IEEE Transactions on Industrial Informatics

CALL FOR PAPERS
for Special Section on

Augmented Intelligence of Things for Smart Enterprise Systems

Theme: Enterprise management systems (EMS) and big data analytics are the most promising computing platform in the fields of artificial intelligence, information science, and statistics that uses statistical pattern recognition, federated learning, database management, visualization technology, and social networking. In the era of modern industrial and medical science research, there is a significant trend in developing a consortium having experts from various field viz., Computer network management, Artificial intelligence, Biomedical engineering, Computer vision, sensor devices, and advanced communication systems to achieve easily accessible, affordable and rapid smart EMS system for providing better big data handling and creating new demands and opportunities for engineering and management systems and their applications. Here, one has have been confronted with a new IoT-the intelligence of things. Meanwhile, the future of augmented Intelligence of Things (AIoT) and Artificial intelligence encompasses advanced cognitive methods capable of doing what ordinary federated learning systems cannot attain easily or attain at all in parallel and distributed systems architectures for a Smart society. EMS is the combination of sustainable Industrial internet of things and Intelligence of Things. Augmented intelligence is used to develop a human-centred partnership model. It means that augmented intelligence and or AIoT will soon logically and effortlessly interrelate with human experts and operators, providing them with articulate clarifications and answers, increases cognitive performance including robust decision making, learning analytics, and new experiences, even at the edge of the network or in robotic devices and navigation. The proper decision-making systems are required for handling the massive big data under smart EMS. In this special issue, the focus is on mainly robust and adaptive decision-making systems for faster data processing and manipulation in every sector.

In line with these efforts, the central theme of this Special Issue is to report novel methodologies, theories, technologies, techniques, and solutions for EMS data analytics for sustainable societal systems. Therefore, This Special Issue aims at addressing these topics across multiple abstraction levels, including mathematical models, the provisioning of services, engineering, management, optimization, short-or-long range health informatics, and interfaces to specific implementation approaches. Hence, it aims to present the most important and relevant advances to overcome the challenges related to AIoT_EMS analytics, and processing through IoT.

This special section will focus on (but not limited to) the following topics:

- Big data analytics for AIoT_EMS
- Computational complexity for AIoT_EMS analytics
- Cyber-physical systems and Blockchain for AIoT_EMSM
- Cloud/Fog computing for AIoT_EMS
- Context-aware security and privacy for AIoT_EMS
- Large-scale data analytics tools and technologies for AIoT_EMS
- Complex biomedical complex data handling over AIoT_EMS
- Machine learning and deep learning approaches in AIoT_EMS
- Modeling, simulation, and analysis for the resilience of complex AIoT_EMS
- Smart City trust management and risk assessment, as well as social-factor considerations in the Application of AIoT_EMS

Manuscript Preparation and Submission

Follow the guidelines in "Information for Authors" in the IEEE Transaction on Industrial Informatics http://www.ieee-ies.org/pubs/transactions-on-industrial-informatics . Please submit your manuscript in electronic form through Manuscript Central web site: https://mc.manuscriptcentral.com/tii . On the submitting page #1 in popup menu of manuscript type, select: SS on **Augmented Intelligence of Things for Smart Enterprise Systems**

Submissions to this Special Section must represent original material that has been neither submitted to, nor published in, any other journal. Regular manuscript length is 8 pages.

Note: The recommended papers for the section are subject to final approval by the Editor-in-Chief. Some papers may be published outside the special section, at the EIC discretion.

Timetable:
Deadline for manuscript submissions **March 30, 2022**
Expected publication date (tentative) September 2022

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