Special Session on

Neurorobotics

at the 33rd International Conference on Artificial Neural Networks ICANN 2024





Neurorobotics brings together interdisciplinary research in machine learning, robotics and bio-inspired artificial intelligence, most prominently using artificial neural networks. Following the understanding by building methodology, cognitive robotics employs neural models in robots that interact with and learn from complex and multimodal environments thus gaining their cognitive abilities. In connection with HRI, cognitive modeling represents a way to make robots more considerate and aware of people as well as make their behavior more legible and explainable and make interaction with robots smoother and more efficient. After the successful Neurorobotics special session in ICANN 2023 we are announcing a second edition of this session organized under the Horizon Europe project TERAIS. We want to bring together researchers with diverse backgrounds and expertise to promote collaboration and knowledge sharing in the field of Neurorobotics and cognitive robotics for HRI.

SPECIAL SESSION TOPICS

- Neural control and learning in robotics
- Cognitive architectures for robots
- Bio-inspired and developmental robotics
- Human-robot interaction and collaboration
- Trustworthy, human-aware and explainable robots
- Computational models for robotic applications

SUBMISSION INSTRUCTIONS

Contributions (full papers or extended abstracts) have to be submitted through the regular ICANN submission system at

https://e-nns.org/icann2024/

Select track **Special Session: Neurorobotics**. Accepted papers to the special session will appear in the proceedings of the ICANN 2024 conference.

IMPORTANT DATES

• Paper submission deadline: March 15, 2024

Notification of acceptance/rebuttal: May 15, 2024

Deadline for rebuttal: May 31, 2024

Final notification of Acceptance or Rejection after Rebuttal: June 10, 2024

• Camera-ready paper upload: June 30, 2024

Conference dates: September 17-20, 2024

ORGANIZERS

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