

Special Issue

Advances in Information and Coding Theory: Optimization and Applications

Message from the Guest Editor

This Special Issue explores the important and synergistic fields of Information Theory and Coding Theory, addressing their latest advancements and diverse applications. Information Theory, founded by Claude Shannon, provides the mathematical framework for quantifying information, uncertainty, and the fundamental limits of data compression and reliable communication. Coding Theory, on the other hand, translates these theoretical limits into practical schemes. It develops methods for error detection and correction, enabling robust data transfer across noisy channels and efficient data storage. This Special Issue aims to collect cutting-edge research at the intersection of these disciplines. Topics include (but are not limited to) novel coding schemes for emerging communication paradigms, optimization techniques in Shannon Theory, theoretical bounds on data processing, and applications in areas like secure communications, data privacy, and machine learning.

Deadline for manuscript submissions

closed (25 February 2026)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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