code

Technologies: Python, YOLOv8, Pygame, OpenCV, Multi-threading

- Developed an intelligent traffic management system that integrates real-time computer vision with a dynamic simulation to optimize signal timings, reducing average vehicle waiting time by 20-30% compared to fixed-timer systems.
- Implemented multi-lane vehicle detection using YOLOv8 and Python threading to process four concurrent video feeds, calculating real-time traffic density to allocate green-light cycles proportionally to demand.
- Integrated an emergency vehicle priority module utilizing a custom-trained YOLO model to detect ambulances or other emergency vehicles, triggering immediate signal overrides that reduce emergency clearance times by approximately 35%.

SKILLS

Programming Languages — C++, Java, Python
Libraries and Frameworks — React JS, Node JS, Express JS, Redux Toolkit
Course Work — DSA, Machine Learning, DBMS, Operating System, Computer Networks, OOPs, Cloud, Agentic AI
Tools and Technologies — Git, GitHub, Docker, Redis, Amazon Web Services, Azure
Database — MySQL, PostgreSQL, MongoDB

EDUCATION

Yeshwantrao Chavan College of Engineering (YCCE), Nagpur — 2022 – 2026
Bachelor of Technology in Computer Technology: (8.1 CGPA)

Govind Junior College, Palandur — 2021 – 2022
HSC: (72.50 %)

Hyacinth Little Flower High School, Lakhani — 2019 – 2020
SSC: (85.20%)