

## عنوان مقاله:

Fuzzy Wavelet Neural Network based on Artificial Bee Colony Algorithm for Identification of Dynamic Plant

## محل انتشار:

بیست و یکمین کنفرانس مهندسی برق ایران (سال: 1392)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

Mohammad Amin Heidari - Islamic Azad University, Fasa Branch, Fasa, Iran

Ramin Heidari

Mohammad zaman Zamani - Najafabad Branch, Islamic Azad University

Amir Nekoubin - Young Researchers and Elite Club, Najafabad Branch

## خلاصه مقاله:

This paper present a Fuzzy Wavelet Neural Network (FWNN) design based on Artificial Bee Colony (ABC) Algorithm to improve the function approximation accuracy and general capability of the FWNN. In presented FWNN, the fuzzy rules that contain wavelets are constructed. Each fuzzy rule corresponds to a sub-waveletneural network (sub-WNN) consisting of wavelets with a specified dilation value. Orthogonal least square (OLS) algorithm is used to determine the number of fuzzy rules and to purify the wavelets for each rule and ABC algorithm is suggested for learning of FWNN parameters. The structure is tested for the identification of the dynamic plant. Simulation results demonstrate effectiveness and ability of proposed approach. To validate the results obtained by proposed ABC, a FWNN based Shuffled Frog Leaping (SFL) algorithm is adopted from the literature and applied for comparison. The simulation study shows ABC performs well in finding the solution

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/208464>

