Special Issue

Evolutionary Computation Meets Deep Learning

Message from the Guest Editors

Evolutionary computation and deep learning are two mainstream technologies of modern artificial intelligence. They are both biology-inspired computational methods but are engaged in different tasks. Usually, evolutionary algorithms are designed to solve complex optimization problems, whereas deep learning models are built to complete complex learning tasks. Recently, many studies have found that the appropriate combination of these two methods provides rich and flexible ways for the two mature paradigms to boost each other. The purpose of this Special Issue is to gather a collection of the latest studies on the interplay of evolutionary computation and deep learning, from either theoretical or practical perspectives. We welcome new methods that incorporate different deep learning methods to assist evolutionary algorithms in algorithm configuration, evaluation substitution, etc., as well as the methods that apply different evolutionary algorithms to improve deep learning models in terms of the architectures, training procedures, etc. We invite authors to submit research articles and/or review articles that fit this purpose.

Guest Editors

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Deadline for manuscript submissions

closed (31 January 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/156942

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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.

Editor-in-Chief

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