Special session on
Semantics of Collaborative Networks of Cognitive Systems

Scope: Cognitive systems integrating the latest advances in artificial intelligence, can learn, reason, and more effectively interact with users and their surrounding environments, thus enabling higher levels of collaboration between humans and systems.

These cognitive systems are paving the way to a new generation of "user-in-the-loop" tools. However, these systems require underpinning data or knowledge on which their behavior is governed, thus modification of this data changes the behavior of the system.

However, in many cognitive systems, this knowledge is often ad-hoc or utilizes informal standards specific to the application concerned. This special session aims to examine ways in which formalised semantic models can be utilised by cognitive systems. When these cognitive systems are coupled into collaborative networks the challenge of managing data sharing between in a unified way becomes even more challenging.

Topics of interest include, but are not limited to::

- Case studies of the utilization of existing formalized domain semantics in cognitive system research.
- Where new domain semantics have been developed, or formalized based on the requirements for cognitive systems within their given domain.
- Utilisation of Semantics for formalizing communication within collaborative networks or the formalization of the process of collaboration between systems itself.
- How semantics can play a key role in automating and easing the development, configuration and management of cognitive systems.
- Exploration of the concept of cognitive systems meta-semantics, defining features of domain semantics required for their optimal utilization of cognitive systems.

Special attention will also be given to research featuring either collaborative networks or cognitive systems with specific innovated in relation to underpinning semantics.

Section organizers
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Submission procedure: Papers accepted for this session are included in the main conference and follow the same reviewing process.

Important dates:
- Abstracts: 12 Mar 2018
- Full paper: 2 Apr 2018
- Acceptance notification: 18 May 2018
- Camera ready: 28 May 2018

Acceptance of papers is based on the **full paper** (up to 8 pages). Each paper will be evaluated by three members of the International Program Committee. However, prospective authors should submit a short abstract in advance, in order to check if the proposed topic fits within the conference scope.

When submitting on the web site, you have to indicate the name of the special session.
Submission on: www.pro-ve.org, with copy by email to the chairs of the special session.