# RANCANG BANGUN SISTEM SAKLAR CONTACLESS BERBASIS GESTURE MOTION MENGGUNAKAN SENSOR APDS 9960 DAN ARDUINO NANO

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**ABSTRACT**

*The current development encourages people to continue to think creatively, not just exploring a new discovery, but also maximize the performance of existing technology. The use of this technology is beneficial to reduce the risk of contracting the Covid-19 virus currently being experienced by various countries, one of which is Indonesia. Therefore, a non-contact switch system design was made with only gestures. It only uses body movements without having to make direct physical contact with the switch. Suppose this technology is developed and used as an automatic tool to turn on lights in homes or public places such as campuses and schools. In that case, it will be beneficial to reduce the virus's spread, one of which is the Covid-19 virus. This tool uses the APDS 9960 sensor and the Arduino Nano microcontroller. The APDS 9960 sensor functions as a motion detector for parts of the body converted into digital information. The Arduino Nano as the central controller or brain that will process and control the system. From the tests carried out by the tool system, the calculation of the accuracy value is 100%, and the precision value is 100%, which is a very suitable tool to use.*

**Keywords:** *Covid-19, APDS 9960 Sensor, Arduino Nano*