# MEDICATION REMINDERS FOR ELDERLYUSERS USING FACIAL RECOGNITION

A project report submitted in partial fulfillment of the requirements

for the award of the Degree of

**BACHELOR OF TECHNOLOGY** 

In

#### COMPUTER SCIENCE AND ENGINEERING

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## **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Permanently affiliated to JNTU-GV VIZIANAGARAM)

(Accredited by NAAC, UGC & NBA, AICTE)

MAKAVARAPALEM, NARSIPATNAM, VISAKHAPATNAM-531113 (2020-2024)

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## CERTIFICATE

This is to certify that the project entitled "MEDICATION REMINDERS FOR ELDERLY USERS USING FACIAL RECOGNTION" in partial fulfillment for the of degree of Bachelor of Technology in COMPUTER SCIENCE AND ENGINEERING, at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bonafide work carried out by S HYMAVATHI (20811A05A1), B GUNASEKAR (20811A0519), N ANJIREDDY (20811A0516), PAJAY(20811A0587) under the guidance and supervision during 2023-2024.

PROJECT GUIDE

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### Abstract:

The system's adaptive nature, personalized reminders, and seamless user experience offer promising prospects for improving medication adherence and enhancing health outcomes among elderly individuals. Continuous refinement and collaboration with healthcare professionals can further optimize the system's capabilities and align it with user needs and preferences. Ultimately, this medication reminder system represents a significant advancement in medication management, offering a proactive and personalized approach to support medication adherence in the elderly population.

This abstract presents a medication reminder system leveraging facial recognition technology aimed at enhancing medication adherence among elderly users. Medication non-adherence poses significant challenges, particularly for older individuals managing complex medication regimens. Traditional reminder systems often lack personalization and adaptability, leading to suboptimal adherence rates. In response, this system offers personalized reminders and adaptive alerts tailored to individual user needs and behaviors.

The system utilizes facial recognition technology to seamlessly identify users and retrieve their personalized medication schedules from a secure database. Leveraging deep learning algorithms, the facial recognition module accurately identifies users in real-time, ensuring timely and accurate reminders. Adaptive reminder strategies adjust based on user responses and adherence patterns, maximizing effectiveness in supporting medication adherence goals.

Key features include a user-friendly interface designed with simplicity and clarity, large fonts, and clear icons to accommodate elderly users. The medication schedule database securely stores user profiles and medication data, while the reminder engine dynamically generates reminders based on user identification and medication schedules.