Quantum Robotics

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Message from the Guest Editor

With increasing importance in Quantum Computing on one hand and Machine Learning on the other, combined with fast advancements in design of more and more sophisticated robots, it is obvious that at least some of the advanced future robots will be controlled by quantum computers. While the first ideas of quantum robots come from Benioff and are relatively old, there is so far no systematic definition of the unified research areas specifically related to quantum robotics. With a massive amount of data that will be generated by future sensors and rising complexity of control/planning/interacting/reasoning systems, as well as the fact that future robots will operate in all kinds of environments, especially interacting with humans, it is widely accepted that Quantum Algorithms and especially Quantum Machine Learning will play a major role in robotics and automated integrated systems. It is foreseeable that quantum algorithms, quantum sensors and quantum controls will be the main approach to next generation of robotics research. They will also bring new challenges to robotics community. This Special Issue will try to define and outline the nascent research area of Quantum Robotics.

Special Issue

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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