

ABSTRACT

The rapid advancement of information technology encourages companies to always improve operational efficiency, including in employee attendance management. This research aims to develop a face recognition-based attendance monitoring system using the Convolutional Neural Network (CNN) method with MobileNetv1 architecture to improve the accuracy, efficiency, and security of employee attendance records. The method used includes the process of collecting employee face data, image pre-processing, training and testing the CNN model based on TensorFlow.js which can be accessed through the website. Data collection was carried out using a laptop camera as an image input tool using PT Infomedia Nusantara (Tenesa) employee data. Testing was carried out in an indoor room with stable lighting. The test results showed an accuracy rate of 94%, with the model successfully recognizing faces in various positions and lighting conditions. This system is proven to be effective for use as a modern presence solution that minimizes physical contact and has high accuracy.

Keywords: *Attendace, Face Recognition, Convolutional Neural Network, MobileNetv1, TensorFlow.js*