

Innovation Laboratory
AE3920I

ATTENUE

SMART ATTENDENCE SYSTEM



Final Presentation

CONTENT

- 01** INTRODUCTION
- 02** PROBLEM
- 03** SOLUTION
- 04** STEPS
- 05** PROGRESS
- 06** IOT
- 07** PTODUCT

INTRODUCTION

The Smart Attendance System using Computer Vision is an automated solution designed to streamline the process of marking attendance in classrooms. By leveraging face recognition technology, the system enables professors to capture a photo of the class, which is then processed to identify students and automatically record their attendance. This eliminates the need for manual roll calls, saves time, and enhances accuracy, providing a modern, tech-driven approach to classroom management.



PROBLEMS



Manual Attendance is Time-Consuming and Prone to Errors:

In large classrooms, taking attendance manually consumes valuable lecture time and often results in errors, such as missed entries or incorrect marking.

Lack of a Reliable System to Prevent Proxy Attendance:

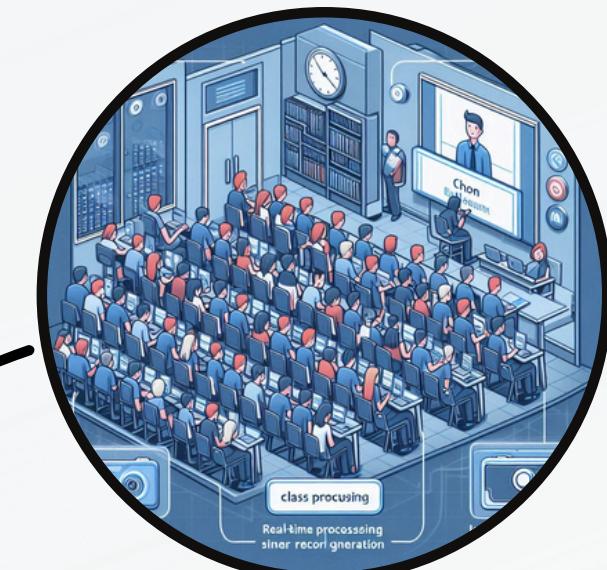
Traditional attendance methods allow for the possibility of proxy attendance, where students can mark attendance for absent peers, leading to inaccurate records.



SOLUTIONS

Real-Time Processing and Instant Record Generation: The system processes the class photo in real-time, generating attendance records almost instantly, preventing delays and minimizing disruption during lectures.

Automated Attendance through Face Recognition: By using computer vision to automatically identify and record the attendance of students from a classroom photo, the system reduces the time spent on manual attendance.



Elimination of Proxy Attendance: With facial recognition technology, each student is uniquely identified based on their facial features, ensuring that only present students are marked, thereby preventing proxy attendance.

STEPS

01

02

03

04

MAKING OF
COMPUTER
VISION
MODEL

MAKING
OF
APPLICATION

INTEGRATE
THE MODEL
WITH THE
APPLICATION

IOT

PROGRESS

Now we are importing data (images) directly from Google-Drive

initially we were embedding images every time, but now we embed it only once and use the same for the number of time

IOT Model is ready, now we are able to capture image and process it from Raspberry Pi itself. And export to model directly

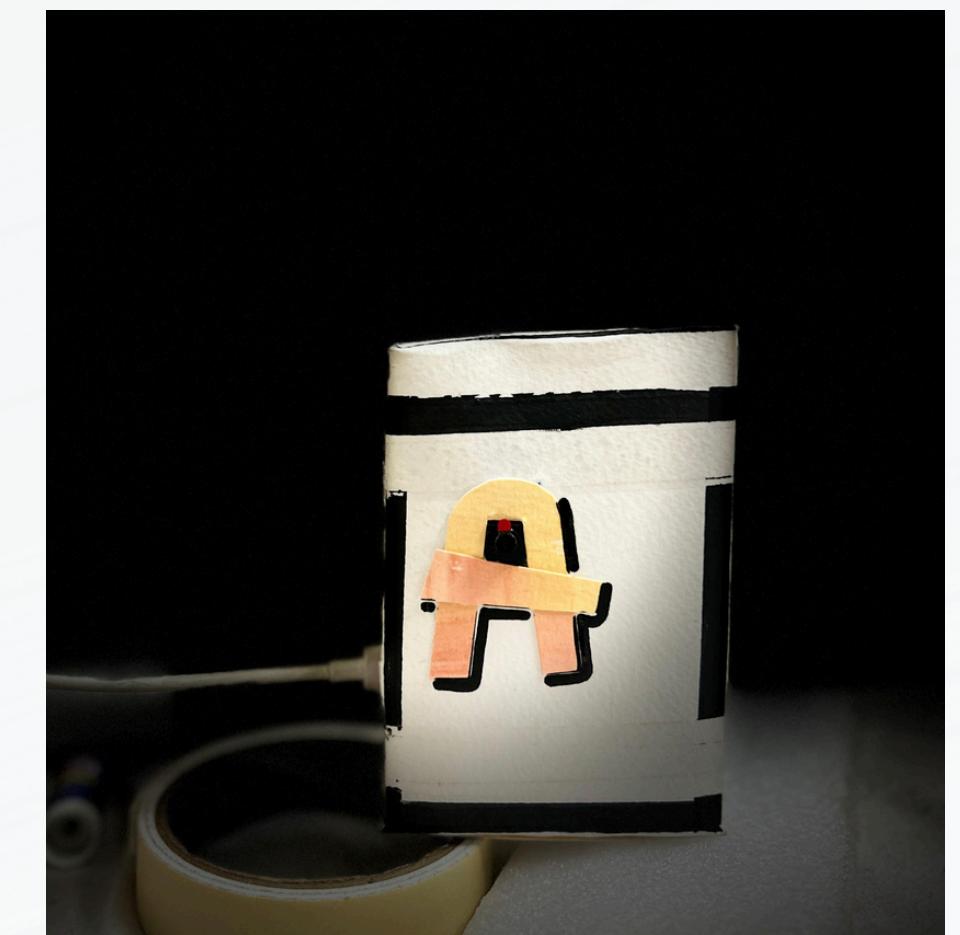
IOT



+



=



Raspberry Pi

Camera
Module

Attenuate

REVENUE MODEL

Document Link:

[https://docs.google.com/document/d/1dpl5iwYFx7Eijk9IDqHALnqHFLW2p4f4/edit?
usp=sharing&oid=117029742341889742871&rtpof=
true&sd=true](https://docs.google.com/document/d/1dpl5iwYFx7Eijk9IDqHALnqHFLW2p4f4/edit?usp=sharing&oid=117029742341889742871&rtpof=true&sd=true)



OUR TEAM



THANK YOU

Team ATTENUE

