**IEEE Journal of Selected Areas in Sensors**

# CALL FOR PAPERS

IEEE Journal of Selected Areas in Sensors Special Section on

**Data-driven** **Intelligent Sensor Calibration and Its Application**

Data-driven intelligent sensor calibration offers numerous benefits across a wide spectrum of applications, including robotics, healthcare, agriculture, and Industry 4.0. With advancements in machine learning, artificial intelligence, and big data, these adaptive calibration techniques are replacing traditional manual methods, enabling sensors to operate more accurately and autonomously in dynamic environments. These developments enhance the precision and reliability of sensor systems, addressing the growing demands of modern, complex real-world applications.

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

* Data-driven sensor calibration methods and their applications in robotics, healthcare, agriculture, and Industry 4.0.
* Machine learning and AI techniques for sensor error modeling and compensation.
* Self-calibrating sensor systems for autonomous systems.
* Multi-sensor fusion and calibration using data-driven approaches.
* Applications of calibrated sensors in fields such as autonomous navigation, SLAM, robotic manipulation, and healthcare.
* Challenges and future trends in sensor calibration for intelligent systems.

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 “**Data-driven Intelligent Sensor Calibration and Its Application**” Special Section. Authors are particularly encouraged to **suggest names of potential reviewers** for their manuscripts in the space provided for these recommendations in *Manuscript Central.* For manuscript preparation and submission, please follow the guidelines in the *Information for Authors* at IEEE Journal of Selected Areas in Sensors web page, <https://ieee-jsas.org/>

**Deadlines:**

* + Manuscript Submission: 30th April 2025
	+ Notification of Acceptance: 31st May 2025
	+ Final Manuscript published in IEEE Xplore: 15th June 2025
	+ Tentative date of paper section: 15th July 2025

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