

## عنوان مقاله:

Identification of a Nonlinear System by Determining of Fuzzy Rules

## محل انتشار:

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## خلاصه مقاله:

In this article the hybrid optimization algorithm of differential evolution and particle swarm is introduced for designing the fuzzy rule base of a fuzzy controller. For a specific number of rules, a hybrid algorithm for optimizing all open parameters was used to reach maximum accuracy in training. The considered hybrid computational approach includes: opposition-based differential evolution algorithm and particle swarm optimization algorithm. To train a fuzzy system which is employed for identification of a nonlinear system, the results show that the proposed hybrid algorithm approach demonstrates a better identification accuracy compared to other educational approaches in identification of the nonlinear system model. The example used in this article is the Mackey-Glass Chaotic System on which the proposed method is finally applied.

## کلمات کلیدی:

System Identification; Combined Training; Fuzzy Rules; Database Design

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/630920>

