S NAGAPREETHI

Hyderabad, Telangana, India

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Education

MLR Institute of Technology   **2020 − 2024**
Bachelor of Technology in Computer Science & Engineering - AI & ML (CGPA: 8.49)   *Hyderabad, India*

Narayana Junior College   **2018 − 2020**
XII - Telangana State Board of Intermediate Education (Percentage: 95.1)   *Hyderabad, India*

Experience

MLR Institute of Technology   **Jan 2023 − Apr 2024**
Academic Researcher   *Hyderabad, India*

- Actively collaborated in conducting statistical analyses and devising algorithmic workflows of various ML techniques.
- **Authored a research paper** (under publication), comparing ML algorithms to identify key effectiveness metrics for optimizing **Agricultural Surveillance System**, achieving 82% accuracy in crop disease detection.

Sclanet Inc.   **Mar 2023 − Aug 2023**
AIML Intern   *Hyderabad, India*

- Collaborated with a 5-person ML team to develop an inventory management model that processed 1000+ SKUs daily, reducing stockouts by 45% and improving inventory accuracy to 87% using Computer Vision and ML.
- **Conducted extensive product image searches** to curate a diverse and relevant set of **1000+ product images.**

H-Bots Robotics   **Mar 2022 − Sep 2022**
Machine Learning Intern   *Hyderabad, India*

- Collaboratively developed an **IoT-enabled interactive robot** deployed for college laboratories to detect and identify individuals, measure their temperature through a handshake, and greet them by name.
- **Reduced processing time by 25%**, **increased accuracy by 15%**, integrated servo motors and temperature sensors, and authored a technical paper detailing the design, implementation, and performance of the robot.

Projects

Driver Assistant System 🔗
Python, Computer Vision, Object Detection

- An artificial agent to reduce human error-related road crashes, focusing majorly on **drowsiness detection**, **lane detection**, **lane departure**, **lane keeping assistance**, **object detection & recognition**, and **collision warning**.

IoT Based Interactive Robot 🔗
Python, Sensors, Facial Recognition, ML, CV

- Built an **IoT based interactive robot** that primarily detects and identifies a person, checks their temperature with a handshake and greets them with their name, implementing **Computer Vision** and **ML** approaches.

Technical Skills

Languages: Python, Java, and C.
Tools / Software: Git, GitHub, Visual Studio.
Libraries and Frameworks: NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch, NLTK.
Databases and DBMS: Oracle Database 10g Express Edition, MySQL.
Fundamentals: Prompt Engineering, ML, NLP, CV, Research methodology.
Soft Skills: Communication, Team-work, Analytical, Interpersonal, and Problem-solving.

Courses and Certifications

- Hands-on approach to AI for real-world applications - IIT Kharagpur AI4ICPS   November 2024
- Introduction to Cloud Computing - IBM   February 2023
- Machine Learning Onramp - MathWorks   September 2022

Achievements

- **Patent | Driver Assistant System** - Application Number: #202341076488
- **Patent | Crop Monitoring with AI Based Autonomous Farm Rover** - Application Number: #202341038965
- **Technical Paper | ICCCI 2024** - Hello, Humans! Welcome to Roboverse: An IoT Based Interactive Robot