### **Call for Papers**

# Special Session on

# **Neurorobotics**

at the 32nd International Conference on Artificial Neural Networks





Neurorobotics brings together interdisciplinary research in machine learning, robotics and bio-inspired artificial intelligence. Embodying neural models in a physical agent allows interacting with and learning from a complex and multimodal environment. This makes robots an ideal platform for research on topics like multimodal and active sensing, complex object manipulation and navigation, neural reinforcement learning or verbal and non-verbal social interaction.

For research in machine learning, robotic control provides a complex and challenging test environment where neural approaches can be evaluated and improved with regard to their ability to adapt, generalize and cope with noisy input. For neuro- and cognitive science research, neurorobotics provides an environment to implement, evaluate and refine models of biological and human information processing.

#### **SPECIAL SESSION TOPICS**

In the session on Neurorobotics, we want to bring together researchers with diverse backgrounds and expertise to promote collaboration and knowledge sharing in the field of Neurorobotics. We welcome submissions on:

- Neural control and learning in robotics
- Sensor fusion, multimodal and active sensing in robots
- Bio-inspired and developmental robotics
- Human-robot interaction and collaboration

#### SUBMISSION INSTRUCTIONS

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

https://e-nns.org/icann2023/

Select track NRR 2023 (Neurorobotics). Accepted papers to the special session will appear in the proceedings of the ICANN 2023 conference.

# **IMPORTANT DATES**

• Full paper and extended abstract submission: Apr. 9, 2023

• Notification of acceptance: 30th of June 2023

• Conference dates: 26 – 29 September 2023

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