Special Issue

Quantum Computing: Techniques and Applications in Medical Image Processing

Message from the Guest Editors

Quantum computing (QC) has been recently in the frontlines of both industrial and academic discussions, its promising results as well as its hype, and sometimes, its anticipated controversies. We do recognize the advantages of QC and we believe in its transformative potential. Nevertheless, we also recognize that given its novelty—especially in the field of healthcare— clinicians and quantum computing researchers may feel the engagement with QC in the context of real-life medical imaging and image processing problem domains challenging. With this special issue, we wish to contribute of shaping the future of QC and medical imaging science by calling for articles that focus on the utilization of quantum computing methodologies within the fields of medical imaging, image reconstruction, image processing, radiomics, and AI. We are interested to read about QC approaches that deal with, e.g., classic-to-quantum imaging data encoding, error mitigation, quantum circuit optimization, quantum image reconstruction, quantum radiomics, quantum image processing, and manipulation as well as quantum AI for predicting clinical end-points.

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Deadline for manuscript submissions

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About the Journal

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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