

[Proposed session title]

Special Session on machine learning and computational intelligence based awareness

[Aim of the proposed session]

This Special Session (SS) aims to exchange several tackles for analyzing awareness mechanism and making its computational models using machine learning (ML) and computational intelligence (CI) approach to our awareness computing community.

The ultimate goal of awareness computing is to create computing systems that have a similar function to a human awareness capability. Since ML and CI, especially interactive evolutionary computation (EC), have been used to design human models and analyzing human characteristics, they must be good tools to analyze human awareness mechanism and make its model. As EC-based approach is exploratory research for awareness science and computation and few, we would like to collect these approach and exchange them. Proposals of any research approaches or tackles to this topic are welcome.

[Scopes of the proposed session]

Awareness research topics of interest include (but are not limited to) the following:

- Artificial neural networks
- Evolutionary computation
- Fuzzy logic
- Swarm intelligence
- Artificial immune systems
- Machine perception
- Computer vision, including object recognition
- Natural language processing
- Syntactic pattern recognition
- Search engines
- Medical diagnosis
- Bioinformatics
- Brain-machine interfaces
- Cheminformatics
- Detecting credit card fraud
- Stock market analysis
- Classifying DNA sequences
- Sequence mining
- Speech and handwriting recognition
- Game playing
- Software engineering
- Adaptive websites
- Robot locomotion
- Computational advertising
- Computational finance
- Structural health monitoring
- Sentiment analysis

- Affective computing
- Information retrieval
- Recommender systems
- Optimization and Metaheuristic

[Submission]

Authors are invited to submit original and unpublished contributions to the Special Session (machine learning and computational intelligence based awareness) by using the online submission system at the iCAST 2015 website by May 15, 2015. Please select option of “SS: machine learning and computational intelligence based awareness” when submitting your contribution.

Details of the CEC2015 can be found at <http://www.neuq.edu.cn/index/meeting/iCAST2015/>

[Important Dates]

May 15, 2015: Deadline for paper submission

July 15, 2015: Notification of paper acceptance

August, 15, 2015: Submission of final camera-ready papers

September, 22-24, 2015: conference

[Organizers:]

Yan PEI

The University of Aizu,

School of Computer Science and Engineering,

Tsuruga, Ikki-machi, Aizu-wakamatsu, 965-8580 Japan

TEL <+81>242-37-2765

E-mail peiyan (AT) u-aizu.ac.jp

URL <http://web-ext.u-aizu.ac.jp/~peiyan/>