# *ABSTRACT*

*Fingerprint identification technology is a security technology that has high level security. Fingerprints are one of everyone's personal data, where the data will not be equal to one another. By using fingerprints as a key security system, then only certain people can access a system, so that automatically unregistered others cannot access it.*

*The final project, had been designed an automatic door locks that use fingerprint detection as a key. Fingerprint scanning will be performed by fingerprint module then fingerprint will be matched with templates that had been stored in database. If there are any matches, the fingerprint module will send data to the microcontroller and then the microcontroller will open or close the relay, so the door lock will lock or unlock automatically.*

*The final project had been resulted an automatic door locks that can provide a high level of security by using fingerprint as key so that people who were not registered cannot access it. With the percentage of working capability from ten experiments when finger in dry condition the device can work 100%, when finger in humid condition the device can work 100%, and when finger has small scratches the device can work 100%, whereas, finger in wet condition the device was difficult to detect fingerprint with percentage 40%.*

*Keyword: Automatic look door, fingerprint, fingerprint module, microcontroller, relay, door lock.*