

CALL FOR PAPERS: ROBUST ARTIFICIAL INTELLIGENCE FOR NEUROROBOTICS

Neural computing is a powerful paradigm that has revolutionised machine learning. However, robotics brings stringent constraints on size, weight and power constraints (SWaP), which challenges the developers of these technologies in new ways. Equally, the fact that learning and adaptation might happen on a real physical platform implies a significantly greater emphasis on ensuring safety and rendering automated decisions verifiable and explainable. RAI-NR is a 3 day meeting featuring invited and contributed talks exploring issues of reliability, safety and resource efficiency in neurobotic systems.

To this end, we invite contributed 4-6 page extended abstract submissions in line with the following themes:

Robotics and Robot Learning: How are neural network based methods and neuromorphic design principles driving advances in robotics?

Hardware for AI: How are new advances in neurally inspired computing and electronic sensing hardware enabling these advances?

Safety, verification and explainability: How are we developing the new techniques required to ensure the safety of learning, perception and control in real world settings?

Neuroscience for perception and action: How can perspectives on how animals/humans solve problems be used to drive advances in robotics?

Authors of accepted papers will be invited to contribute submissions towards a special issue of *Frontiers in Neurorobotics*.

EXTENDED ABSTRACT SUBMISSION

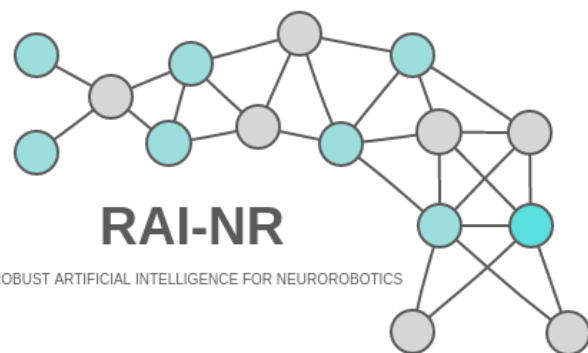
21 JUNE 2019

WORKSHOP REGISTRATION

29 JULY 2019

CONFIRMATION OF ATTENDANCE

12 AUGUST 2019



THE UNIVERSITY
of EDINBURGH



**BAYES CENTRE AND
SCHOOL OF
INFORMATICS,
UNIVERSITY OF
EDINBURGH (26 - 28
AUGUST 2019)**

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University of Edinburgh
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