Special Issue

Advances in Lossy Data Compression Techniques

Message from the Guest Editors

Today's modern applications generate large volumes of data, making data reduction a crucial technique in various domains. Lossy compression offers the capability to significantly reduce data size, saving memory and storage space, alleviating I/O burden, reducing communication time, and improving energy efficiency in parallel and distributed environments such as high-performance computing (HPC), cloud computing, edge computing, and the Internet of Things (IoT). Within this context, there are three significant research topics that the community is addressing: (1) the possibility of achieving several orders of magnitude of lossy compression for extreme-scale sciences, (2) understanding the trade-off between performance and accuracy in lossy compression, and (3) developing effective solutions for reducing data size while preserving the information within large datasets. The goal of this Special Issue is to provide a dedicated platform for researchers from all related communities to present their research findings, exchange ideas, identify new research directions, and foster collaborations within the lossy compression community.

Guest Editors

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Deadline for manuscript submissions

closed (15 September 2024)

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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