CyberSciTech 2016 Special Session Call for Papers:

Special Session on 'Systems thinking and Cybernetics for Cyber-physical systems' (STC4CPS)

Auckland, New Zealand, August 8-12, 2016 http://cyberscitech.net/2016/special-sessions/

Aim and scope (including a list of main topics):

There is a growing interest worldwide in the 'cyberspace' research and in the design and development of cyber-physical systems. Cyberspace is the virtual space realized through the information and communication technologies. Cyber-physical systems are the intersection of cyber systems and physical systems necessitating high and effective coordination and intercommunication between the physical and non-physical components in the cyberspace. Given the complexity and various other challenges involved in the design and development of multidisciplinary cyber-physical systems, it is worthwhile to have a special session focused on applications of cybernetics and systems thinking to the cyber-physical systems.

The aim of the special session is to organize enriched and meaningful discussions on the applications of cybernetics and systems thinking to the cyber-physical systems, and particularly 'human in the loop cyber physical system' (HiLCPS) that boosts human interactions with the physical world in a positive manner.

We invite original and unpublished theoretical and practice-oriented papers focused on applications of cybernetics (including what Heinz von Foerster termed the 'cybernetics of the observed system' and the 'cybernetics of the observing system'; and Norbert Wiener's assertion that 'the entire field of control and communication theory, whether in the machine or in the animal' is cybernetics) and systems thinking to systems in general and cyber-physical systems, in particular. The papers should be on, but not limited to the following main topics-

- Cybernetics for cyber-physical systems
- Cybernetics for 'human in the loop cyber physical system' (HiLCPS)
- Cyber-physical systems through the Systems thinking lens
- Case studies on cyber-physical systems for any industry domains

Important Dates

Special Session_STC4CPS Paper Submission due: April 15, 2016
Acceptance notification: May 15, 2016
Camera-ready manuscript due: May 31, 2016

Special Session Organizers

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