

----- PRELIMINARY CALL FOR PAPERS-----

AIC 2016

4th Edition of the International Workshop on Artificial Intelligence and Cognition

New York, USA, July 17th-18th 2016

Workshop website: <http://di.unito.it/AIC2016/>

Co-located with IJCAI 2016: <http://ijcai-16.org/>

Follow us on Twitter: https://twitter.com/AIC_Workshop
hashtag: #aic2016ws

AIC 2016 will be an official workshop of the [BICA 2016, 7th Conference on Biologically Inspired Cognitive Architectures](#) and will be one of the international events that will take place in July in New York under the [HLAI framework](#), a joint effort between the major Artificial Intelligence conferences and academic events explicitly targeting work towards the computational (re-)creation of human-level intelligence Artificial Intelligence.

MOTIVATION

The research in Artificial Intelligence (AI) has been based, from an historical standpoint, on a strong collaboration with Cognitive Science. This collaboration, has produced - along the years - mutual benefits. In AI this partnership has driven to the realization of intelligent systems based on plausible models of human cognition.

In turn, in cognitive science, this partnership allowed the development of cognitive models and architectures providing greater understanding on human thinking.

In recent years, after a period of partial fragmentation of the research directions, the area of cognitively inspired artificial systems is progressively attracting a renewed attention both from academia and industry and the awareness about the need for additional research in this interdisciplinary field is gaining widespread acceptance.

AIC 2016 is the fourth appointment of the workshop series AIC (<http://dblp.uni->

trier.de/db/conf/aic/index), started in 2013 and stemming from the need of creating an international scientific forum for the discussion and the presentation of the theoretical and applied research developments in the field of cognitively inspired Artificial Intelligence.

The AIC 2016 edition is also particularly important from a historical perspective since, in 2016 falls the 60th anniversary of the Dartmouth College, the event which effectively inaugurated the history of AI and Cognitive Systems Research. The original goal of creating a general Artificial Intelligence by taking inspiration from the human cognition (and its heuristics) still represents a goal pursued - in different ways and perspectives - by many researchers around the world and is one of the main challenges for the AIC community as well.

As for the previous editions, the AIC 2016 workshop aims at putting together researchers coming from different domains (e.g., artificial intelligence, cognitive science, computer science, engineering, philosophy, social sciences, etc.) working on the interdisciplinary field of cognitively inspired artificial systems.

Both papers spotlighting theoretical issues and experimental research in the field are welcome. The submission of papers regarding the presentation of realized or under-development cognitively inspired systems and/or applications is encouraged.

We also particularly welcome papers raising challenging questions, innovative ideas and out of the box thinking and which, as a consequence, can help to promote interesting discussions at the workshop.

Participation of younger researchers and the submission of research papers also at early stage of work is encouraged as well.

TOPICS

Topics of interest include but are not limited to:

- Knowledge Representation and Cognition (e.g. Neural Networks models, Ontologies and representation of common sense etc.)
- Cognitive Architectures (e.g. SOAR, ACT-R) and Cognitive modelling for Artificial Systems
- B.I.C.A. (Biologically Inspired Cognitive Architectures) and systems
- Cognitive Robotics
- Human-Robot Interaction
- Evaluation of cognitively driven AI systems compared with other AI approaches

- Cognition and Semantic Web
- Methodological open questions on AI and Cognition
- Automated reasoning: deductive, probabilistic, diagnostic, causal and analogical inference
- Human-Computer Interaction
- Historical and theoretical relation among Cognitive Science and Artificial Intelligence
- Knowledge discovery and acquisition
- Modelling of human learning and knowledge acquisition in complex domains
- Computational Linguistics, Natural Language Processing & Understanding
- Logic and Reasoning
- Evolutionary Computation
- Cognitively inspired Machine Learning
- Computational Theories of Learning
- Decision Support Systems
- Computational Creativity
- Computational Models of Narrative for Artificial Systems

IMPORTANT DATES

- March, 25 2016, papers submission deadline
- May, 9 2016, notification of acceptance/rejection
- June, 10 2016, camera-ready copy due and registration
- July 17-18 2016: Workshop dates

PAPER SUBMISSION INFORMATION

All papers must present original and unpublished work that is not currently under review. Papers will be evaluated according to their significance, originality, technical content and relevance to the workshop by the PC. We welcome the following types of contributions:

- Full research papers (up to 8-14 pages)
- Short research papers (up to 4-7 pages)

All submissions must be written in English and must be formatted according to the information for LNCS Authors:

<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>.

Please submit your contributions electronically in PDF format to EasyChair:

<https://www.easychair.org/conferences/?conf=aic20150>

PROCEEDINGS

Accepted papers will be included in the workshop proceedings published on-line by CEUR Workshop Proceedings (CEUR-WS.org), with ISSN.

At least one author of each accepted paper must register to the workshop and attend the workshop to present the paper.

SPECIAL ISSUE

Selected and extended papers from AIC 2016 will be invited to submit their work to a forthcoming Special Issue on Cognitive Systems Research Journal.

PROGRAM CHAIRS AND ORGANIZERS

Antonio Lieto, University of Torino and ICAR-CNR, Italy
Mehul Bhatt, University of Bremen, Germany
Alessandro Oltramari, Carnegie Mellon University, USA
David Vernon, University of Skövde, Sweden

INVITED SPEAKERS (TBA)

PROGRAM COMMITTEE (TBA)

CONTACT

Please address questions regarding the workshop to the organizers:

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