ABSTRACT

In this era of globalization, technology is very sophisticated which is in the form of digital and automated systems. The devices used are already small-scale or often called micro-scale and there are already some who have developed Nano technology. There's been a lot of news lately about motorcycle theft. Theft is happening everywhere; in the office, on campus, or at home.

There are two steps to starting the motorcycle. First, the motorcycle must get power from the battery to turn on the electrical system on the motorcycle. Second, the motorcycle must get current from the starter so that the motorcycle coil can start the engine. The device must consist of Arduino as the main controller and fingerprint sensor. Relay module as a switch to turn on and off the motorcycle contacts and motor starter. There is one input from the overall system, namely the fingerprint sensor. The output of the system is expected to be able to turn off and turn on the motorcycle.

In this final project, the design and realization of a motorcycle activation system that uses a fingerprint sensor has been completed. The test results on this fingerprint design show that the authentication process takes longer than the enrollment process. The level of system accuracy obtained is 90%.

Keyword : *fingerprint, technology, Ardunio.*