

Special Issue

Mathematical Methods Applied in Explainable Fake Multimedia Detection

Message from the Guest Editors

With the tremendous progress made in computer vision and deep learning, it has become easy to generate fake multimedia data that is indistinguishable from real data. The spread of fake multimedia data could mislead the public, which may result in unforeseeable consequences. Researchers have made efforts to develop methods for the detection of fake multimedia data, most of which focus on designing deep neural networks (DNNs) against specific fake multimedia generation approaches. More efforts need to be devoted to explain why DNN models are effective and how we could design explainable approaches for robust fake multimedia detection. This Special Issue aims to promote research on both fake multimedia generation and detection techniques, including effective fake multimedia generation, explainable fake image detection, explainable fake video detection, and explainable fake audio detection. Researchers and engineers working in the field are invited to contribute original research articles that present their work. All submitted papers will be peer-reviewed and selected on the basis of both their quality and relevance to the theme of this Special Issue.

Guest Editors

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Deadline for manuscript submissions

closed (31 August 2024)



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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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