Special Issue on
Machine Vision and Deep Learning for Healthcare applications

DESCRIPTION

Machine vision is the technology and methods that enable the automatic analysis of images for information retrieval. It is being widely used in many areas of image understanding and visual computing. Deep learning has recently emerged as a powerful tool for various computer vision tasks. The integration of deep learning with machine vision makes the analysis more intelligent and accurate. The latest advances in the healthcare field are aimed to improve human life and medical care. The development of latest medical image modalities, including MR, X-ray, PET, US imaging, 3D and 4D requires effective analysis tools. There is an urgent requirement of development of technologies and methods for analysis of the medical data. Machine vision and deep learning can be used effectively for solving these healthcare challenges. Thus, this special issue aims to embrace the capabilities of deep learning and machine vision for medical imaging, diagnosis, disease prediction, 3D and 4D image analysis and other related areas. The topics of interest include, but are not limited to:

- Image acquisition, reconstruction and synthesis
- Automatic Treatment or Recommendation
- Internet of Medical Things (IoMT)
- Computer-aided detection and diagnosis
- Diagnosis and prediction of COVID-19
- Deep learning for Electronic health records
- Multimodal Data Fusion and Analysis
- Deep learning for Radiation Oncology
- Transfer learning in clinical imaging process and analysis
- Privacy and Security for mHealth and eHealth
- 3D and 4D medical image analysis
- Predictive analytics and therapy
- Drug discovery and precision medicine
- Technology for emergency and care
- Dynamic, functional, physiologic, and anatomic imaging
- Applications in different medical image modalities, including MR, X-ray, PET, US imaging

The authors are requested to submit their full research papers complying with the general scope of the journal. The submitted papers will undergo peer review process before they can be accepted. Notification of acceptance will be communicated as we progress with the review process.

Important dates (approx.):

Deadline for submissions: March 30, 2022
1st round of acceptance notification: May 30, 2022
Submission of revised papers: June 30, 2022
2nd round of acceptance notification: August 30, 2022
Publication online: December 15, 2022

GUEST EDITORS

Dr. Akansha Singh, Bennett University, Greater Noida, India, akanshasing@gmail.com
Dr. Krishna Kant Singh, Professor, Faculty of Engineering & Technology, Jain (Deemed-to-be University), Bengaluru, India., krishnaiitr2011@gmail.com
Dr. Vijayalakshmi Saravanan, University of South Dakota (USD), USA, vijayalakshmi.saravanan@gmail.com