

Development of a Servo Motor Tester for Humanoid Robot Applications

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ABSTRACT

This research aims to build a servo motor tester that is capable to detecting the level of accuracy and suitability of servo motors in operation. The Open-CM microcontroller is used to control the motion of the servo motor. The rotary motion of the servo is compared to the arc as the true value. The difference between the servo angle and the true value is defined as an angular error. This angular error is used to determine accuracy. There are 5 servo motors tested in this research. Each servo motor is tested with several operating points. As a result, each servo motor has a different angle error. Servo motor with ID number 03 has the lowest performance with an average angle error of 2.75 degrees.

Kata Kunci: Servo Motor, Servo Tester, Accuracy, OpenCM 9.04