

## Department of CSE-IOT (Internet of Things)

### Innovation Fair 2026

**Date:-30-01-2026**

### Organized by:

**Jawaharlal Nehru Technological University, Kakinada (JNTUK)**

### Introduction

Innovation Fair 2026 was organized by **Jawaharlal Nehru Technological University, Kakinada (JNTUK)** to encourage students to showcase innovative ideas and practical solutions addressing real-world problems. As part of this event, students from **Ramachandra College of Engineering, Eluru**, presented an innovative healthcare project titled “**MediGuard Bot.**”

### Objectives of the Event

The main objective of the **MediGuard Bot** is to design and develop an intelligent healthcare assistance system that:

- Automatically dispenses medicines on time
- Monitors environmental hazards such as gas leakage and fire
- Enables remote patient monitoring using IoT technology
- Provides live video surveillance through camera integration

The system aims to reduce medication errors, improve patient safety, minimize dependence on caregivers, and enhance continuous healthcare support for elderly and patients in home environments

## Description of the Event

The MediGuard Bot works as a smart healthcare assistant designed for home use. The system ensures timely medicine delivery while continuously monitoring environmental conditions for safety threats. In case of gas leakage or fire detection, alerts can be sent remotely through IoT connectivity. Additionally, a camera module allows caregivers or family members to monitor the patient remotely, ensuring safety and continuous supervision.

Flow diagrams and system architecture diagrams can be included in the poster/report to improve understanding and visibility of the working process.

## Novelty of the Project

The novelty of the **MediGuard Bot** lies in its **multi-functional integration**. Unlike traditional systems that offer only reminders or basic medicine dispensing, this project combines:

- Automatic medicine dispensing
- Real-time gas and fire detection
- IoT-based remote monitoring
- Live video surveillance

All these features are integrated into a single, compact, low-cost, and user-friendly platform, making it a unique and efficient solution for smart home healthcare automation.



Students of Ramachandra College of Engineering presenting their innovative project “MediGuard Bot” at the Innovation Fair 2026, JNTUK Kakinada. The team explained the working model, highlighting smart healthcare automation, safety monitoring, and IoT integration. The stall attracted attention for its practical approach to improving patient care and home safety.



- The Innovation Fair 2026 was graced by the presence of Shri Nara Lokesh, Hon'ble Minister, and Government of Andhra Pradesh, who interacted with students and reviewed innovative projects.”
- MediGuard Bot: A Smart IoT-Based Healthcare and Safety Assistance System
- Innovative MediGuard Bot for Automated Medicine Dispensing and Patient Monitoring
- MediGuard Bot – Intelligent Healthcare Solution for Elderly and Home Safety



The Head of the Department interacted with **Shri Nara Lokesh** Vice-Chancellor **Prof. C. S. R. K. Prasad** during Innovation Fair 2026 and explained the MediGuard Bot project. The discussion focused on the project's objectives, real-time applications in healthcare, and its potential impact on patient safety and home automation. Shri Nara Lokesh appreciated the innovation and encouraged the team for their practical approach

## OUTCOME OF THE EVENT

The **Innovation Fair 2026** was conducted successfully and achieved its objectives of promoting creativity, innovation, and practical learning among students. Participants gained hands-on experience by presenting real-time solutions to societal and technological challenges. The event enhanced students' technical knowledge, problem-solving skills, and confidence in explaining their projects to experts and peers. It also encouraged teamwork, innovative thinking, and awareness of emerging technologies. Overall, the event provided valuable exposure to research, innovation, and entrepreneurship, motivating students to develop future-ready solutions.

## Student Participation

The following were presented **Innovation Fair 2026**

1. **B.V Narendra Bavisetti**
2. **G. Devi Sowmya**
3. **D. Anil Kumar**

Students actively participated in the **Innovation Fair 2026** by presenting innovative projects and working models. The participants demonstrated strong technical skills, creativity, and teamwork while explaining their ideas to faculty members, experts, and visitors. The event provided students with an opportunity to gain hands-on experience, improve communication skills, and interact with dignitaries and evaluators, thereby enhancing their confidence and practical knowledge.

## **A proud moment for RCE**

The successful presentation of the MediGuard Bot at Innovation Fair 2026 marked a proud moment for **Ramachandra College of Engineering**. The project received appreciation from dignitaries and experts, highlighting the institution's commitment to innovation, research, and practical learning.

**HoD**

**Dean -Academics**

**Principal**