

Comparison study for artificial intelligent with PID controller

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ABSTRACT

In conventional system, there is usually fluctuating system that caused high rippling and distortion with low steady state. In order to overcome this problem, the system with artificial intelligent via clustering neural network is proposed to convert the system for linearity. the Simulink system proved that the suggested method is more effectiveness.

KEYWORDS: artificial intelligent, PD control, non linear system

1. INTRODUCTION

In recent year many researchers proposed methods based on artificial intelligent to improve the system capability [1-5]. But every method has advantages and disadvantages depending on the system behavior that applied on the system.

II. PROPOSED METHOD

The figures 1 and 2 shows that the system with GA is fast response as compared with fuzzy logic and PI controller.

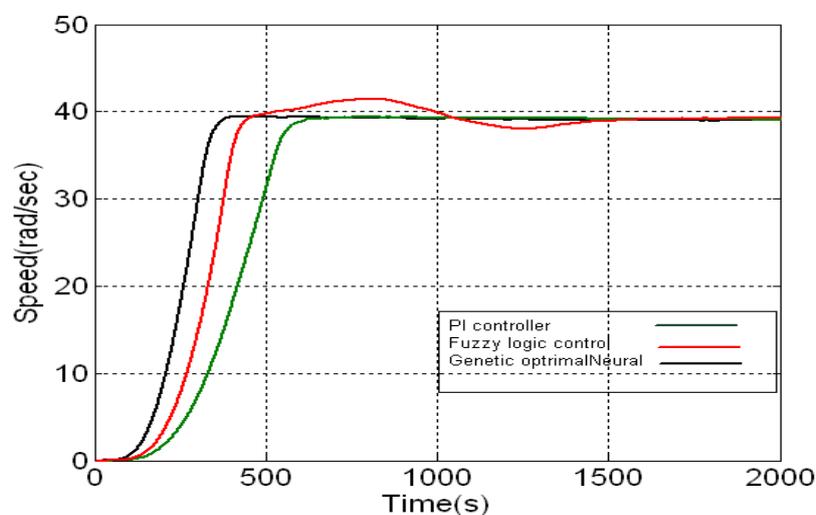


Figure 1: speed response

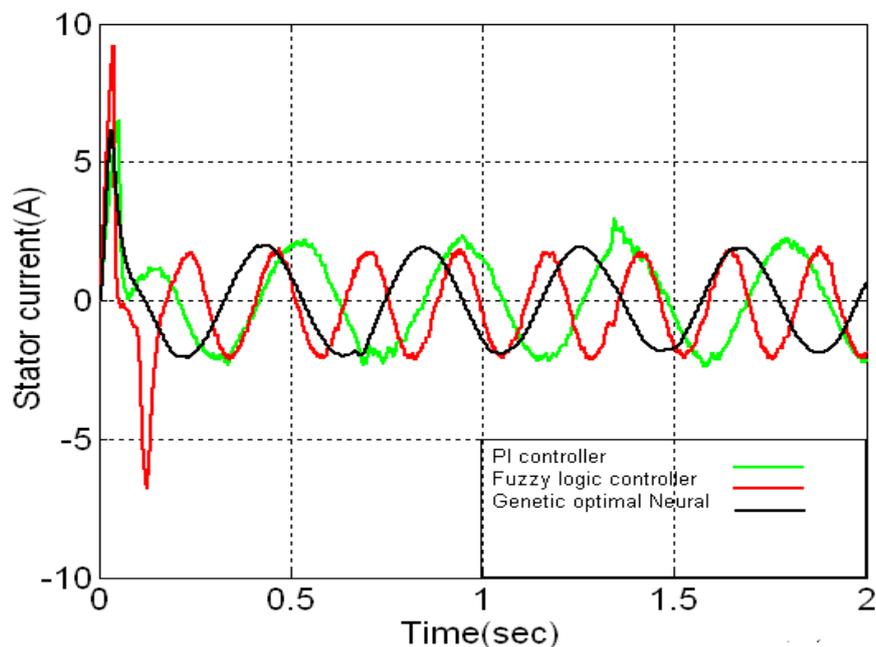


Figure 2: current behaviour

III. CONCLUSION:

From the comparison study of fuzzy, genetic algorithm, and PI controller, it can be seen that the system with genetic algorithm is better than the two methods which mean that the system by GA is capable to reduce the oscillation and increase the efficiency of the system

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