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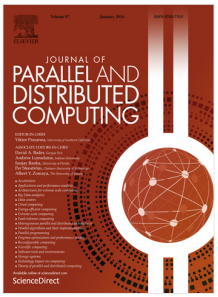

Implications of deep learning for the automation of design patterns organization

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***Highlights (for review)**

There is a need to bridge the gap between the semantic relationship between patterns.
We propose an approach by leveraging a powerful deep learning algorithm named Deep Belief Network (DBN).
The DBN learns on the semantic representation of documents formulated in the form of feature vectors.
We performed a case study in the context of a text categorization based automated system.
The experimental promising results suggest the significance of the proposed approach to construct a more representative feature set.