

Abstract Details

Title: Effect of Viscous Friction Coefficient Variation on Robot's Joint PID Control

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Abstract: Friction is the example of a complex result of an interaction between two contacting surfaces. The friction, also can be static models which depend only on the relative speed of interacting surface. Friction can be affected by other factors. This paper investigates the effects of friction and viscosity on the robot arm. Different values of the friction coefficient were tested with a DC motor robot joint. The stability and output performance were tested to determine the best performance of the robot in the presence of the friction.

Keywords: Robot Arm, Friction, Viscosity, PID, Stability.