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Face Recognition Based on Computer Vision: A New Way of Attendance Marking

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Abstract: Computer Vision marked a significant contribution to the application of automated attendance marking. This technology captures the face of an individual facing in an image-capturing device such as a camera. This study developed a face recognition attendance marking based onthe machine learning method. Computer Vision libraries from OpenCV such as Haar Cascade Classifier and Local Binary Pattern Histogram were used for identification and recognition. Images were collected from 8 participating individuals. The images were clustered according to their name (label). These images were used for training to create a face recognition model. Real-time testing was performed to evaluate the system's performance. The results generated a mean recognition accuracy of 95% which implies a significant basis for the application of the system to attendance marking.

Keywords: Attendance Marking, Computer Vision, Face Recognition, Machine Learning

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