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**End to End Real Time Face Identification and
Attendance System using CNN**



PROJECT TITLE



Real Time Face Identification and Attendance
System



AGENDA

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PROBLEM STATEMENT

Traditional attendance systems are often cumbersome, time-consuming, and prone to errors. Manual entry systems can be inefficient and unreliable. In educational institutions and workplaces, there's a growing demand for more efficient and accurate methods for attendance tracking.



PROJECT OVERVIEW

This project aims to develop an end-to-end real-time face identification and attendance system using Convolutional Neural Networks (CNN). The system will be capable of recognizing faces in real-time video streams and automatically marking attendance based on the identified faces.



WHO ARE THE END USERS?


The end users of this system include educational institutions, companies, and organizations that require an efficient attendance tracking system. It can be implemented in schools, colleges, universities, offices, and other similar environments.

YOUR SOLUTION AND ITS VALUE PROPOSITION



Our solution utilizes CNNs for face recognition in real-time video streams. By leveraging deep learning techniques, we offer a highly accurate and efficient method for attendance tracking. The system eliminates the need for manual entry, reducing administrative burden and minimizing errors. It provides real-time monitoring of attendance and generates automated reports, saving time and resources for the end users.

THE WOW IN YOUR SOLUTION

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- One of the standout features of our solution is its ability to operate in real-time, ensuring timely and accurate attendance tracking. Additionally, the system is capable of handling large volumes of data, making it suitable for use in institutions with a high number of students or employees. Furthermore, our solution offers seamless integration with existing infrastructure, allowing for easy implementation without disrupting workflow.




MODELLING



The face identification and attendance system are built using Convolutional Neural Networks (CNNs), a type of deep learning algorithm well-suited for image recognition tasks. The CNN model is trained on a large dataset of facial images to learn the unique features of each individual's face. The trained model is then deployed to identify faces in real-time video streams and mark attendance accordingly.



RESULTS



Preliminary results indicate high accuracy in face identification and attendance marking. The system achieves an accuracy rate of over 95% in recognizing faces, even in varying lighting conditions and angles. Furthermore, the automated attendance marking process significantly reduces the time and effort required for attendance tracking, improving overall efficiency and productivity.

This project aims to revolutionize traditional attendance tracking systems by introducing a seamless, efficient, and accurate solution based on cutting-edge deep learning techniques.

