

# Android Based Advanced Attendance Vigilance System Using Wireless Network with fusion of Bio-metric Fingerprint Authentication

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**Abstract—** In this digital era, different organizations have started taking attendance using biometric fingerprint authentication. This will keep the track of employee's attendance but the question arises if the employee is fully present at his/her workplace after giving attendance. In this modern era of digitalization, it is seen that after giving attendance a huge number of employees escape away from their workplace and do their personal job in the office time. This paper focuses on a smart attendance system where an android device will be used as a smart ID card. A mobile application is developed in Java to ensure the attendance of an individual employee using bio-metric fingerprint authentication. In addition, the entire working place will be a Wi-Fi zone. So, the connection or disconnection of the android device (Smart ID card) to the router will determine whether an employee is present in the working place or not. A counter will be there into the system to count the total amount of time an employee spends in the working place.

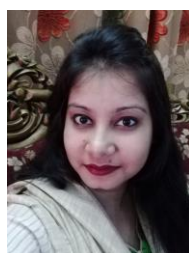
**Keyword—** Wireless Network, Router, MAC address, Attendance System, Android Based Mobile Application, Fingerprint



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