S NAGAPREETHI

Hyderabad, Telangana, India

✉ preethisomayajula@gmail.com in Preethi Somayajula ○ SnPreethi ● Portfolio

Education

MLR Institute of Technology	**Nov 2020 – Jun 2024**
Bachelor of Technology in Computer Science & Engineering - AI & ML (CGPA: 8.49)	*Hyderabad, India*
Narayana Junior College	**Jun 2018 – Jun 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*

- Authored a research paper on **Agricultural Surveillance System** detecting crop diseases with **82% accuracy**.
- Developed a **forecasting system** that enhanced prediction **precision by 40%** through automated data integration.
- Interpreted **statistical analyses** to identify key metrics for optimization, resulting in **25% faster workflow**.

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

- Collaborated to build **inventory management system** processing 1,000+ SKUs using ABC inventory analysis.
- Curated a comprehensive **database of 1,000+ product images** for model training and validation.
- Assisted in drafting **technical documentation**, contributing to **30% reduction in support inquiries**.

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

- Programmed an **IoT robot** for lab access control of 300 unique users via **facial recognition** & **thermal handshake**.
- Coordinated with 2 departments to integrate sensors, achieving **25% faster processing**, and **15% higher accuracy**.
- Authored a **technical paper** detailing the design, implementation, and performance aspects of the robot.

Projects

Driver Assistant System 🔗

Python, Computer Vision, Object Detection

- Devised a **comprehensive safety system** integrating 7 distinct modules with **79% accuracy** in hazard identification.
- Optimized **real-time object detection** with 30fps processing speed & **81% accuracy** in varying lighting conditions.
- Reduced potential collision scenarios through **predictive warning systems** operating at **120ms latency**.

IoT Based Interactive Robot 🔗

Python, Sensors, Facial Recognition, ML, CV

- Engineered an IoT-enabled **face recognition system** in identifying up to **300 unique users** through CV and ML.
- Integrated automated temperature-sensing handshake and workflows, helping **reduce false positives by 40%**.
- Developed **personalized greetings and interaction** features with **average response time of 0.8 seconds**.

Technical Skills

Languages: Python, Java, C, and SQL. **Tools / Software**: Git, GitHub, Visual Studio, and Tableau.
Libraries and Frameworks: NumPy, Pandas, Scikit-learn, Tensorflow, NLTK, Matplotlib, and Seaborn.
SDE Core: DSA Fundamentals, Software Architecture, SDLC, Debugging & Troubleshooting.
Fundamentals: Statistical Analysis, ML, Neural Networks, CV, NLP, Research & Documentation.

Courses and Certifications

- Hands-on approach to AI for real-world applications - IIT Kharagpur AI4ICPS	Nov 2024
- Test Automation - EPAM Systems	Aug 2023
- Introduction to Cloud Computing - IBM	Feb 2023

Achievements

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