

## Call for Papers - Beyond interface design: socio-technical human factors and UX for human-centered industrial automation

### Organized and Chaired by

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**FOCUS.** Understanding how human factors and UX shape safe, resilient, and effective operation of industrial systems in increasingly automated and AI-rich environments. The session emphasizes socio-technical perspectives that extend beyond interface design to include cognition, organizational structures, physical work contexts, and regulatory frameworks, translating research insights into actionable requirements, design principles, and evaluation methods for future human-centered industrial systems.

#### TOPICS

- ❖ Safety-/mission-critical cognition: Situation awareness, mental model, workload, attention, perception, fatigue, vigilance
- ❖ Human–AI/agent system teaming: oversight, trust, automation bias, over/under-reliance, uncertainty, explainability, transparency, accountability, coordination, communication
- ❖ UX challenges, human-centered requirements, design methods and system evaluation across industrial domains (manufacturing, mining, maritime, aviation etc.)
- ❖ Physical ergonomics, noise, vibration, mobility and environment-dependent interaction, embodied interaction in harsh environments
- ❖ Sociotechnical system analysis: system governance, resilience engineering, risk management, cognitive work analysis and task analysis
- ❖ Evolving work: roles, competencies, training, simulation-based learning, de-skilling/re-skilling, regulatory development
- ❖ Regulatory, legal, ethical, and societal considerations: compliance-by-design, liability, auditability, standards, privacy, inclusive design & sustainability decision support

❖ **AIM.** This Special Session aims to bring together researchers and practitioners from academia and industry to share recent research results, emerging concepts, and practical experiences in human-centered design and human factors for industrial automation, with a focus on human–AI interaction and socio-technical system.

❖ **CONFERENCE FORMAT.** The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations.

#### ❖ AUTHOR'S SCHEDULE (2026)

##### ❖ Regular and special sessions papers

Submission deadline ..... April 19  
 Acceptance notification ..... May 25  
 Deadline for final manuscripts ..... July 4

##### ❖ Work-in-progress/Industry practice papers

Submission deadline ..... May 31  
 Acceptance notification ..... June 19  
 Deadline for final manuscripts ..... July 4

#### SS Program Committee

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