NIHARIKA **NAMALA**

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SUMMARY

Enthusiastic and detail-oriented computer science undergraduate with a strong foundation in technology, and a keen interest in computer vision and automation. Passionate about solving real-world challenges through innovation and continuous learning. Highly motivated, quick to adapt, and eager to contribute meaningfully to dynamic, growth-oriented internship roles.

SKILLS

- Python
- basics of c
- basics of c++
- basics of HTML
- basics of Java programming
- Time management

EXPERIENCE

12/2023 - 06/2024

Industrial Training Intern

IndusTech Solutions pvt limited - Hyderabad, India

Project: Autonomous Vehicle Control.

- This project simulates how an autonomous vehicle (self-driving car) can detect and follow a path using only software and a camera.
- Developed a Python-based system to detect and follow a black line path on a white surface, replicating road lane following.
- Processed live video input using OpenCV for real-time image analysis and decision-making.
- Implemented logic to determine movement directions: Left, Right, or Straight, based on the detected line's position.
- Captured input from a webcam or pre-recorded video file to simulate real-world driving conditions.
- Demonstrated how computer vision can be used to control autonomous systems using Python and OpenCV.

Key Features:

- Real-time line detection using OpenCV.
- Direction decisions: Left, Right, Straight.
- Uses Python, OpenCV, and NumPy.
- Simple logic and beginner-friendly.
- Visual output with detected path.
- Scalable for advanced automation projects.

EDUCATION AND TRAINING

Anurag University - Hyderabad
undergraduate b.tech | 2024-2027
Govt Polytechnic For Womens-Medak
Diploma | 92% | 2021-2024
Zilla Parishad High School-Tadwai
SSC | 10CGPA | 2021

CERTIFICATIONS

- **Industrial Training Certificate** - Autonomous Vehicle Control Project
IndusTech Solutions Pvt Limited | 16/2023-15/2024
- **Hackathon Innoquest Certification-**Emotion Detection For Autism Support

PROJECTS

- **Fire detection system** - A smoke detector is a device that senses smoke, typically as an indicator of fire. Fire alarm systems, known as smoke alarms, generally issue a local audible or visual alarm upon detection of smoke. Generally, a fire alarm consists of smoke detectors with a basic assumption that smoke will be generated by the fire. If we detect smoke, then the fire is detected. Even if there is a fire, the smoke may be generated quite later after burning the surroundings. We will detect the fire using Arduino Uno, which is interfaced with a temperature sensor and buzzer. The temperature sensor senses the heat, and the smoke sensor senses any smoke generated due to burning or fire. The buzzer connected to the Arduino gives us an alarm indication
- **Plant leaf detection** - Leaf shape description is the key downside in leaf identification. Up to now, several form options have been extracted to explain the leaf form, however, there's no correct application to classify the leaf once capturing its image and identifying its attributes. A number of the classification techniques used are fuzzy logic, principal component analysis, and k-nearest neighbors classifier, and the main purpose of the proposed system is to detect the diseases of plant leaves by using feature extraction methods, where features such as shape, color, and texture are taken into consideration, and the detection accuracy is enhanced with the proposed algorithm (CNN) The proposed method is fully automatic, while existing methods require user input to select the best

ACCOMPLISHMENTS

- **State-level kabaddi player** at the school and diploma levels developed strong collaboration skills, leadership qualities, and physical and mental resilience
- **participant of Srujana TechFest** during diploma ,presenting a project on **Fire Detection System** showcasing innovation and technical skills

WEBSITES, PORTFOLIOS, PROFILES

- https://www.linkedin.com/in/namala-niharika-a728b932a