



PROJECT REPORT
IMPLEMENTATION OF FACE RECOGNITION
ATTENDANCE SYSTEM FOR PT. SUMBER KURNIA ALAM
WITH MTCNN AND FACENET ALGORITHM

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ABSTRACT

Attendance taking is an essential and recurring task in many organizations. Traditionally, attendance is recorded manually using pen and paper, which can be time-consuming, prone to errors, and inefficient. With advancements in computer vision and machine learning, the process of attendance taking can be automated using face recognition technology. This project presents the implementation of a face recognition attendance system for PT. Sumber Kurnia Alam. The system is designed to replace the traditional manual method for attendance taking and to improve the accuracy and efficiency of the attendance recording process. The face recognition attendance system uses MTCNN and FaceNet algorithms, which are widely used in the field of computer vision and machine learning for face detection and recognition. The implementation of the system involves gathering a dataset of employee faces. To provide accurate detection, dataset needs to be preprocess using whitening and EXIF transformation methods. Preprocessed dataset then being used to train the smart attendance system to generate facial embeddings. The attendance recording process works by comparing facial input that has been captured using webcam by the help of OpenCV library with facial embeddings generated earlier when the training process occurred. This project will provide a faster and more accurate attendance recording system with average time of 6,57 seconds difference from real time.

Keyword: Face Recognition, FaceNet, MTCNN, Smart Attendance System

