

NARASARAOPETA ENGINEERING COLLEGE (Autonomous) DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2024 - 2025

Batch Number	CG1
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Guide	Dr.S.V.N.Sreenivasu
Title	Next-Gen Attendance System
Domain/Technology	Deep Learning
Dataset Link	https://drive.google.com/file/d/1a4ceZpUXaHXZQy9OmYK3Uy7ZQwFJsSnp/view?usp=sharing
Base Paper Link	https://ieeexplore.ieee.org/document/10497524
Software Requirements	Browser: Any Latest browser like Chrome Operating System: Windows 11 Language: Python Platform: Visual Studio Code
Hardware Requirements	Processor: 11th Gen Intel(R) Core TM i7-11370H @ 3.30GHz 3.30 GHz RAM: 8GB (gigabyte) System Type: 64-bit operating system, x64-based processor
Abstract	The Next-Gen Attendance System is an automated advanced solution in the real-time tracking of attendance using deep learning models to streamline and enhance the process. With a wide capability of using YOLOv8 for very accurate face detection, this system offers three flexible modes for attendance capture: webcam live feeds, pre-recorded videos, or static images. These individual detected faces are uniquely labelled, and no same face gets recorded more than once in multiple sections. The system also makes use of CNN models to optimize facial feature and eye identification, even under dynamic environments. It significantly reduces the amount of manual effort and human error that is possible in attendance monitoring. The records are kept in secure easy to access excel sheets that uniquely identify each user. This solution has been designed for modern classrooms and pave the way for seamless integration of AI in attendance management systems within educational institutions.

Signature of the student(s) Signature of the Guide Signature of the project coordinator