INVITED SESSION SUMMARY

Title of Session:
Anthropic-Oriented Computing (AOC)

Name, Title and Affiliation of Chair:

Manuel Mazzara, Innopois University, Russia
Jooyoung Lee, Innopolis University, Russia
Victor Rivera, Innopolis U inversity, Russia

Details of Session (including aim and scope):

This invited session aims at attracting international researchers in the interdisciplinary field of Anthropic Oriented Computing (AOC), which lies at the intersection among sociology, neuroscience, philosophy, anthropology, psychology and computer science. Current systems are indeed melting pots of interacting parts mixing economical, philosophical and sociotechnical issues and interests, thus calling for adequate management approaches of the ecosystem as a whole.

Trans/interdisciplinary methodologies are therefore required for dealing with such issues. In this invited session we specifically focus on the anthropic aspects of this complex scenario projecting them into computer science. The main focus is on humans, covering a broad spectrum from inward (emotions and affective computing) to outward (communities and crowds) aspects. On one hand, the focus is on AI through the neurophysiological perspective. On the other hand, collective intelligence springing from human collaboration and interaction is at stake, taking into account the cultural divergences that flavour the bounded rational processes with local or situated cognitive perspectives.

The intent is to raise interest in cross disciplinary research with potential practical outcomes in the following (but not restricted to) fields:

- Affective cognitive architectures
- Crowdcasting
- Crowdsourcing
- Crowdsensing
- Emotional computer interface
- Situated and embodied cognition
- Swarm cognition (swarm intelligence + distributed cognition = swarm cognition)
- Multi agent neural networks
- Realistic/Spiking neural networks
- Neurobiologically inspired systems for AI
- Neurobiologically inspired systems for Robotics
- Philosophical aspects of Artificial consciousness
- Minimal cognitive models and their scalability
- Computational Psychological and Neuroscientific aspects of Affective computing
- Computational Psychological and Neuroscientific aspects of Robotics
- Decision making and Artificial Consciousness
- Volunteer computing
- Social computing
- Online social network analysis
- Data mining and databases
- Collective intelligence
- Multi-agent system approaches to crowd modelling
- Agent-based crowd simulation
- Crowd agents
- Agent crowd map

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

- Innopolis University, Russia

Website URL of Call for Papers (if any):

netislab.com/aoc2018

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