SCHOOL OF ENGINEERING

DESIGN OF RC MODEL MOTOR SPEED CONTROLLER USING FUZZY LOGIC

FINAL YEAR PROJECT REPORT

HUON CHEK NGIE UCSI ID: 99309250 UNN ID: 05026546

B. ENG (HONS) ELECTRICAL & ELECTRONICS ENGINEERING

SEPTEMBER 2005-APRIL 2006

Abstract

In this project the design of a DC motor speed controller using fuzzy logic is proposed to solve a problem in the regulation of DC motor subjected to impulsive load disturbances, of great amplitude and short duration, consistent in the attenuation of the excessive overshoot in the output, which is frequently present in motor speed control. Along in this report is the analysis are being done to further analyze the result for the improvement of the system.

Firstly this project will discuss the introduction of the entire system which utilizes the fuzzy logic technology as a controller usage on the DC motor. Furthermore, literature review and previous works has been done as a review to produce a better system.

The project is full using Matlab software to develop this project system. Fuzzy interference system is the most important part to create a controller and do the analysis for this project. The analyses result will be discuss and apply to the real system in the further to improve the human activities. Therefore, this report will explain all the possibilities, testing, result and analysis to complete this project.