

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**
3. Date of Acceptance Notice: **September 15, 2025**
4. Date of Final Paper Submissions: **September 30, 2025**
5. Deadline for Early Registration: **September 30, 2025**
6. Deadline for Normal Registration: **October 20, 2025**
7. Deadline for Late Registration: **October 30, 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

Author Submission Guidelines: The first draft of paper should be written in English and not exceeding 6 pages. For more details, visit <https://conferences.ifac-control.org/hms2025>.

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