Computational intelligence technologies for ambient intelligence

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ABSTRACT

Adaptability and advanced services for ambient intelligence require an intelligent technological support for understanding the current needs and the desires of users in the interactions with the environment for their daily use, as well as for understanding the current status of the environment also in complex situations. This infrastructure constitutes an essential base for smart living. Computational intelligence can provide additional flexible techniques for designing and implementing monitoring and control systems, which can be configured from behavioral examples or by mimicking approximate reasoning processes to achieve adaptable systems. This session will analyze the opportunities offered by computational intelligence to support the realization of adaptable operations and intelligent services for smart living in an ambient intelligent infrastructure.

Biography

Vincenzo Piuri is a Professor at the University of Milan, Italy and has been Visiting professor at the University of Texas at Austin, USA, and visiting researcher at George Mason University, USA. His research interests are: intelligent systems, signal and image processing, pattern analysis and recognition, machine learning and industrial applications. Original results have been published in 400+ papers. He is a Fellow Member of the IEEE, ACM Distinguished Scientist, and Senior Member of INNS. He has been IEEE Director, IEEE Vice President for Technical Activities (2015), and President of the IEEE Computational Intelligence Society. He is Editorin-Chief of the IEEE Systems Journal (2013-19). For his contributions to the advancement of theory and practice of computational intelligence in measurement systems and industrial applications, he received the IEEE Instrumentation and Measurement Society Technical Award (2002). He is an Honorary Professor at Obuda University (Hungary), Guangdong University of Petrochemical Technology (China), Muroran Institute of Technology (Japan), and Amity University (India).