

Android-Based Employee Presence Information System Using Face Recognize and Spot Area Methods (Case Study of Bondowoso Regency Government)
(Sistem Informasi Presensi Pegawai Berbasis Android Dengan Metode Face Recognize Dan Spot Area (Studi Kasus Pemerintah Kabupaten Bondowoso))

Achmad Faliqul Isbah

Study Program of Informatics Engineering

Majoring of Information Technology

Program Studi Teknik Informatika

Jurusan Teknologi Informasi

ABSTRACT

Employee attendance is an important aspect of human resource management in the Bondowoso Regency Government. However, employee attendance processes that still use manual and conventional methods have several problems, such as inaccuracy, inefficiency, and vulnerability to fraud. Therefore, this research aims to develop an Android-based employee attendance information system that uses face recognition and spot area methods. The face recognition method is a method that can recognize employees' faces via smartphone cameras, while the spot area method is a method that can determine employee locations based on GPS coordinates and the Haversine algorithm. This system also uses the Google ML Kit plugin as one of the main components in the facial recognition process. This system can carry out employee attendance online, quickly, easily, accurately, and safely. The test results show that the system developed has good performance and meets user needs.

Keywords: information system, employee attendance, Android, Haversine algorithm, Google ML Kit, face recognition, spot area.