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Authors: Lina Li, Witold Pedrycz, Zhiwu Li



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## ACCEPTED MANUSCRIPT

#### **Development of Associative Memories with Transformed Data**

Lina Li<sup>a</sup>, Witold Pedrycz<sup>b,a</sup>, and Zhiwu Li<sup>c,a</sup>

<sup>a</sup> School of Electro-Mechanical Engineering, Xidian University, Xi'an 710071, PR China (lina\_li1014@163.com)

<sup>b</sup> Department of Electrical and Computer Engineering, University of Alberta, Edmonton, AB, T6R 2V4 Canada (wpedrycz@ualberta.ca)

<sup>c</sup> Institute of Systems Engineering, Macau University of Science and Technology, Taipa, Macau (zhwli@xidian.edu.cn)

Graphical abstract



## Highlights

- This paper arguments the generic architectures by introducing transformations of spaces in which the associated data are defined.
- The enhancements of performance of associative memories is summarized by using nonlinear functions (mappings) of spaces of data to be associated.
- The influence of cutoff points of nonlinear functions is analyzed based on Particle Swarm Optimization.
- The experiments demonstrated that the improvement achieved in this way in the range of 2.3%-41.1% depending upon the number of cutoff points and the type of the associative memory.

#### Abstract

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