CALL FOR PAPERS

IEEE Journal of Selected Areas in Sensors Special Section on

Emerging Technologies in Sensor Networks

Sensor network is a fundamental building block of IoT applications, enabling reliable communication, while it is undergoing significant transformation through the integration of emerging technologies such as AI/ML, 5G and beyond, edge computing, quantum computing, blockchain, digital twin, AR, and VR. The integration of AI/ML algorithms into sensor networks is a rapidly growing research area, and its benefits include real-time data analysis, improved network reliability and accuracy, reduced manual intervention, and optimized sensor and network performance. Additionally, these algorithms can detect potential security threats, which is critical for improving network security. To fully explore the potential of AI/ML algorithms in sensor networks, extensive theoretical and practical research is necessary to design and develop new techniques and approaches that can enable even more efficient, accurate, and secure data collection and analysis.

It is intended that this Special Section of IEEE Journal of Selected Areas in Sensors (JSAS) will show the state-of-the-art in "Emerging Technologies in Sensor Networks". Original research contributions, tutorials and review papers are sought in "Emerging Technologies in Sensor Networks" related areas including (but not limited to):

- Emerging sensor technologies
- Edge intelligence in sensor networks
- Emergence of AR/VR and metaverse
- Digital twins for IoT networks
- Novel QoS requirements
- Novel system architectures
- New communication paradigms
- New hardware and system design
- 5G/6G-IoT integration
- Security and privacy
- Interoperability in heterogeneous networks
- Mobility management and handoff mechanisms
- AI/ML-enabled sensor networking
- Cognitive computing in sensor networks
- Real-time support
- Simulations and real-world experiments
- Modeling, analysis and deployment
- Sensor Data Processing
- Testing, evaluation and verification of sensor networks
- Sensors for various applications

Solicited and invited papers shall undergo the standard IEEE Journal of Selected Areas in Sensors (JSAS) peer review process. All manuscripts must be submitted on-line, via the *IEEE Author Portal,* see https://ieee.atyponrex.com/journal/jsas. When submitting, please indicate in the "Manuscript Type" roll down menu that the paper is intended for the "**2024 Emerging Technologies in Sensor Networks**" Special Section. Authors are particularly encouraged to **suggest names of potential reviewers** for their manuscripts in the space provided for these recommendations. For manuscript preparation and submission, please follow the guidelines in the *Information for Authors* at IEEE Journal of Selected Areas in Sensors web page, http://ieee-jsas.org/

Deadlines

·	Manuscript Submission:	~~September 15, 2023~~	November 3, 2023
·	Completion of First Review:	~~November 15, 2023~~	January 5, 2024
·	Revised Manuscript:	~~December 15, 2023~~	February 5, 2024
·	Completion of Final Review:	~~January 15, 2024~~	March 5, 2024
·	Publication:	Q1 2024	

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