ICICC-2023
6th International Conference on Innovative Computing and Communication

Organized by Shaheed Sukhdev College of Business Studies, New Delhi, India
On 17-18th FEBRUARY 2023.

********** CALL FOR PAPERS **********

SPECIAL SESSION ON

AIoT for Images: Application, Challenges and Future Scope

SESSION ORGANIZERS:

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SESSION DESCRIPTION:

In recent years, Artificial Intelligence (AI) has been integrated into a large and rapidly expanding range of applications. Increased hardware processing speeds, combined with deep learning and machine learning technologies have allowed the development of real-time intelligent image processing at network edge regions. AI applications for intelligent image processing include handwriting / recognition, image captioning and autonomous vehicle navigation. In addition, AI has been increasingly integrated into Internet of Things (IoT) applications. Some of these so-called AIoT applications include intelligent image processing in smart factories to monitor machinery conditions and control raw material inventory, identifying abnormalities in medical images, and automatic real-time scanning and recognition of license plates in traffic to locate stolen cars. These intelligent image processing applications of AIoT can improve quality of life and raise business competitiveness.

This special issue focuses on such applications for the real-time use of AIoT intelligent image processing. The topics covered in this special issue include (i) intelligent image processing applications and services to fulfill the real-time processing and performance demands, (ii) real-time deep learning and machine learning solutions to improve computational speed and increase recognition rates at network edges, (iii) new frameworks to optimize real-time AIoT image processing, and (iv) combining intelligent real-time image processing with edge computing, fog computing, and relevant techniques to balance the computational workloads between IoT devices and the server side.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- **1. Real-time intelligent image processing for the internet of things**
- **2. An AIoT Based Smart Agricultural System for Detection and prediction with Machine Learning**
- **3. An Energy-Efficient and Fast Scheme for Hybrid Storage Class Memory in an AIoT Terminal System**
- **4. Perception Chip with Near-Sensor Processing Scheme for Low-Power AIoT Applications**
- **5. Research on Foreground Object Recognition Tracking and Background Restoration in AIoT Era**
- **6. AIoT Bench: Towards Comprehensive Benchmarking Mobile and Embedded Device Intelligence**
- **7. AIoT Solution Survey and Comparison in Machine Learning on Low-cost Microcontroller**
- **8. The implementation to intelligent linkage service over AIoT hierarchical for material flow management**

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **[session name]** ***on or before*** **[30th November 2022]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://icicc-conf.com/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify [**Session Name**] at the top (above paper title) of the first page of your paper.

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