



Attendance Management System Using Face Recognition

Selina Mohapatra



Introduction

The project aims to automate the traditional attendance system where attendance is marked manually by building an attendance system which utilizes facial recognition to mark employees' presence. It covers areas like facial detection, alignment, and recognition, along with adding photos to a real-time database, viewing, and updating the employee's total attendance on real time.

Technical Specifications



Outcome Highlights

The collage includes several screenshots: 1. A desktop monitor displaying the 'THYNK UNLIMITED' logo. 2. A server room with a person holding a laptop, with a 'Login' screen overlaid. 3. A view from a high-rise office window showing two people standing by a large window, with a 'Welcome to our office' sign and a 'Mark Your Attendance' button. 4. A mobile phone screen showing a video feed of a person's face with a green bounding box and a purple overlay. 5. A mobile phone screen showing a profile picture of 'Selina Mohapatra' with a blue 'MARKED' button. 6. A screenshot of the 'Realtime Database' in the Firebase console, showing a list of employees with their names and IDs. 7. A screenshot of the 'Storage' section in the Firebase console, showing a list of uploaded profile pictures.

Conclusion

The system successfully highlights the practical application of face recognition technology, offering a scalable solution with increased security for real-time attendance data.

Future Work

Looking ahead, potential enhancements include logging in/out times, generating insightful reports, and integrating advanced analytics for predictive insights, emphasizing the system's adaptability to evolving technological landscapes and organizational needs.

Acknowledgments

I extend my sincere gratitude to Professor Dr. Rajvardhan Patil for his mentorship during this project. His guidance throughout the semester has been instrumental in shaping the project's direction and enhancing my learning experience. I deeply appreciate the support and expertise he brought to this endeavor.