IEEE IST 2025

October 15–17, 2025
INSA, Strasbourg, France

IEEE INTERNATIONAL CONFERENCE ON IMAGING SYSTEMS & TECHNIQUES

The IEEE IST will take place at INSA Strasbourg on October 15–17, 2025, in conjunction with the IEEE School of Imaging.

The IST 2025 is Sponsored by:
IEEE Instrumentation and Measurement Society, the IEEE France Section, and the TC 19 Technical Committee on Imaging Systems

CALL FOR PAPERS

IMPORTANT DATES

June 15, 2025
Full Paper Submission Deadline

June 30, 2025
Notification of Acceptance

July 15, 2025
Full Paper Deadline

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Please visit:
ist2025.ieee-ims.org

Invitation from the Organizers

On behalf of the Technical and Local Committee of the 2025 IEEE International Conference on Imaging Systems and Techniques (IST 2025) and IEEE International School on Imaging, we welcome you to the IST conference, 15-17 October 2025, INSA, Strasbourg, France.

Historically, this is the twenty-first consecutive year, following the successful IST events held previously in Stresa, Italy (2004), Niagara Falls, Canada (2005), Minori, Italy (2006), Krakow, Poland (2007), Chania, Greece (2008), Shenzhen, China (2009), Thessaloniki, Greece (2010), Penang Island, Malaysia (2011), Manchester, UK (2012), Beijing, China (2013),Santorini, Greece (2014), Macau, China (2015), Chania, Greece (2016), Beijing, China (2017), Krakow, Poland (2018), Abu Dhabi, UAE (2019), New York (virtual) (2021), Taiwan (Virtual) (2022), Copenhagen, Denmark (2023), Tokyo, Japan (2024)) where experts from all over the world meet to trigger an in-depth discussion of imaging methodologies and its applications shaping the future, and identifying emerging imaging trends.

The application of machine learning and artificial intelligence (AI) to analyze and interpret big data is transforming various technology sectors by significantly enhancing accuracy, efficiency, and early disease detection, leading to a rapid shift in the global economy with an unprecedented convergence of science and technology. Let us see this transformational revolution as a unique opportunity not only to exchange and disseminate knowledge but also bridge multidisciplinary while establishing global collaborative multidisciplinary opportunities, by tightening collaborations among industry, healthcare and academia.

We would like to thank the TC-19 on Imaging Measurements and Systems Technical Committee, IEEE Instrumentation and Measurement Society, the local Organizing Committee, the IEEE School of Imaging the and the IST Technical Committee, for their dedicated efforts towards the organization of the event. Special thanks to Conference Catalysts, LLC, and specifically Alexis Wisdom, for their dedicated efforts, and their outstanding and enthusiastic efforts to administrate these two major events.

We are cordially inviting you to join and honor with your presence the 2025 IEEE International Conference on Imaging Systems and Techniques (IST2025) and the IEEE International School on Imaging. This is a unique opportunity for the advancement of knowledge, while generating unique collaborative opportunities among industry, healthcare and academia.

George K. Giakos
Fellow IEEE, General Chair
Manhattan University, New York, United States

Prof. Denis Cavallucci
Local Organizer Chair
INSA, Strasbourg, France

IST 2025 Technical Scope

The objectives of IST 2025 are but not limited to:

- » Imaging sensors, phenomenology, representation, modeling, and registration
- » Detection, recognition, and classification
- » Image understanding and scene analysis for intelligent systems
- » Big data and deep learning
- » Medical diagnostic and therapeutical imaging modalities, tomography
- » Computational imaging, image-based modeling, analysis, and processing
- » Bioinformatics, AI-enabled diagnosis and personalized treatment of tumors
- » Medical measurements, detection and image figure-of-merits (FOM)s
- » Bioinspired vision, neuromorphic architectures and deep learning
- » Novel hardware designs and system architectures
- » Quantum computing and artificial intelligence
- » Synthesis, rendering, and visualization
- » 3D vision: modeling, representation, perception, processing, and recognition; predictive 3D vision
- » Electromagnetic modalities and tomography

- » Non-classical sensing, sensor fusion
- » Tracking and scene analysis for intelligent vehicles
- » Motion estimation, registration, and fusion
- » Multi-spectral, polarimetric and hyper-spectral Imaging, algorithms and applications
- » 3D reconstruction technology employing deep neural-based rendering techniques
- » Emerging Neural Radiance Fields (NeRF) and 3D Gaussian Splatting (3DGS) techniques
- » Defense and Space imaging systems
- » Active and passive vision and real-time techniques
- » Segmentation for object location and obstacle avoidance for intelligent robots
- » Robot control, mobile robotics, mobile sensor networks, mobile mapping
- » Intelligent mobile robot methods, learning strategies, and advancements
- » Autonomous multi-vehicle collaboration (including UAVs)
- » Machine vision for process control/diagnosis, trend analysis, or preventative maintenance
- » Machine vision applications for industrial research

IST 2025 MANUSCRIPTS

Manuscripts must be prepared in 4 to 6 pages in IEEE 8.5 x 11 format. The IST Proceedings are indexed in the WEB of Science and Scopus and will be submitted to IEEE *Xplore®* for publication. Submitted papers may not have been previously published in or under consideration for publication in another journal or conference. Manuscripts should be submitted as PDF files via EDAS.

High-quality, technically extended papers will be considered, following a peer review process, for possible publication in a Special Issue of IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM) as well in other prestigious peer- reviewed journals.

IST 2025 SPONSORS

IEEE Instrumentation & Measurement Society, the IEEE France Section, and the TC 19 Technical Committee on Imaging Systems, in conjuction with INSA Strasbourg, and the IEEE International School of Imaging.

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