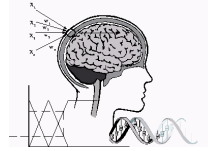




International

*Innovation in Knowledge Based and Intelligent
Engineering Systems*



INVITED SESSION SUMMARY

Title of Session:

Artificial Intelligence, Robotics and Human-Machine Systems

Name, Title and Affiliation of Chair:

Professor Rossi Setchi, IROHMS Director, School of Engineering, Cardiff University, UK
Professor Philip Morgan, IROHMS Director of Research, School of Psychology, Cardiff University, UK
Dr Robert Deaves, Chair of the IROHMS International Scientific Board, Dyson, UK

Details of Session (including aim and scope):

The aim of this Invited Session is to explore research challenges and opportunities at the intersection of artificial intelligence (AI), robotics and human-machine systems, to deliver safe, trustworthy and ethical human-machine systems, which benefit society and economy. We welcome contributions from a wide range of multidisciplinary areas including human-centred computing, human-centred robotics, human-like AI, ethical and explainable AI, and human-centred technologies and society.

Submissions are expected from, but not limited to the following topics:

- Affective computing
- Augmented cognition
- Computational semantics
- Contextual reasoning
- Emerging technology and society
- Ethical AI
- Explainable AI
- Explainable robotics
- Human-centred computing
- Human-centred cyber security
- Human-centred robotics
- Robot perception/learning
- Social robotics
- Trusted autonomy

The Invited Session is initiated by the Research Centre for AI, Robotics and Human-Machine Systems (IROHMS) at Cardiff University, but we welcome contributions from other institutions and research groups worldwide.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Centre for Artificial Intelligence, Robotics and Human-Machine Systems, Cardiff University, UK

The Centre for Artificial Intelligence, Robotics and Human-Machine Systems (IROHMS) research builds on the strength of globally established academics in the field of digital manufacturing and robotics, human factors and cognitive psychology, mobile and social computing and artificial intelligence.

<https://www.cardiff.ac.uk/artificial-intelligence-robotics-and-human-machine-systems>

Website URL of Call for Papers (if any):

Email & Contact Details:

Professor Rossi Setchi Setchi@cf.ac.uk

Professor Phil Morgan MorganPhil@cardiff.ac.uk