Special Session on

Computational Intelligence for Physiological

and Affective Computing (CIPAC)

Aims and Scope

Affective Computing (AC) is "computing that relates to, arises from, or deliberately influences emotions," as initially coined by Professor R. Picard (Media Lab, MIT). It has been gaining popularity rapidly in the last decade because it has great potential in the next generation of human-computer interfaces.

Physiological Computing (PC) relates to computation that incorporates physiological signals in order to produce useful outputs (e.g., in computer-human interaction). It mainly differs from AC in the sense that its foremost focus is not the modeling of affect but rather the utilization of physiological information generally. AC/PC raises many new challenges for signal processing, machine learning and computational intelligence.

The Computational Intelligence (CI) and Physiological and Affective Computing (AC) special session aims to bring together researchers from the three areas of CI to discuss how CI techniques can be used individually or in combination to help solve challenging AC/PC problems, and conversely, how physiological and affect (emotion) and its modeling can inspire new approaches in CI and its applications.

Topics of interest

The topics of **CIPAC** includes, but is not limited to the following topics:

- Security of content centric networks
- Models of emotion and physiological information
- Classifiers for physiological information

- Applications based on/around physiological information
- Fuzzy set and system based architectures for processing emotions and other affective states
- Automatic emotion recognition & synthesis from physiological signals, facial expressions, body language, speech, or neurocognitive performance
- Emotion mining from texts, images, or videos
- Affective interaction with virtual agents and robots based on fuzzy systems
- Applications of affective computing in interactive learning, affective gaming, personalized robotics, virtual reality, social networking, smart environments, healthcare and behavioral informatics,

Submission procedure

We invite researchers to submit scientific papers which should not exceed 10 pages using the **Springer** templates (Latex template, Word template) without page numbers. Please select the acronym of the special session when submitting your paper on the Easychair system. Submitted papers are selected based on their originality, relevance to the Special session topics and technical soundness, following a double blind peer-revewing process. Authors names and affiliations should be deleted from the submitted version. Self-references should be in the third person. One of the authors of an accepted submission should attend the conference to present the work. Papers should be submitted in PDF format through the Easychair system. Please note that English is the only accepted language for writing and presenting papers. Registered and presented papers will be submitted for inclusion in **Springer Library**.

EasyChair online submission website:

https://easychair.org/conferences/?conf=icdec2017

Important Dates

- Deadline for paper submission: **January 2nd, 2017**
- Notification of the first round review: **February 5, 2017**
- Deadline of revised version submission **February 26, 2017**

Special session Organizers

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