



Call for Papers

IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM)

Special Section on

Real-time and Lightweight Signal Parameter Estimation for Intelligent Instrumentation

Parameter estimation of discrete-time signals is of great interest for many engineering fields such as measurement instrumentation, biomedical and healthcare, communications, audio systems, power systems, mechanical systems, aerospace, circuit testing, and so on. The parameters to be estimated can be modelled as constant or time-varying variables, either deterministic or random. Therefore, the used algorithms are often required to provide accurate steady-state parameter estimates and/or fast response under dynamic conditions. Moreover, they should satisfy real-time constraints even if low-cost electronics is used.

This special section focuses on recent developments on real-time and lightweight time-domain or frequency-domain algorithms for the estimation of the parameters of discrete-time signals. Topics include new theoretical developments, instruments, systems, or applications of real-time and lightweight time-domain or frequency-domain algorithms for the estimation of the parameters of discrete-time signals related, but not limited to, the following areas:

- Measurement systems
- Medical, biomedical, and healthcare systems
- Instrumentation for robotics, mechatronics, and industrial automation
- Power system measurements and monitoring
- Condition monitoring and fault detection/analysis of large-scale systems
- Industrial measurement applications
- Renewable energy systems and smart grid

Each accepted paper for this Special Section will receive an Open Access fee waiver; i.e., accepted papers will not be charged Open Access fee.

Deadlines

Submission: July 15, 2023
First decision: August 20, 2023
Final decision: October 1, 2023
Publication Volume: 2023

For more info and submission instructions, please visit OJIM's official website: <http://ojim.ieee-ims.org/>

Guest Editors:

Dario Petri	University of Trento, Italy	dario.petri@unitn.it
Daniel Belega	Politehnica University Timișoara, Romania	daniel.belega@upt.ro