Advances in Quantum Artificial Intelligence and Machine Learning

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Message from the Guest Editors

Dear Colleagues,

The use quantum coprocessors for extensive and non tractable computation routines in AI will lead to new machine learning and artificial intelligence applications.

Linear algebra-based quantum machine learning is based on quantum gates that describe quantum basic linear algebra subroutines. These subroutines exhibit theoretical exponential speedups compared to classical counterparts and are essential for machine learning. Quantum annealing solves optimization problems.

Quantum-Inspired machine learning and AI algorithms are based on mathematical quantum theory to model the algorithms.

Quantum cognition uses a mathematical quantum theory to model cognitive phenomena.

clues from psychology indicate that human cognition is not only based on traditional probability theory as explained by Kolmogorov's axioms but additionally on quantum probability.

Submissions may include original research articles or comprehensive reviews related to the topic.

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Special Issue

Editor-in-Chief

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Message from the Editor-in-Chief

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