A Comparison of Grammatical Bee Colony and Neural Networks in Medical Data Mining

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Authors:

Tapas Si, Sk. Sujauddin

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Abstract

This paper proposes a novel application of Grammatical Bee Colony for classification of medical data. Grammatical Bee Colony is a Swarm Programming algorithm generally used for automatic computer program generation in any arbitrary language. In this paper, Grammatical Bee Colony based classifier is designed and applied in medical data mining. The proposed method is applied on ten medical data sets and obtained results are compared with Multi-Layer Perceptron classifier trained with Levenberg-Marquardt algorithm. The proposed method statistically outperforms other method.

References


Index Terms

Computer Science
Biomedical

Keywords

Medical data mining, Machine learning, Classification, Swarm programming, Grammatical bee colony, Artificial neural network