K B Venkataramana

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Software Developer | FullStack Web Developer | Roboticist | Computer Vision

EDUCATION

Bachelor of Engineering, R.M.K Engineering College – Chennai, Tamil Nadu — Aug 2022 – May 2026
Electronics and Communication Engineering — CGPA: 8.1

EXPERIENCE

Project Team Lead – e-Yanthra Hackathon.

- Successfully competed against numerous teams from across the country, demonstrating technical skills, creativity, and problem-solving abilities.
- Got invited to participate in Symposium in IITB

TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript.
OS: Windows, Ubuntu.
Frameworks: TensorFlow, OpenCV, ROS2(Robot Operating System2), Django, ReactJS.
Packages: NumPy, Pandas, Matplotlib, MediaPipe.
Algorithms: SLAM (Simultaneous Localization &Mapping), Path Planning algorithms.
Other Skills: Data structures, Gazebo, Algorithmic Thinking, Real-time Operating System, UX/UI.

PERSONAL PROJECTS

Personal Protection Equipment Detection
Description: It helps to monitor and find out if the construction workers are wearing necessary safety equipments. **Created 7 custom YOLO objects** and trained over 1300+ data.
Tools used: OPENCV, YOLO V8

Gesture-Based Home Automation
Description: It is a home automation system that leverages the power of computer vision and machine learning to create an intuitive, gesture-based interface for controlling household devices. By analyzing user gestures, specific processes such as turning on or off the lights can be seamlessly automated with a rapid response time. I **Won three National level paper presentation** events for this project.
Tools used: OPENCV, SERIAL COMMUNICATION, MEDIAPIPE

Computer vision-based monitoring of Underloading of Coal Wagons
Description: We created this for **Ministry of coal at SIH 2023**. It is an IoT device designed to monitor the underloading of coal wagons and promptly notify the concerned authorities and payloaders. Utilizing advanced computer vision and TensorFlow, the system ensures precise monitoring and efficient communication.
Tools used: OPENCV, TENSORFLOW

Personal Portfolio Website
Description: I designed and developed my personal portfolio website from scratch to showcase my skills, projects, and professional experience.
Tools used: HTML, CSS, JAVASCRIPT

HONORS & AWARDS

Top 10 Placement in National Level Hackathon e-Yanthra by IIT Bombay
Winner – National level Paper Presentation held in Easwari College of Engineering
Runner - National level Paper Presentation held in Sri Venkateshwara College of Engineering
Runner - National level Paper Presentation held in SIMATS Engineering