

34th Irish Signals and Systems Conference 2023

<http://www.issc.ie>

Dear Colleague,

The [34th Irish Signals and Systems Conference](#), ISSC 2023, will be held in Dublin, Ireland on 13-14 June 2023 and will be hosted by University College Dublin. It will be an **in-person** conference (i.e., there will be no virtual/remote participation).

Call for Papers

Over the past 33 years, ISSC has become the premier conference in Ireland addressing all aspects of signals and systems. The conference focuses on Digital Signal Processing, Control Systems, Communications and related fields of ICT, and encompasses algorithms and system modelling, design and implementation for a broad range of applications. The Organising Committee would like to invite you to participate in the 34th Irish Signals and Systems Conference, ISSC 2023.

Important Dates

Full Paper Submission: 12th March 2023

Notification of Acceptance: 23rd April 2023

Early Registration Deadline: 7th May 2023

Submission of Camera Ready Paper: 14th May 2023

Author Registration Deadline: 14th May 2023

Conference Dates: Tuesday 13th to Wednesday 14th June 2023

Topics of Interest

Prospective authors are encouraged to submit previously unpublished contributions from a broad range of topics, which include but are not limited to the following:

Signal Processing

- Speech, audio, image, video and multimedia signal processing
- Bio-inspired systems
- Biomedical signal processing and systems
- Medical diagnostics
- Signal-based QoE and UX assessment
- Analog, mixed-signal and RF signal processing
- Embedded DSP

Control Systems

- Linear and non-linear system modelling and control
- Robust and adaptive control
- Distributed and networked control
- System identification
- Control applications

<p>Cyberphysical Systems</p> <ul style="list-style-type: none"> • Networks and networked systems • Data management and processing for cyber-physical systems • Smart living technologies • ASICs and FPGAs for signal processing and system-on-chip • Applications in control, power electronics and communications • Energy-efficient applications and system implementations • Digital manufacturing • Robotics and autonomous systems 	<p>Communications and Future Networking</p> <ul style="list-style-type: none"> • Next-generation wireless and optical communications • Signal processing for communications • Network architectures and optimisation • Distributed media and services • Cognitive and sensor networks • Internet of things • Green communication and networking • Blockchain in communication networks • Software-defined networks • Quantum networks
<p>Cybersecurity</p> <ul style="list-style-type: none"> • Cryptography and information hiding • Privacy and privacy-preserving algorithms • Trust and trustworthy systems • Network, application and system security • Security of industrial control systems and cyber-physical systems • AI for cybersecurity and cybersecurity for AI • Digital and information forensics 	<p>Machine Learning and AI</p> <ul style="list-style-type: none"> • Machine learning for systems and signal processing • Deep learning • Machine learning at the network edge • Affective computing • Ethics in AI and machine learning • Interpretability and analysis of machine learning models • Deep learning and pre-trained models for natural language processing and computer vision • Green AI
<p>Signals and Systems for Sustainability</p> <ul style="list-style-type: none"> • Signals and systems for sustainable applications (green and circular economy, pollution, water, waste, food) • Architectures, theories and algorithms for energy-efficient signal processing • Mitigating and minimising digital waste • Efficient and sustainable AI 	

ISSC 2023 welcomes submissions for Special Sessions on novel or emerging areas of research in signal processing, control, communications, cybersecurity, applied ML/AI and related ICT areas. Developments in engineering/ICT education are also very welcome. Please contact issc2023@ucd.ie with your suggestions.

Submission Guidelines

Prospective authors are invited to initially submit their work as a [fully formatted manuscript](#) of original research. For the final submission, papers over 6 pages will be charged €90 per extra page up to a maximum of two extra pages (8 pages maximum). Papers must be submitted via the [online submission system](#) on the conference website. Subject to the conference requirements for registration and attendance, and IEEE requirements (including [authorship](#)), accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements.

We look forward to your submission or participation in ISSC 2023.

Kind Regards,

Mark Flanagan

General Chair, ISSC 2023
On behalf of the Organising Committee