

INTELLIGENT SYSTEM FOR ARM & GRIPPER ROBOTS AS A SOURCE OF ROBOTICS

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ABSTRACT

The purpose of this study: (1) design and implementation of robot arm & gripper, (2) synthesize Robot Arm & Gripper as a source of learning Robotics.

This research method uses the Research and Development approach through the stages of analysis, design, development, implementation, and evaluation.

The results showed that the robot arm & gripper has a 4-Degree of Freedom (DOF) consisting of 3 brushed DC motor types of power windows and 1 MG995 Servo motor. Detection of differences in types of metal and non-metal objects using Proximity infrared and inductive proximity. Control system processor using Arduino Mega 2560. Testing the performance of the robot arm & gripper has 80% success. The movement of the robot arm & gripper to place objects in the provided container has an average success of 95%.

Keywords: Robot Arm & Gripper, Learning Resources.

Kata Kunci: *Robot Arm & Gripper, Learning Resources.*