Half-day workshop

Workshop Title

1st International Workshop on "Affective and Cognitive Sensing for Intelligent Human-centered Systems" (ACSIHS)

Organizers

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Call for Papers

The rapid evolution of machine learning, pervasive sensing technologies, and affective computing is enabling systems to better perceive, interpret, and anticipate human emotions, traits, and cognitive states. Simultaneously, the integration of IoT infrastructures and wearable devices is opening new avenues for continuous, real-world monitoring and interaction enhancement.

This international workshop invites contributions from academia, industry, and research institutions focusing on innovative methods, architectures, applications, and evaluations in the areas of **emotion recognition**, **personal traits assessment**, **human situation awareness**, **machine learning**, **IoT**, and **wearable systems**.

We particularly encourage submissions addressing interdisciplinary approaches, real-time systems, ethical considerations, and applications in critical domains such as healthcare, automotive, smart environments, and safety-critical operations.

Topics of interest include, but are not limited to:

- Emotion detection and recognition from physiological, behavioral, and multimodal signals
- Machine learning algorithms for affective and cognitive state inference
- Personal traits modeling and assessment in pervasive environments
- Neurotechnology-based systems for cognitive and emotional monitoring
- Wearable Brain-computer interfaces (BCIs) for situational awareness
- Brain informatics methods mental workload, attention, and affective states analysis
- Cognitive neuroscience-inspired models for intelligent human-centered systems
- Enhancing human situation awareness through intelligent and adaptive systems
- IoT-based architectures for real-time human monitoring and interaction
- Development and integration of wearable systems for affective and cognitive sensing

- Multimodal data fusion for robust user state estimation
- Privacy, ethics, and data protection in human-centered sensing applications
- Benchmarking frameworks, datasets, and evaluation methodologies
- Explainable and transparent AI in the context of affective computing
- Practical applications in healthcare, smart homes, vehicular systems, and collaborative robotics

Submission Guidelines:
Authors are invited to submit original, unpublished work. Accepted papers will be presented at the workshop and will be included in the conference BI proceedings at the Springer-Nature LNAI Brain Informatics Book Series (https://link.springer.com/conference/brain).

Important Dates:

- Paper Submission Deadline: [June 20, 2025]
- Notification of Acceptance: [August 10, 2025]
- Camera-Ready Submission: [August 30, 2025]
- Workshop Date: [November 11, 2025]

We look forward to your contributions and to a vibrant scientific discussion during the workshop.

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