

# The Fourth International Workshop on Semantic Computing and Knowledge Creation based on Needs Engineering

In conjunction with

The 13<sup>th</sup> IEEE International Conference on Semantic Computing  
January 30 - February 1, 2019 / Newport Beach, California, USA

## Overview

Semantic interoperability, ubiquitous computing, enterprise integration and business convergence by competence sharing are some of the main problems faced in industry today. All of these topics have been addressed in a uni-disciplinary approach, which has the advantage of leading to focused disciplinary progress. However, it also leaves unexplored solutions that can only be arrived upon by collaborators with diverse expertise, coming together in a multi and interdisciplinary approaches. This workshop is intended to bring together researchers, practitioners and domain experts, sharing the latest advances in the state of the art and practice for transdisciplinary problem solving with multi-criteria measurement, to address the challenges in needs engineering. It will provide a unique forum for discussion on integrated frameworks considering business ontologies, IoT understanding, value based process technologies, big data analysis and architectures, machine learning, deep learning and all legacy dependent systems.

## Topics of interest

The topics of interest within the context of this workshop include, but are not limited to:

- Digital Ecosystems for Innovation
- Innovation by Competence Modeling, Simulation, Emulation and Enactment
- Semantic Interoperability
- Ubiquitous Computing
- Internet of Things
- Enterprise Integration and Business Convergence
- Business Ontologies
- Value based Process Technologies
- Integrated Frameworks for Dynamic Problem Solving
- Big Data Analysis and Architectures
- Machine Learning and Deep Learning Architectures
- Competence Transdisciplinary Measurement
- Social Business

## Fields of interest for semantic computing and knowledge creation applications:

- Biomedicine
- Healthcare
- Agriculture
- Manufacturing
- Engineering
- Education

- Finance
- Economy
- Entertainment
- Business
- Science
- Humanity

## **Submissions**

Authors are invited to submit a paper up to 6 pages (in English) in double-column IEEE format following the submission guidelines available at the ICSC 2019 web page (<https://www.ieee-icsc.org/>; <https://www.ieee-icsc.org/submission>).

Papers must be original and not be submitted to or accepted by any other conference or journal. An electronic version (PDF format) of the full paper should be submitted by the deadline to EasyChair (<https://easychair.org/conferences/?conf=sckne2019>). All submissions will be acknowledged. More information is available on the ICSC 2019 web page.

Each paper will be peer-reviewed by at least two experts in the topical area. Papers accepted by the workshop will be published in the conference proceedings published by IEEE Computer Society Press. Outstanding papers will be selected for extension and publication in International Journal of Semantic Computing or Encyclopedia with Semantic Computing and Robotic Intelligence. All papers should be submitted to Cristiane Chaves Gattaz ([cristiane.gattaz@utexas.edu](mailto:cristiane.gattaz@utexas.edu)).

## **Important Dates**

Regular paper submission: December 15, 2018 (Midnight, PST)

Notification of acceptance: December 22, 2018

Camera-ready & author registration: Dec 31, 2018

## **Organizing Committee**

### **Workshop Co-Chairs**

Aureliano Bressan, Federal University of Minas Gerais, Brazil

Gustavo Silva Araújo, Ibmecc-Brazilian Institute of Capital Markets, Brazil

Paulo Estevão Cruvinel, Embrapa Instrumentação

Cristiane Chaves Gattaz, University of Texas at Austin, Austin, Texas, USA (CHAIR)

Wesley Mendes da Silva, FGV-EAESP, Brazil

Any general questions regarding the workshop should be directed to Cristiane Chaves Gattaz ([cristiane.gattaz@utexas.edu](mailto:cristiane.gattaz@utexas.edu)).