

Speed Control of Brushless DC Motor using Fuzzy and Neuro Fuzzy

Nikita Tiwari
M. E. Scholar, Power Electronics
RITEE, Raipur (C.G.)
nikitatiwari03@gmail.com

Prof. Ritesh Diwan
Asst. Professor, Dept. of ET&T
RITEE, Raipur (C.G.)
riteshdiwan5@gmail.com

Abstract – DC drive systems are often used in many industrial applications such as robotics, actuation and manipulators. The purpose of this paper is to control the speed of Brushless DC (BLDC) motor by using Fuzzy logic controller (FLC) and Neuro-fuzzy controller in MATLAB / SIMULINK model. The scopes includes the modelling and simulation of Brushless DC motor, application of fuzzy logic controller to actual DC motor. This paper is going to present the new capacity of assessing speed and control of the Brushless DC motor. By utilizing the Neuro-fuzzy controller, the rate can be tuned until it get like the desired output that a user wants.

Keywords – Brushless DC motor, Fuzzy Logic Controller, PI Controller MATLAB.