Implementation of Self-Tuning Fuzzy PID Control Applied on Brushless DC Motor

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Abstract

this paper presents simple implementation for two different control techniques applied on brushless DC motor. The first technique is the conventional PID control while the second technique is the self-tuning fuzzy PID control. In the second technique the main role of fuzzy logic control adjusts the PID control output according to error and change of error. The Arduino microcontroller is used to send the control signal to real system and receive the speed feedback signal. The experimental results show that the superiority for self-tuning fuzzy PID control compared to conventional PID control.

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