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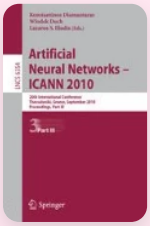

Artificial Neural Networks – ICANN 2010

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Abstract

In this paper we present a novel approach for identifying the head-and-shoulders technical analysis pattern based on neural networks. For training the network we

use actual patterns that were identified in stochastically simulated price series by means of a rule-based algorithm. Then the patterns are being converted to binary images, in a manner similar to the one used in hand-written character and digit recognition. Our approach is tested on new simulated price series using a rolling window of variable size. The results are very promising with an overall correct classification rate of 97.1%.

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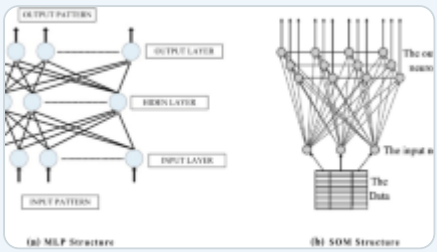

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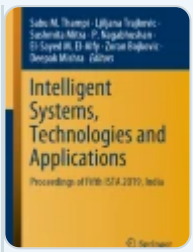

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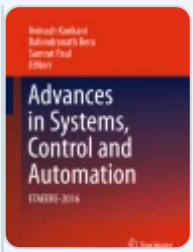

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