CISIS 2013 Keynote Talk 1

Dr. Santi Caballé, Open University of Catalonia, Spain

Intelligent Software Systems in Support for Enhancing and Improving the On-line Collaborative Learning Experience

Abstract

Collaborative learning systems often lack the challenging resources and tools required to fully support collaborations, making the experience unattractive to end-users and discouraging progression. Whilst the learner might expect to control the collaborative experience, often it is the collaborative experience that controls and limits the learner. As a result, collaborative learning resources can lack authentic interactivity, user empowerment and balanced levels of challenge, thus having a negative effect in learner motivation and engagement. In order to overcome these deficiencies, in this talk I will propose a range of advance intelligent systems that virtualize the live collaborative sessions and produce interactive and attractive resources to be experienced and played by learners during the collaboration. Learners can observe how avatars discuss and collaborate, how discussion threads grow, and how knowledge is constructed, refined and consolidated. Furthermore, learners can interact with these systems in order to modify some parameters observing the consequences and assessing their understanding.

The research reported in this talk was undertaken within the European Framework 7 project ALICE (Adaptive Learning via Intuitive/Interactive, Collaborative and Emotional Systems).
CISIS 2013 Keynote Talk 2

Prof. Felix Wu, UC Davis, USA

Ubiquitous Computing Leveraging Online Social Informatics

Abstract

This talk is concerning human relationship, interactions, and value between the information content and the structural properties of online social networks. And, how will this affect the paradigm of Ubiquitous Computing. We view the online social network as a vehicle for propagating information (or innovations) of various kinds in supporting human/relationship-centric computation. Depending on the available structural topology (or the structure of overlapping communities), some information might get propagated much faster/wider, while other information might never be practically accessible by most of the population. Thus, it is valuable to develop a computational model to analyze and leverage the information content’s value according to the integration of social and information networks. Furthermore, the "value" of social informatics can be used, as an alternative, to determine the outcome of ubiquitous computing. The possible applications following this principle include discovery of community interests and inter-dependency analysis between information content and human relationship. We will discuss how contents might possibly affect the structural properties of online social networks under different models of social capital.
In the developing world, mobile phone penetration is often more than 50%. New automobiles are often connected to global networks. This has changed the type and scale of sensor networking applications that are feasible. This keynote discusses a sampling of current research prototypes. Example applications are given for science, government, industry, and consumer electronics applications. This sampling shows how distributed sensing is changing the way we live; it also points to changes that can be anticipated in the near future. This talk presents an overview on the challenges involved in the design and deployment of sensors and for modeling of information topological structure.