

## **ABSTRACT**

*Radio Frequency Identification (RFID) is a technology that is used in an automatic identified system for object recognition and collect the information. Where one of their use is in Home Automation. Home automation is the control system of the electrical devices that are in the house. Where its use can help us efficiently control the device using the remote control.*

*In this study refers to the case study as a lecturer Telkom University Computer Systems study program and implemented an RFID reader device for room's security systems. The system consists of RFID tags and RFID reader. RFID reader to read RFID tags then authenticated access rights on the database server, and the authentication result to trigger related functions ie solenoid function (open / close key), function the buzzer (alarm), and the function of the magnetic sensor. Based on test results and analysis have shown good results in all test parameters. In the implementation of the automatic door lock has been successful to detect RFID tags that have been registered and store it into the system log. Circuit door opener goes well dantandai with the opening of the door lock in this case as a solenoid lock as expected.*

**Key Words:** *automatic door lock, RFID tag, Raspberry Pi*