Special Issue

Mathematics in Information Theory and Modern Applications

Message from the Guest Editors

Modern information theory is mainly concerned with quantifying the information in probability distributions and their interactions with large-scale nonlinear systems built for applications in the modern age. It typically involves novel mathematical applications of information measures, high-dimensional geometry, algebra, combinatorics, etc. Further progress on this front calls for new mathematical techniques to refine the understanding of information through the lens of information theory, and novel usage of information for real-world problems. This Special Issue aims to be a forum for the presentation of recent mathematical advances in information theory, and how information-theoretic tools lead to new theoretical understandings of modern applications. In particular, the understanding and analysis of real-world problems related to data science with the help of mathematical tools based on information theory fall within the scope of this Special Issue.

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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.

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