

Accepted Manuscript

Extended Fuzzy Hyperline-Segment Neural Network with
Classification Rule Extraction

Swati Shinde, Uday Kulkarni

PII: S0925-2312(17)30551-9
DOI: [10.1016/j.neucom.2017.03.036](https://doi.org/10.1016/j.neucom.2017.03.036)
Reference: NEUCOM 18264

To appear in: *Neurocomputing*

Received date: 3 September 2016
Revised date: 29 January 2017
Accepted date: 18 March 2017

Please cite this article as: Swati Shinde, Uday Kulkarni, Extended Fuzzy Hyperline-Segment Neural Network with Classification Rule Extraction, *Neurocomputing* (2017), doi: [10.1016/j.neucom.2017.03.036](https://doi.org/10.1016/j.neucom.2017.03.036)



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- In EFHLSNN, learning is made insensitive to learning parameter, θ , as compared to other fuzzy min-max neural networks.
- The EFHLSNN can be trained without intersection test and its removal and this saves a lot of time and space.
- In EFHLSNN, the hyperline segments can overlap with at most one point of intersection due to which the problem of misclassification is removed.
- The EFHLSNN can process the data of continuous, discrete or mixed type and thus it is more suitable for real life applications with mixed attributes.
- The EFHLSNN, along with the classification results, also gives the justification of its decision in terms of classification rules.

Download English Version:

<https://daneshyari.com/en/article/4947147>

Download Persian Version:

<https://daneshyari.com/article/4947147>

[Daneshyari.com](https://daneshyari.com)