FUZZY LOGIC SPEED CONTROLLER FOR DC MOTOR

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ABSTRACT

Today, there are many types of DC motor controller that had been designed. Engineers had designed new methods of speed control, which improve the performance of the motor.

Motor controllers are important especially to DC motor where they are used currently in many industries. DC motors have several variable characteristics and are used extensively in variable speed drives. They are also can provide a high starting torque and also possible to obtain speed control over wide range. The methods of speed control are normally simpler and less expensive than those of AC drives.

In this project, focuses on a control system using a fuzzy logic controller (FLC) for separately excited DC motor. To acquire an accurate fuzzy logic control algorithm, a simulation with MATLAB program has been made. The major benefits of this project lies in an original approach where fuzzy logic is applied without requiring any specific expertise in conventional method. Benefits are discussed and concrete results are given.

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