

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 3, April 2023

Face Recognition Based Attendance System

Er. Farzana Khan¹, Saad Mohd Shahid Vadanagara², Mohammed Mustafa Arif Chamadiya³, Khan Anees Nafees⁴, Ashmiza Riyazuddin Shah⁵

Assistant Professor, Department of Information Technology¹ Students, Department of Information Technology^{2,3,4,5} M. H. Saboo Siddik College of Engineering, Mumbai, Maharashtra, India

Abstract: This paper explores the use of automated technologies in the face recognition based recognition system, with a focus on automating attendance capture. The project aims to improve the attendance marking of students by providing a more personalized and efficient service through the design and implementation of a Digital Attendance Web application. A face-based recognition system is a computer-based system that utilizes image recognition technology to identify individuals. In this paper, we present a face-based recognition system that uses deep learning techniques to extract features from facial images and identify individuals.[1] The proposed system utilizes Haar Cascade to extract features from facial images, and a classifier is trained to recognize the individual in the image.[6] The system is trained on a large dataset of facial images. It achieves high accuracy in identifying individuals in different scenarios, such as variations in illumination, pose, and facial expressions. The proposed system has a wide range of applications, including security, surveillance, and identification systems. It has the potential to revolutionize the way we interact with technology and enhance the security of our personal information.

Keywords: Digital Attendance, Haar cascade, Images, Dataset, Face recognition, Automated Attendance.

REFERENCES

- [1]. M. Karunakar, C.A. Sai, K. Chandra, K.A. Kumar "Smart Attendance Monitoring System (SAMS): A Face Recognition Based Attendance System for Classroom Environment," International Journal for Recent Developments in Science and Technology, 4 (5) (2020), pp. 194-201
- [2]. Smitha, Pavithra S Hegde, Afshin Face Recognition based Attendance Management System International Journal of Engineering Research & Technology (IJERT)ISSN: 2278-0181http://www.ijert.orgIJERTV9IS05086 Published by :www.ijert.orgVol. 9 Issue 05, May-2020
- [3]. Dhanush Gowda H.L , K Vishal , Keertiraj B. R , Neha Kumari Dubey Pooja M. R. Face Recognition based Attendance System, International Journal of Engineering Research & Technology (IJERT) Vol. 9 Issue 06, June2020
- [4]. N. Sudhakar Reddy, MV Sumanth, S. Suresh Babu, "The Counterpart Approach to Attendance and Feedback System uses Machine Learning Techniques", Journal of Emerging Technologies and Innovative Research (JETIR), Volume 5, Issue 12, Dec 2018.
- **[5].** IEEE ,Boda, R., &Priyadarsini, M. J. P. (2016). Face Detection and Tracking Using KLT And Viola Jones. ARPN Journal of Engineering and Applied Sciences, 11(23), 13472-1347
- [6]. Deshpande, N. T., & Ravishankar, S. (2017). Face Detection and Recognition using Viola-Jones algorithm and Fusion of PCA and ANN. Advances in Computational Sciences and Technology, 10(5), 1173-1189.
- [7]. Kavia, M. Manjeet Kaur, (2016). "A Survey paper for Face Recognition Technologies". International Journal of Scientific and Research Publications, 6(7).
- [8]. N.Gupta, A.Sharma and P.TyagiFacial Recognition-Based Attendance System: A Comprehensive Review IJSRS.

DOI: 10.48175/IJARSCT-9225



392