CALL FOR PAPERS

16TH IFAC SYMPOSIUM ON ANALYSIS, DESIGN AND EVALUATION OF HUMAN-MACHINE SYSTEMS

IFAC HMS 2025

⊕ Beijing, China
📅 November 18th to 21th

The IFAC HMS 2025 encompasses a broad scope within the field of human-machine systems. It includes but is not limited to areas of human ergonomics and brain-machine interfaces, control robotics, embodied artificial intelligence, human-AI interaction, human-automation interaction, human-systems integration, intelligent human-machine interfaces, and human operator support. Accepted papers will be published in the IFAC-PapersOnLine series, indexed by **Elsevier/EI** (https://sciencedirect.com/).

The objective of the symposium is to serve as a premier international platform for the dissemination and discussion of the latest scientific and technological advancements in human-machine systems. By facilitating knowledge exchange, the event aims to foster collaboration, inspire innovative thinking, and promote synergies among researchers, practitioners, and industry professionals. Furthermore, it seeks to address contemporary challenges and contribute to the continual advancement of human-machine systems.

Scope of the IFAC HMS 2025

S1. Decision making and cognitive processes
S2. Modeling, analysis, assessment, optimization and regulation of human performance
S3. Human and organizational factors in Industry 4.0
S4. Design, analysis and performance evaluation methodology
S5. Intelligent or adaptive human-machine interfaces
S6. Human operator support and functional state assessment
S7. Human operator selection and training
S8. Human-machine interaction and human-computer interaction
S9. Cognitive human-machine systems
S10. Human-machine symbiosis
S11. Brain-machine interaction and brain-computer interface
S12. Human-automation interaction and human-robot interaction
S13. Human-AI interaction
S14. Human-systems integration

S15. Embodied artificial intelligence
S16. Neuroergonomics, psychophysiological computing
S17. Natural cognition and interaction
S18. Adaptive automation and adjustable autonomy
S19. Adaptive aiding/assistance
S20. Social, ethical and legal implications/impacts of complex HMS
S21. Robotics and human-machine control systems
S22. Robotics and intelligent control systems
S23. Human-machine systems for health
S24. Humanoid and systems
S25. Robotics and interaction
S26. Autonomous systems and automation
S27. Applied, virtual, or augmented environments
S28. Task or functional allocation
S29. Job design and work organization

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Important Dates

1. Deadline for Special (Invited) Session Proposals: **July 10, 2025**
2. Deadline for Submitting Regular Papers and Invited Papers: ~~August 15,2025~~ ~~August 25,2025~~ **August 31, 2025**
3. Date of Acceptance Notice: **September 30, 2025**
4. Date of Final Paper Submissions: **October 10, 2025**
5. Deadline for Early Registration: **October 10, 2025**
6. Deadline for Normal Registration: **October 30, 2025**
7. Deadline for Late Registration: **November 20, 2025**

Organization Information

Organizing Institutes: International Federation of Automatic Control (IFAC), Chinese Association of Automation (CAA)

Host: Institute of Automation, Chinese Academy of Sciences, University of Shanghai for Science and Technology

Main Technical Committee: TC 4.1 Human Machine Systems