



Algorithmic Aspects of Neural Networks

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Message from the Guest Editors

The recent fast resurgence of Artificial Intelligence, after several decades of unsatisfactory advances, is due to a family of algorithms collected under the term Deep Learning. The amazing success achieved by deep learning was totally unexpected, because it does not include substantial innovations. It is just a derivation from artificial neural networks, a field that was stagnating at the beginning of this century. This surprise has motivated investigation into algorithmic aspects that can explain why deep learning works so well, and so much better than previous neural networks. This Special Issue collects early results of this research.

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Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

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