

ICDS 2014

Foreword

The Eighth International Conference on Digital Society (ICDS 2014), held between March 23-27, 2014 in Barcelona, Spain, continued a series of international events covering a large spectrum of topics related to advanced networking, applications, and systems technologies in a digital society.

Nowadays, most of the economic activities and business models are driven by the unprecedented evolution of theories and technologies. These achievements are present everywhere in our society and it is only a question of user education and business models optimization towards a digital society.

Digital devices conquer from kitchen to space vessels most of the functionality commonly performed by human beings. Telecommunications, advanced computation, miniaturization, and high speed devices make tele-presence easy. Wireless and mobility allow ubiquitous systems to be developed. Progress in image processing and exchanging facilitate e-health and virtual doctor teams for patient surgeries.

Naturally, issues on how to monitor, control and manage these systems become crucial to guarantee user privacy and safety. Not only devices, but also special software features must be enforced and guaranteed in a digital society.

The variety of the systems and applications and the heterogeneous nature of the information and knowledge representation require special technologies to capture, manage, store, preserve, interpret and deliver the content and documents related to a particular target. In response to this challenge, Intrusion Prevention and Detection Systems have now grown in prominence to such an extent that they are now considered a vital component for any enterprise organisation serious about network defence. However, the numerous recorded attacks against high profile organizations is continuing evidence that many of these controls are not, at present, a panacea for dealing with the threats. Having themselves learnt the mechanisms employed by IPDS malicious parties are becoming particularly adept at evading them through inventive obfuscation techniques. These challenges need to be addressed using increasingly more innovative, creative and measurable IPDS mechanisms and methods.

Progress in cognitive science, knowledge acquisition, representation, and processing helped deal with imprecise, uncertain or incomplete information. Management of geographical and temporal information becomes a challenge, in terms of volume, speed, semantic, decision, and delivery.

Information technologies allow optimization in searching and interpreting data, yet special constraints imposed by the digital society require on-demand, ethics, and legal aspects, as well as user privacy and safety.

Nowadays, there is notable progress in designing and deploying information and organizational management systems, experts systems, tutoring systems, decision support systems, and in general, industrial systems.

The progress in difference domains, such as image processing, wireless communications, computer vision, cardiology, and information storage and management assure a virtual team to access online to the latest achievements.

Processing medical data benefits now from advanced techniques for color imaging, visualization of multi-dimensional projections, Internet imaging localization archiving and as well as from high resolution of medical devices. Collecting, storing, and handling patient data requires robust processing systems, safe communications and storage, and easy and authenticated online access.

National and cross-national governments' decisions for using the digital advances require e-Government activities on developmental trends, adoption, architecture, transformation, barrier removals, and global success factors. There are challenges for government efficiency in using these technologies such as e-Voting, eHealth record cards, citizen identity digital cards, citizen-centric services, social e-financing projects, and so on.

We take here the opportunity to warmly thank all the members of the ICDS 2014 Technical Program Committee, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to ICDS 2014. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the ICDS 2014 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that ICDS 2014 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the area of digital society.

We are convinced that the participants found the event useful and communications very open. We hope that Barcelona, Spain, provided a pleasant environment during the conference and everyone saved some time to enjoy the charm of the city.

ICDS 2014 Chairs:

Lasse Berntzen, Vestfold University College - Tønsberg, Norway

Åsa Smedberg, DSV, Stockholm University/KTH, Sweden

Freimut Bodendorf, University of Erlangen, Germany

A.V. Senthil Kumar, Hindusthan College of Arts and Science, India

Charalampos Konstantopoulos, University of Piraeus, Greece

Andranik Tangian, Wirtschafts- und Sozialwissenschaftliches Institut - Düsseldorf | Karlsruhe Institute of Technology, Germany