DE GRUYTER

Special Issue:

Setting The Future of Signal and Image Processing

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DESCRIPTION

Signal and Image Processing is a broad topic of study that examines the physical-mathematical basis and potential implementation of sensors, artificial intelligence algorithms,signal processing and interpretation. We can think, act andlearn, because of the nonlinearity's inherent sensory information. Creating new, theoretically inspired approaches that focus on establishing and developing Signal and Image Processing Applications crosses the divide between theory and practice.

Signal Processing covers a wide range of signal processing and machine learning subjects, including detecting, estimating, inference, and classification difficulties. Advances in computational for the analysis of sparse, linear, and nonlinear systems, non-recursive and recursive digital filters, multi-rate filter banks, deep convolutional neural network, sensor array processing, -based approaches to implementing chaos theory. The image Processing journal covers research on creating, processing, and exchanging visual information. Its primary objective is the most recent developments in image and video processing, including image generation and display, segmentation, colour and texture analysis, enhancement and restoration, coding and communication, implementations and architectures, and creative applications.

The theory and practice in signal, image, and video processing. It seeks to distribute advanced engineering breakthroughs and research findings to all signal, and image processing, presenting practical solutions to the current Engineering and Scientific signal, image, and video processing issues. Signal and image processing is the science and technology that transform signals produced by natural methods or artificial to form suitable for a given goal. The signal is used for transmission, presentation, storage, segmentation, interpretation, classification, or diagnosis. It could also be voice, audio, pictures, videos, sensor, telemetry, electrocardiograms, or seismology, among other things. The design of reliable, low-complexity filters, signal reconstruction, and filter bank theory are all current topics of development in digital signal processing. Restoration, compression, quality assessment, computer vision, and medical imaging are all areas where image processing is used. Modelling, recognition, and compression

This Special Issue focuses on deep learning neural networks, image and video spatial-time processing, and nonlinear, sensor-based machine learning, and non-Gaussian signal processing techniques with convex and non-convex. It includes fresh theoretical models for analysing sensing in information-theoretic learning and signal processing. Signal and Image Processing and an interpretable deep learning framework are also used to support the sensor applications. When unknown sensor data is acquired, these algorithms can generalize, learn new information, and make discoveries for themselves.

The following topics are welcome but not restricted to:

- Using data collection IoT systems by data-driven algorithms
- Transfer learning applications in image processing
- Using machine learning for object detection
- IoT applications of data and analysis
- Systems that use knowledge-based machine learning
- Aspects of perceptual systems of computational
- Real-world applications of machine learning
- Knowledge-based neural networksand temporal knowledge representation
- Interactions between machines and humans
- Communications with Digital Signal Processing
- Modern Digital Signal Processing Technologies
- Automated Signal Processing Learning
- Information Security and Forensics

IMPORTANT DATE

Final Paper Submission Deadline: 31.07.2024

HOW TO SUBMIT

Before submission authors should carefully read the Instructions for Authors and Publication Ethics

All submissions to the Special Issue must be made electronically via the online submission system https://mc.manuscriptcentral.com/jisys

All manuscripts will undergo the standard peer-review process (single-blind, at least two independent reviewers). When entering your submission via the online submission system please choose the option **"SI Future of Signal and Image Processing".**

Submission of a manuscript implies that the work described has not been published before and is not under consideration for publication anywhere else.

We are looking forward to your submission!

In case of any further questions please contact:
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