# **CfP Special Session**



March 6-8, 2024, Arcada University of Applied Sciences, Helsinki, Finland



# **Special Session Call for Papers** "Human-Robot Interaction for Sustainable Development (HRI4SD)"

as part of the International Conference on Smart Technologies & Education (STE 2024)

# **HRI4SD Background and Overview**

Sustainable development has been defined as "development that meets the needs of the present without compromising the ability of future generations to meet their needs" [1]. Human-robot interaction (HRI) aims to create more efficient robotic systems that contribute to optimize processes, generate less contamination and protect natural and human resources for the future. To achieve these sustainable goals, integrating robots into our society has become of paramount importance. From vacuum robots to humanoid robots, researchers have put a significant effort into delicately integrating human characteristics into robots, aiming for a natural and comfortable interaction.

Research shows that humans remain skeptical about the anthropomorphic features integrated into robots. More importantly, human engagement is even lower in HRI scenarios. As a result, the ubiquitous integration of humanoid robots is significantly limited in various strategic sectors such as healthcare, education, and public services, among others. To tackle this problem, research on the life cycle of HRI needs more attention in fields such as designing, developing, deploying, and validating HRI. Thus, the special session HRI4SD is focused on exploring and addressing these and their related open questions. The special session will then unveil new guidelines for a more advanced version of HRI for sustainable development.

[1] WCED, Special Working Session. "World commission on environment and development." Our common future 17, no. 1 (1987): 1-91.

# **HRI4SD Topics**

We encourage you to submit your research on the next (but not restricted) topics:

- Human-robot interaction (HRI)
- Human-robot collaboration
- Child-robot interaction
- Elder-robot interaction
- Sustainable HRI
- Artificial intelligent (AI) for robotic systems

- User experience (UX) for HRI
- Evaluation methodology and metrics for HRI
- Simulation for HRI
- Deployment for HRI
- Programming for HRI
- others











### **HRI4SD Program Committee**

#### **Chairs**

- Leonardo Espinosa Leal, Arcada University of Applied Sciences, leonardo.espinosaleal@arcada.fi
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#### **Members**

- Dennis Biström, Arcada University of Applied Sciences, dennis.bistrom@arcada.fi
- Christa Tigerstedt, Arcada University of Applied Sciences, christa.tigerstedt@arcada.fi

### **Special Sessions General Information**

Special Sessions, held in parallel with the general conference, are an integral part of the conference. They provide researchers in focused areas the opportunity to meet and present their work, and offer a forum for interaction among the broader community of technology-enhanced learning, and online engineering world-wide. Special sessions papers are required to meet the same standards as papers in the general conference and are published in the same conference proceedings.

Special Session papers must be submitted to REV submission server (https://www.conftool.com/ste2024/) to the respective Special Session track. Special Session papers will be reviewed by at least two members of the special session's program committee, and acceptance decisions will be made by the conference program co-chairs and Special Sessions Chair.

## **Important Deadlines**

30 Nov 2023	Submission of complete Special Session papers
15 Dec 2023	Notification of acceptance
15 Jan 2024	Camera-ready due & Author registration deadline
06 Mar 2024	STE 2024 opening

## **Review/Proceedings**

All submissions will undergo a double-blind review process. All accepted and presented papers will be published as STE 2024 Proceedings in Springer's Lecture Notes in Networks and Systems. The books of these series are submitted to ISI Proceedings, El-Compendex, DBLP, SCOPUS, Google Scholar and Springerlink. Selected award-winning papers will be recommended for publication in international journals.









