Call for Papers
Themed Series of APSIPA Transactions on Signal and Information Processing on
"AI for Medical Image Analysis"

Introduction

The integration of artificial intelligence (AI) into medical imaging has revolutionized healthcare by enhancing diagnostic accuracy, optimizing treatment planning, and improving patient outcomes. AI-driven techniques in medical image processing, classification, segmentation, and treatment planning have enabled automated analysis of complex medical data, facilitating early disease detection and personalized medicine. Despite these advancements, challenges such as data heterogeneity, interpretability, and integration into clinical workflows persist. This themed series aims to gather cutting-edge research and developments in AI applications for medical imaging, fostering collaboration among researchers, clinicians, and industry professionals to address these challenges and propel the field forward.

Topics of Interest

We invite researchers to submit original research articles and reviews that address the following topics (but are not limited to):

- AI algorithms for medical image classification, segmentation, and treatment planning
- Image preprocessing and enhancement methods
- Image sequence and longitudinal analysis
- Multimodal image analysis and fusion
- Interpretable and explainable AI in medical imaging
- Foundation models and vision language models for medical images
- Data augmentation and synthesis in medical imaging
- Federated learning and data privacy in medical image analysis
- Clinical applications in radiology, pathology, and other medical specialties

Submission and Review Process

Each paper submitted to this series will be reviewed using the first-come-first-serve principle. The target of the first round of decision-making is 5 weeks, and the period of the first round of revision is 2 weeks. The paper will be accepted between 8-12 weeks (depending on 1 or 2 revisions). Once the submission window has closed, accepted papers ready for publication will be published online. The series will be accompanied by an editorial written by the guest editorial team. If a paper cannot be accepted within the publication window, it will be considered as a regular paper.

If you are interested in paper submission, please refer to:

https://nowpublishers.com/Journal/AuthorInstructions/SIP

Important Dates

Submission Window: June 1 to August 1, 2025

Publication from October 2025

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