

Special Issue

Machine Learning Meets Stochastic Processes: New Trends for Understanding Complex Systems

Message from the Guest Editors

Machine learning techniques have been used with great success in multiple scientific and engineering fields, that can leverage large amounts of data. Recently, the interplay between machine learning and stochastic processes has been explored through techniques such as supervised learning methods for determining equations' solutions or unsupervised learning methods for selecting system models. Such techniques can be used in numerous applications, including biological systems, finance, genomics, political analysis, migration flow analysis, and social network analysis. This Special Issue is open to theoretical and applied contributions joining the fields of stochastic process and machine learning:

- Methods that exploit data samples and time series to improve the efficiency or accuracy of algorithms in order to solve stochastic differential equations, hidden Markov models, and partial differential equations.
- Statistical learning methodologies for diffusion processes and/or point processes.
- Techniques exploring the usage of stochastic process to improve the performance of machine learning techniques, for instance, by providing additional training data.

Guest Editors

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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