

ABSTRACT

The presence of employees is important for companies that implement Work From Office because it is a factor in employee discipline. Some companies implement employee presence using an application or using biometric techniques such as fingerprints. However, fingerprints cannot be used properly if there are users who have physical limitations. In addition, the application is vulnerable to fraud if no verification proves that the employee is present. Therefore, we need a presence system using face recognition. Face recognition is a rapidly growing research topic. In this Final Project, the author will analyze and design a face recognition architecture for employee attendance and measure the resulting performance of the face recognition architecture that has been designed. This Final Project uses the theory of Face recognition and DeepFace. The work used is Information System Research and research systematics used the System Development Life Cycle (SDLC). The steps taken are requirements, prototype design, implementation, and testing. The results of this study are the design of face recognition architecture using the Dlib model which is implemented in a website-based employee attendance application. The performance produced by this architecture is 100% accuracy with an average process duration of 0.34 seconds. It is hoped that this Final Project can be useful for companies to be able to implement face recognition architecture for employee attendance.

Keywords: Face recognition, DeepFace, Architecture