Call for Paper

The 3rd IEEE International Conference on Agents (ICA'18)

Conference Venue: Nanyang Technological University, Singapore Conference Date: July 28-31, 2018 Conference Website: <u>http://ica2018.crowdscience.org/</u> Submission link: <u>https://easychair.org/conferences/?conf=ica2018</u>

Scope and Background:

Intelligent agents are software entities which can carry out some actions on behalf of clients with some degree of autonomy. Through sensing the status of environment, agents perform some operations based on some possessed knowledge in order to change or influence the environment towards their goals. A Multi-Agent System (MAS) is a group or society of agents, and agents interact with others in the group cooperatively and/or competitively in order to reach their individual or common goals. In general, agents possess five common properties which are autonomy (some level of self-control), adaptivity (the ability to learn and improve performance with experience), reactivity (the ability to perceive the environment and to respond in a timely fashion to changes that occur), proactivity (the ability not only to act simply in response to their environment but also to exhibit goal-directed behaviour by taking the initiative) and sociability (the ability to interact, communicate and work with other agents). Research on agent techniques and MASs mainly focus on improving existing or invent innovative frameworks, models, mechanisms, approaches and algorithms to improve agents effectiveness and efficiency in those five aspects for advanced autonomous problem solving abilities in complex environments.

Topics:

We envision a future society where computational agents and humans (physical agents) are living, working and snuggling with each other. Harmonious collaboration among computational agents and humans are of importance in the next-generation society. ICA2018 will call for papers related to the following topics are not limited to:

- Decision making techniques
- Multi-agent communication and interaction protocols
- Negotiation and argumentation
- Game theory and auctions
- Social computing
- Cooperation, collaboration and coordination mechanisms
- Self-organization and self-adaptation
- Computational reasoning
- Machine learning
- Complex systems and system dynamics
- Collective intelligence
- Programming languages
- Internet of things, agents, and people
- Systems designs, development and implementation
- Human and multi-agent systems interaction
- Social science, humanities, ethical, legal, and social issues
- Future visions and grand challenges

Publication and Submission:

All accepted papers in the regular oral presentation/ poster will appear in the Conference Proceedings to be published by CPS. They will be indexed by EI, SCOPUS, INSPEC, DBLP and ISI. Selected ICA'18 papers will be invited for expansion and publication in international Journals.

All submissions need to fulfil the requirements from CPS (<u>http://www.computer.org/web/cs-cps/</u>). We require submission in the IEEE Conference Proceedings format (<u>https://www.ieee.org/conferences_events/conferences_events/conferences_publishing/templates.html</u>).

The format of the final manuscript should be no more than 6 pages (including references) for regular papers, 4 pages for short papers, and 2 pages for poster papers in length. Submission is entirely automated by a paper management tool, which is available from the main web site: https://easychair.org/conferences/?conf=ica2018. Authors must first register th eir own account, and then follow the instructions.

All accepted papers will be provided an oral presentation and/or a poster. Each paper will be reviewed by at least three PC members or experts in the field. Multiple submission policy is applied for papers. Papers that are being submitted to other conferences, whether verbatim or in essence must reflect this fact on the title page. Papers that do not meet this requirement are subject to rejection without the review.

Important Dates:

- Deadline for paper submission: May 18, 2018
- Acceptance notification: June 15, 2018
- Deadline for early-bird registration: June 29, 2018
- Submission deadline for camera-ready: July 7, 2018
- ICA2018 conference: July 28-31, 2018

No-show policy:

The paper may be excluded from IEEE Xplore and the CSDL if the presentation is not made at the conference. Also, no-show papers are not recommended in the post-conference publications.

Organization:

Steering Committees:

Chengqi Zhang, University of Technology, Sydney, Australia Yves Demazeau, Centre National de la Recherche Scientifique, France Takayuki Ito, Nagoya Institute of Technology, Japan Minjie Zhang, University of Wollongong, Australia Jiming Liu, Hong Kong Baptist University, China Chunyan Miao, Nanyang Technological University, Singapore Catholijn Jonker, TU Delft, Netherlands

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