# ABSTRACT

*Design tool for the start and off system of motorized vehicles with finger print based on Arduino Uno as a microcontroller that will communicate serially so that it is more practical in use. Designed for automation in turning on motor contacts and motor engines only by attaching fingerprints to the sensor. Motor engine only by attaching a fingerprint to the sensor. The high rate of motorcycle theft motorcycle, this tool is expected to be able to minimize the occurrence of theft, thus increasing the sense of security for motorcycle users themselves. Currently Currently, most of the security system and how to turn on the ignition and motorcycle engine still use a lot of conventional conventional way, namely using the built-in motorcycle key, but there are also some that use keyless technology using an infrared remote. Already use keyless or keyless technology using an infrared remote. Therefore, this tool is made using a fingerprint sensor aims to add authentication regarding the security and use of the motorcycle. Security and use of the motorcycle. The fingerprint sensor performs process of scanning the fingerprint image that is attached to the sensor whether it matches the registered fingerprint, if it matches, then the first fingerprint tapping automatically Arduino Uno as the microcontroller will automate to activate relay number 1 as a link to the motor contact. The second tapping if the same fingerprint tapping then Arduino Uno will automate by activating relay number 1 to connect to the motor contact. Uno will automate by activating relay number 2 which is connected to the motor contact. On the third time tapping the same fingerprint, the Arduino Uno will automatically deactivate all relays which aim to turn off the engine and motor contacts.*

*Keywords:*
*Fingerprint Sensor, Automatic Security, Arduino Uno*