Optimal DC machines performance based on intelligent controller

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Abstract:

The disorganized neural controller links the calculation of the delicate rationale to the architecture of a five-layer pseudo-nervous system. The classical PID controller was replaced by an Adaptive Neuro Fuzzy Inference system (ANFIS), that will be adjusts the thin induction framework with the calculation of learning in half and a half; this makes the thin framework for learning. A fuzzy nervous-based vector display controls a frame under control. This paper displays an optimal performance with speed controller based on the drive of a power system. The proposed Neural Fuzzy Control Unit combines of a thin Boolean arithmetic calculation and five layers mock neural network system (ANN) structure, which fine-tunes the delicate deduction framework with a half and a half learning arithmetic. This makes a thin framework for learning. The proposed drive recruiting engine exhibition controlled by neurotransmitters is examined in different working conditions. The consequences of the proposed console contrast with those obtained by a regular PI controller and Fuzzy Logic controller. The study of reproduction shows the drive's strength and reliability for superior driving applications. Structural reconstruction is accomplished through applying of Matlab Verson 2019b. DC machine is a contextual search. Palatable results were obtained; this demonstrates the capability of the ANFIS console in control using a high non-linear dynamic frame and great results can be obtain by tuning the intelligent controller.