Special Issue

Applications of Quantum Computing in Artificial Intelligence

Message from the Guest Editor

Today's computational requirement for solving complex problems involves giant data sets and massive and sophisticated learning structures that commonly use neurons, fuzzy logic, and optimization algorithms. Machine learning is a field of artificial intelligence with many computationally intractable complex problems. The emerging field of quantum machine learning (QML) integrates quantum computing, aiming to provide in the future an exponential speed-up with respect to classical machine learning methods. Different quantum research trends exist in algorithms of interest in the QML field and other closely related fields. This Special Issue aims to publish novel theoretical and practical proposals for QML, quantum learning theory, quantum deep learning, quantum convolutional neural networks, quantum transfer learning, quantum optimization algorithms, and any other techniques that combine quantum computing with learning algorithms. Keywords

- quantum machine learning
- quantum intelligent systems
- quantum learning systems
- quantum deep learning
- quantum transfer learning
- quanvolutional neural networks

Guest Editor

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Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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