

## Special Issue

# Entropy for Machine Learning and Complex Systems Toward Regional Sustainable Development

### Message from the Guest Editors

In recent decades, a need has arisen for forecasting and predictive modeling to deliver real-time solutions to sustainable development problems by integrating the models from the rapidly developing fields of machine learning, complex systems, and entropy. Machine learning is an approach for data analysis. The concept of entropy originally developed from physics fields, but, it is clear that entropy is deeply related to machine learning and complex systems. Besides applications in machine learning, entropy is a general measure, commonly used for qualitative analysis of complex systems. In this regard, entropy is a powerful descriptive method, which presents an operational and theoretical framework to attain both qualitative and quantitative descriptions of the intrinsic properties of machine learning and complex systems theories. To understand the importance of entropy concepts in machine learning and complex systems, in this Special Issue, we are interested in providing state-of-the-art literature of entropy concepts and establishing a reliable connection between machine learning, complex systems, and the sustainable development context.

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### Guest Editors

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Prof. Dr. Edmundas Kazimieras Zavadskas

Dr. Dragan Pamucar

Prof. Dr. Fausto Cavallaro

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### Deadline for manuscript submissions

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## Entropy

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## About the Journal

### 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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### Editor-in-Chief

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