عنوان مقاله:

Mathematical Modeling and PerformanceComparison of Overhead Cranes Using Soft-Computing Techniques

محل انتشار:

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خلاصه مقاله:

In this paper an offline control of Overhead crane system has been proposed using fuzzy and ANFIS controllers. The mathematical model of the system has been derived which was further used to built a Simulink of proposed system. The ANFIS controller was designed using datasets generated from results of PID controller. The controllers were compared in terms of settling time, maximum overshoot and undershoot. The study elaborates the effect of variation in magnitude of physical attributes of the crane system i.e. mass of crane, mass ofload and length of crane on performance parameters of the system. The system has been simulated in Matlab andsimulation results are shown which validates the proposed study

کلمات کلیدی:

Overhead crane, fuzzy logic, ANFIS, training,Matlab, Performance parameters

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