Special Issue

Coding and Information Theory for Distributed Storage Systems

Message from the Guest Editors

Data storage systems, housing massive amounts of information, have become an indispensable component in modern communication networks, as well as cloud computing and network applications. The trend towards ubiquitous data storage in current and future applications induces stringent requirements for data storage, especially in the aspects of reliability and security—not only for storing the data but also for disseminating the data to users and different nodes in the systems. The use of information theory and coding to study the fundamental limits of data storage systems and to innovate efficient coding schemes has gained significant attention from both academia and industry. This Special Issue will collect original papers within the research area of coding for distributed storage, including the derivation of fundamental trade-offs in storage systems, the design of practical codes that enable efficient data access and update, and the construction of coding schemes that keep stored data confidential and protect the privacy of users. Papers on network coding, physical-layer network coding, secure network coding, and coded caching are also welcome.

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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