Special Issue

Self-Learning in Physical Machines

Message from the Guest Editor

In recent years, we have made great strides in the general understanding of learning phenomena in physical systems, where learning is understood as an analogy to neurological processes and computational machine learning (ML) algorithms. These research efforts lie in the intersection of physics, neuroscience and computer science and use insights and techniques from these fields to design and characterize self-learning machines that autonomously adapt functional properties and behaviors while observing examples of use. This Special Issue on self-learning machines will highlight recent exciting developments and ideas in the field, touching upon physical and biological learning studied both theoretically and experimentally. We invite authors to present original research articles or review articles on topics including, but not limited to:

- Self-learning machines in different media (electrical, optical, mechanical, etc.);
- Neuromorphic computing;
- Novel physical computation;
- Biologically plausible learning;
- The physics of learning.

Guest Editor

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Deadline for manuscript submissions

closed (15 January 2025)

Entropy

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Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.
Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

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