





# **CALL FOR PAPERS**

The 1st IFAC Joint Conference on Computers, Cognition, and Communication will be held in Padova, Italy, from 15-18 September 2025. J3C serves as a platform for scientists, researchers, and practitioners to discuss their cutting-edge research results and findings, shape future directions and developments, and exchange knowledge and perspectives in the fields of intelligent control, automation & robotics, cyber-physical systems, Artificial Intelligence & control, control via communication networks, engineering, and its integration into industry and society. It constitutes the primary forum for cross-industry, multidisciplinary research and provides an opportunity for a unique and rich cultural experience complemented by excellent technical and social programs. J3C 2025 is the flagship event for the IFAC CC on Computers, Cognition, and Communication (CC3) and will consist of 3 sub-events:

1st IFAC Workshop on Engineering and Architectures of Automation Systems (EAAS 2025): Automation systems are subject to substantial change. Architectures are becoming more flexible and virtualized. Communication channels no longer just transfer individual data points but comprehensive data models. Digital twins form the backbone of modern applications in the cloud or at the edge. The role of humans is also changing from observer to an integral part of a human-centered production environment. EAAS core topics: digital twins, system architectures of automation systems, information models in engineering and operation, application of artificial intelligence, autonomous and cyber-physical systems.

7<sup>th</sup> IFAC Conference on Intelligent Control and Automation Sciences (ICONS 2025): The ICONS conference delves into computational intelligence methods for modeling, system identification, and control. Key topics include neural networks, evolutionary computing, fuzzy techniques, swarm intelligence, reinforcement learning, and training algorithms. Focus areas cover machine learning, deep learning, neurodynamic optimization, brain-computer interfaces, and human-machine interaction. Hybrid systems, smart sensors, actuators, data fusion, intelligent agents, swarm robotics, and autonomous systems are also featured. Applications span transport, medical, biomedical, aerospace, automation, manufacturing, process control, industry, smart cities.

7<sup>th</sup> IFAC Symposium on Telematics Applications (TA 2025): The TA symposium focuses on the expanding capabilities in web technology, telecommunication, and machine-to-machine communication. It explores how Cyber-Physical Systems, the Industrial Internet, and the Internet of Things enhance traditional remote control and create new applications. Emphasizing the need for sound theory, methods, proof of concepts, and industrial standardization, the symposium offers a platform for academic and industrial communities to address new challenges, share solutions, and discuss future research. Topics include telematic methods, networked systems, control through networks, cyber-physical systems, Industry 4.0/5.0, interoperability.

J3C 2025 will feature keynote addresses, tutorials, and technical presentations and special sessions, all of which will be included in the registration. Special session proposals and technical papers are solicited on all cited aspects, from theory to applications. All accepted papers will appear in the proceedings of the meeting, will be hosted on-line on the IFACPapersOnLine.net website and will be indexed in SCOPUS.



IFAC TC Main-Sponsors: TC3.1, TC3.2, TC3.3 IFAC TC Co-Sponsors: TC1.2, TC1.5, TC2.1, TC4.1, TC4.3, TC5.1, TC5.3, TC6.1, TC6.4, TC7.3, TC7.5, TC8.2, TC9.4



Schedule:
Special Session Proposals:

15 March 2025 Submission of full papers:

#### 15 April 202

Notification of acceptance: 25 June 2025 Camera-ready paper & author registration: 10 July 2025 Early registration deadline: 10 July 2025

## National Organizing Committees (NOC):

General Chair – Gian Antonio Susto (ITA)
EAAS Co-Chair – Federico Tramarin (ITA)
EAAS Vice Chair Industry – Gilberto Pin (ITA)
ICONS Co-Chair – Alessandro Beghi (ITA)
ICONS Vice C. Industry – Chiara Masiero (ITA)
TA Co-Chair – Angelo Cenedese (ITA)
TA VC Industry – Dave Cavalcanti (USA)

### International Program Committees (IPC):

IPC Chair – Shuzhi Sam Ge (SGP)
EAAS Co-Chair – Mike Barth (DEU)
EAAS VC Industry – Frank Maurer (DEU)
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ICONS VC Industry – Diego Romeres (USA)
TA Co-Chair – Lei Ma (CHN)
TA Vice Chair Industry – Ming Jiang (CHN)

#### Editors & Other Main Organizers:

CC3 Coordinator – Thierry Marie Guerra (FRA)
CC3 Conference Vice-chair – Ulrich Jumar (DEU)
Vice Program Chair – Séan McLoone (GBR)
EAAS Editor – Jus Kocijan (SVN)
ICONS Editor – Roberto Oboe (ITA)
TA Editor – Alexander Fay (DEU)

