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Special Session Call for Papers SMC2014 Special Session on Computational Awareness

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Organized by



Introduction/Call for Papers

Awareness, by definition, refers to the state of perceptibility, consciousness and/or feels and implies vigilance in observing or alertness in drawing inferences from what one experiences (Merriam-Webster). The ultimate goal of awareness computing is to create systems that are able to be aware. Compared with awareness computing, computational awareness concentrate on the approach to gain understanding of awareness systems and its artificial generation through the quantitative and/or mathematical models which prompt the system to be more autonomous and more human-like than conventional ones. Examples are applied in a broad scope including context/situation awareness, safety/security awareness, power/energy awareness, risk/danger awareness, chance/opportunity awareness, etc. This special session aims at providing a forum for researchers, engineers, and scientists to discuss the state-of-the-art issues on computational awareness and to exchange ideas, experiences, and the latest results in this emerging field. Topics of interest include, but are not limited to the following:

A: Awareness Science

- A1: Awareness mechanism and modeling
- A2: Machine learning and knowledge management for awareness
- A3: Pattern recognition and understanding for awareness
- A4: Neural computing/perception/cognition
- A5: Fuzzy logic/granular computing/rough set
- A6: Agent computing/swarm intelligence
- A7: Awareness ontology and semantics

B: Awareness Engineering

- B1: Safety/security/privacy/trust awareness
- B2: Context/situation/background awareness
- B3: Intention/emotion/preference awareness
- B4: Location/position/goal awareness
- B5: Power/energy/capability/resource awareness
- B6: Weakness/risk/danger awareness
- B7: Chance/opportunity awareness

C: Applications of Awareness

- C1: Awareness for telecommunication/ubiquitous computing
- C2: Awareness for overlay/P2P networking services
- C3: Awareness for image/video/speech processing
- C4: Awareness for data/web/text mining
- C5: Awareness for e-business/e-government/e-learning
- C6: Awareness for health/child/elderly care
- C7: Awareness for smart grid/transportation/public services
- C8: Awareness for energy-efficient/green computing

Important Dates

- April 7, 2014:** Deadline for submission of full-length papers to special sessions.
- May 25, 2014: Acceptance/Rejection Notification.
- July 9, 2014: Final camera-ready papers due in electronic form.

Submission Guideline

Manuscripts for a Special Session should NOT be submitted in duplication to any other regular or special sessions and should be submitted to SMC 2014 main conference online submission system on SMC 2014 conference website.

All submitted papers of Special Sessions have to undergo the same review process (three completed reviews per paper). The technical reviewers for each Special Session paper will be members of the SMC 2014 Program Committee and qualified peer-reviewers to be nominated by the Special Session organizers.