



RESEARCH ARTICLE

An Automated Biometric Attendance Management System with Dual Authentication Mechanism Based on Bluetooth and NFC Technologies

Samuel King Opoku

Computer Science Department, Kumasi Polytechnic, Ghana
samuel.k.opoku@gmail.com

Abstract— Attendance Management System (AMS) is the easiest way to keep track of attendance for community organisations for day-to-day monitoring of attendance and manpower analysis. AMS comes in four types. These are Manual, Biometric, Card-based or E-Commerce systems. This paper presents the implementation of an AMS that is based on Bluetooth and NFC technologies in a multi-user environment. It uses fingerprint and the Bluetooth address of the NFC-enabled phone of the user to authenticate the identity of the user. A Java based desktop application receives the NFC tag IDs, other information associated with the mobile phone and the user and submits them to an analyser for the interpretation of the user's behaviour.

Key Terms: - Attendance Management System, Authentication, Biometric, Bluetooth, Mobile Phone, NFC.

Full Text: <http://www.ijcsmc.com/docs/papers/March2013/V2I3201303.pdf>