Call for Papers

Themed Series of APSIPA Trans. on Signal and Information Processing on
"**AI for Healthcare**"

Artificial intelligence (AI) is rapidly transforming the healthcare industry by enabling more efficient, accurate, and personalized care. The availability of vast amounts of medical data from electronic health records, wearables, medical imaging, and other sources has created an opportunity for AI algorithms to provide valuable insights that would have been difficult or impossible to identify otherwise. AI is being applied in various areas in healthcare, including medical diagnosis, drug discovery, personalizing patient care, among others. For medical diagnosis, AI and machine learning algorithms can analyze patient data and recognize patterns indicative of certain diseases or conditions. For drug discovery, AI-powered tools can analyze vast amounts of molecular, genomic, and drug interactions data, to identify potential drug candidates more efficiently and effectively. To personalize care and improve the patient experience, AI and machine learning algorithms can be used to predict patients who are at high risk of readmission, allow healthcare providers to intervene and provide more proactive care. AI-powered chatbots and virtual assistants can also provide patients with personalized support and guidance, reducing the burden on healthcare providers and enhancing the overall patient experience. While AI in healthcare is still in its early stages, its potential to revolutionize the entire healthcare ecosystem is vast.

This themed series focuses on "AI for healthcare" and aims to provide a venue to facilitate idea exchange among researchers of relevant but diverse disciplines. Inter-disciplinary studies are especially welcomed. Interesting topics include but are not limited to:

- AI-enabled disease diagnosis and prediction
- AI-powered personalized medicine and treatment
- AI-assisted medical imaging and analysis
- AI for drug discovery and development
- AI-based medical data analytics and decision-making
- AI-enhanced clinical trials and patient monitoring
- Ethical and legal considerations in AI for healthcare
- AI for public health and preventive care
- Pandemic (such as COVID-19) management with AI
- Health and medical behavior analytics with AI
- AI-based medical visual question & answering, and summarization
- AI-generative models, Large Language Models for healthcare
- Medical image generation and medical image registration with AI
- Organ and lesion segmentation/detection, Image classification in MRI/CT/PET with AI
- Medical image enhancement/denoising with AI
- Active learning and life-long learning in medical computer vision
- User/patient psychometric AI modeling from multimodal medical data
- Real-world applications and challenges of AI in healthcare

Each paper submitted to this series will be reviewed on a first come, first served basis. The initial decision for each paper will be made within four weeks of submission. Accepted papers will be published as open-access articles immediately. Once all papers in this series are published, they will be assembled into an online book with 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

Submission Window: April 1, 2023 to July 31, 2023

Publication Window: May 1, 2023 to August 31, 2023

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