

# ***DESIGN AND CONSTRUCTION OF HOUSE DOOR ACCESS USING FINGERPRINT SENSOR AND RFID SENSOR BASED ON INTERNET OF THINGS (IOT)***

**REZA RAHARDIAN BAHAR**  
**5181011002**

*Computer Engineering Study Program, Faculty of Science & Technology  
University of Technology Yogyakarta  
Jl. Ringroad Utara Jombor Sleman Yogyakarta  
Email : rezarahardianbahar98@gmail.com*

## ***ABSTRACT***

*Technological developments are increasingly rapid in all fields, especially the security sector. The security field can be used in vehicle security, personal data security, door access security, and so on. For security of access to commercial doors, most people still use keys which in terms of security are still quite low. If the key to the door is lost, it can be difficult to access the door. Not to mention the owner of the house who often leaves the house empty, so it can attract the attention of irresponsible people or robbers to rob the contents of the property of the house. And there are also those who have household assistants, the household assistant can also be one of the perpetrators of crime if the owner of the house is not in the house. The household assistant can freely rob the contents of the house's property.*

*In this study, it is proposed to design a house door access using two sensors, namely an RFID sensor and a fingerprint sensor which provides a high level of security for door access. In the design of the system, it will be based on the Internet of Things (IoT) for remote control and monitoring so that homeowners can know and provide access to certain people.*

***Keywords:*** *Door Access Security, RFID, Fingerprint, IoT.*