

## DEEPIKA APARLA

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### CAREER OBJECTIVE

I aspire to build a successful career in a progressive organization where I can apply my skills, knowledge, and passion for continuous learning. My goal is to contribute effectively to organizational objectives while gaining practical exposure and professional growth. I am eager to take on challenging responsibilities, develop innovative solutions, and collaborate with dynamic teams. With a strong sense of dedication and adaptability, I aim to create value for the company while advancing my career.

### EDUCATION

Teegala Krishna Reddy Engineering College	2021 -2025
Btech/Electronics and Communication Engineering	CGPA 8.5/10

### TECHNICAL SKILLS

PROGRAMMING:	Python   JavaScript   SQL
WEB TECHNOLOGIES:	HTML5   CSS3   Django   Bootstrap   Git
TOOLS:	Github   VS Code   PowerBI   MS Excel   PowerPoint   MySQL   MATLAB

### PROJECTS

#### Remote Controlled Surveillance Robot

- Designed and implemented a **wireless-controlled surveillance robot** using **ESP32-CAM, DC motors, and Raspberry Pi 3**, enabling real-time video streaming to Android smartphones via Wi-Fi.
- Developed a **mobile-controlled navigation system** allowing remote operation through IoT-based Android Chrome application.
- Integrated **IP camera module** for live surveillance, achieving **95% clear video transmission within 20 meters** range in testing.
- Powered the robot with a **12V rechargeable battery**, ensuring **3+ hours of continuous operation**.

#### Hand Sign Detection (ASL) Using AI And Image Processing

- Designed and implemented a real-time **ASL hand gesture recognition system** using **Convolutional Neural Networks (CNNs), OpenCV, and TensorFlow/Keras**.
- Developed a **two-stage pipeline**: (1) Hand sign detection & recognition, (2) Text-to-sign conversion with speech input support.
- Optimized image preprocessing with **OpenCV & MediaPipe**
- Integrated speech-to-text and text-to-sign mapping, expanding the system's usability for both **hearing-impaired users** and **ASL learners**.

### CERTIFICATIONS

- Certification in Machine Learning using Python Library by NASSCOM
- Certification in Building Data Analytics Application with Cloud by EY
- Certification in Data Analytics by TATA Group

### SOFT SKILLS

- Communication
- Patience
- Problem-solving
- Time management
- Leadership