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## A Survey Paper on Attendance Management using Real-time Face Recognition

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Abstract: The attendance system being developed for the college aims to simplify the process of marking attendance for students and faculty members. The system utilizes facial recognition technology to collect and train face data of individuals, which is then used to automatically mark attendance in the future. This system aims to reduce the time and effort required to take attendance while increasing accuracy and efficiency. The collected data is securely stored and can only be accessed by authorized personnel. The attendance system will also have a user-friendly interface that can be accessed via a mobile application or web portal. Students and faculty members will be able to quickly and easily view their attendance records and monitor their progress throughout the semester. The system will also provide real-time notifications to alert individuals if they have missed a class or have been marked absent in error. Overall, the attendance system being developed for the college promises to revolutionize the way attendance is taken and recorded. By leveraging facial recognition technology and machine learning algorithms, the system will simplify the process and provide a more accurate and efficient way to track attendance.

**Keywords:** Face recognition, image processing, Biometric authentication, artificial intelligence

## REFERENCES

- [1]. Pavithra S. Hegde, Afshin, Smitha, "Face recognition based Attendance Management system." 2278-0181, 2020.
- [2]. Clyde Gomes, Sagar Chanchal, Tanmay Desai, Dipti Jadhav. Class attendance management system using facial recognition, 32:02001, 2020.
- [3]. Priyanka Pimpalkar, Anand D. G. Donald, review on face recognition system based on deep learning, 38(10):40–46, 2012
- [4]. Akbar, Md Sajid, et al. "Face Recognition and RFID Verified Attendance System." 2018 International Conference on Computing, Electronics Communications Engineering (iCCECE). IEEE, 2018.
- [5]. Yongmei Hu, Heng An, Yubing Guo, Chunxiao Zhang, and Ye Li. The development status and prospects on face recognition. In Bioinformatics and Biomedical Engineering (iCBBE), 2010 4th International Conference on, 2010.
- [6]. Rajkiran Gottumukkal and Vijayan K Asari. An improved face recognition technique based on modular PCA approach. Pattern Recognition Letters, 25(4):429–436, 2004.
- [7]. M. Turk and A. Pentland, "Eigenfaces for Recognition," J. Cogn. Neurosci., vol. 3, no. 1, pp. 71–86, 1991.
- [8]. K. Vijay and K. Selvakumar. Brain fMRI clustering using interaction k-means algorithm with PCA. In 2015 International Conference on Communications and Signal Processing (ICCSP), 2015.
- [9]. Y. Kawaguchi, "Face Recognition-based Lecture Attendance System," 3rd AEARU, no. October 2005
- [10]. J. Kanti and A. Papola, "Smart Attendance using Face Recognition with Percentage Analyzer," vol. 3, no. 6, pp. 7321–7324, 2014[11] N. Kar, M. K. Debbarma, A. Saha, and D. R. Pal, "Study of Implementing Automated Attendance System Using Face Recognition Technique," Int. J. Comput. Commun. Eng., vol. 1, no. 2, pp. 100–103, 2012
- [11]. Rowley, H. A., Baluja, S. and Kanade, T. (1998). "Neural network-based face detection." Pattern Analysis and Machine Intelligence, IEEE Transactions

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