Rancangan Bangun Sistem Kendali Robot Lengan Bergerak Berbasis Piranti Nodemcu

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ABSTRACT

The electronics progress has made a good impact on the industry. In time, the electronic device has widely used as an automatically controlled tool. For that reason, responding to the rapid technological advance, especially in the industrial, the study crease a wireless automatic robot controlled by computer technology. In this research, the writer uses NodeMCU as a microcontroller as an arm-robot controller and wheeled-robot through wifi and controlled by a control application (smartphone). The researcher makes a robot arm that can lift an object and move it to another place with a wheeled-robot using wifi as the robot guiding system. The robot arm can lift until 10gram. The arm can also rotate to the left, right, forward, backward, taken, and placed. The arm robot can take an object as the command from the control application (smartphone). The wheeled-robot can be controlled forward, backward, turn left, and turn right by guiding or commanding through a control application (smartphone).

Keywords: NodeMCU, Robot Arm, Wheeled-Robot, Smartphone