

Special Issue

Explainable AI for Image-Aided Diagnosis

Message from the Guest Editors

Artificial intelligence (AI) is a rapidly advancing field with many potential applications, with computed aided diagnosis (CAD) systems being among the most promising. Gastroenterology, ophthalmology, and radiology are examples of specialities where AI algorithms can be used to automatically identify potential abnormalities or diseases from images and ultimately resulting in earlier treatment and better patient outcomes. Although AI algorithms can achieve high-performance levels in many tasks, the AI decision making process is not easy to understand. For this reason, it is often referred to as a "black box", an arrangement that makes it difficult for practitioners to understand the reasoning behind an AI algorithm's decisions and to limit the ability to trust and interpret the results. This lack of transparency and explanation in AI algorithms is a complex issue that is being addressed by the field of explainable artificial intelligence (XAI). XAI encompasses various approaches to make AI more transparent to users. By developing AI systems that are more transparent and explainable, XAI aims to increase trust in the technology and ensure that it is used responsibly.

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Deadline for manuscript submissions

closed (31 March 2024)



Journal of Imaging

an Open Access Journal
by MDPI

Impact Factor 2.7
CiteScore 5.9
Indexed in PubMed



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Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

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