

Door Access System via Fingerprint with GSM (ReSMART)

Muhamad Hafizuddin Afiq Anuar, Noorlin Mohd Ali, Al-Fahim Mubarak Ali, Syahrulanuar Ngah

Fakulti Sistem Komputer & Kejuruteraan Perisian, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26300 Gambang, Pahang, MALAYSIA
mhafizuddinafiq@gmail.com, noorlin@ump.edu.my,
fahim@ump.edu.my, syahrulanuar@ump.edu.my

Highlights:

This work presents the prototype of door access system using biometric authentication (fingerprint) (ReSMART) for highly-protected area. The implementation of password authentication or ordinary key is somehow having the issues on security risk; therefore we propose ReSMART to enhance the process. ReSMART will verify the fingerprint of registered user, once the authentication is passed, the system will notify the authorized personal of door access activity through short message service (SMS).

Keywords: *Security, Fingerprint, Door Access System, GSM, Data Protection, xBee*

Introduction

Each organization owns restricted areas that requires high protection security method. The current implementation of door accessing system such as physical key, password authentication or smart card possesses security issues. In realizing that security should not be compromised, the implementation of biometric authentication to access these areas is considered. We proposed door accessing system using fingerprint (ReSMART) that will verify only authorized users are allowed to pass the door to protect the valuable asset or data in more reliable manner.