Editorial

The present issue consists of a selection of regular papers and those originating from our sister conference *Information Technology Interfaces ITI 2013*. These latter papers, which are consistently revised and enlarged versions of the respective original presentations at the Conference, are included in order to bring innovative and interesting topics to *CIT*'s readership; they are prepared specifically for *CIT* according to its publishing standards, and have undergone the regular reviewing process. Let me thank *ITI 2013* Chair Professor Vesna Lužar-Stiffler and our Editor Professor Robert Manger for their help in managing the selection of these papers.

The issue begins with an opinion paper authored by Hermann Maurer, Rizwan Mehmood, Petra Korica-Pehserl, titled *How Dangerous is the Web for Creative Work*. This paper comes as a complement to regular research papers we already publish, stressing *CIT*'s social and professional role. In this respect, *CIT*'s continues its tradition of providing recognized experts a platform for expressing opinions on technological artifacts that influence our everyday living, and that are not only technical. The paper addresses the dichotomy between Web based research and creativity enhancement on the one hand, and the purported intellectual capacity decrease arising from diminished both intellectual effort and time lost on "mechanical" activity exercising the Web on the other. As an aside, let me mention that we are privileged by the fact that the leading author is Professor Hermann Maurer, Chair of the Informatics Section of Academia Europaea – The Academy of Europe.

Follows the paper *Specifying Access Policies for Secure Content Dissemination of XML: A Technique Inspired by DNA Cryptography* by Rajni Mohana and Deepak Dahiya, devoted to secure dissemination of XML files which applies DNA cryptography. Basing on its compactness and simplicity features, the proposed technique satisfies both the requirement specification of secure dissemination as well as robustness in terms of time required to break the key.

The first paper from the *ITI 2013* selection is *Scaling the Performance and Cost for Elastic Cloud Web Services* by M. Simjanoska, M. Gusev, S. Ristov, G. Velkoski. Here the authors investigate how cloud performance scales to the price for leased cloud resources, by analyzing variable server load impact on both performance and cost of two Web services utilizing memory and CPU resources. As most of present studies consider mainly the cloud service provider's benefits, this paper, focusing on the customer's side and addressing her/his expenses and privileges, provides an appropriate complement.

The Impact of Packet Fragmentation and Reassembly in Resource Constrained Wireless Networks by J. Pope, R. Simon is the second paper from *ITI*'s batch. The authors focus their research on the effect of packet fragmentation on the performance of Internet protocols redesigned for a special class of networks providing the infrastructure for the Internet of Things (IoT). Investigating a class of network formed by resource constrained nodes, otherwise denoted as Low Power and Lossy (LLN) networks, specifically tree-based LLNs, they show a massive negative impact on communication if excessive packet fragmentation is being used.

In their paper *Exploring Attributes with Domain Knowledge in Formal Concept Analysis*, Jonnalagadda Annapurna and Aswani Kumar Cherukuri analyze the enhancement of domain experts' knowledge by integrating it with the knowledge obtained from the attribute exploration process in Formal Concept Analysis (FCA). This is done in order to better understand the dependencies between the attributes, as the available implementation of this process does not consider the

background expert knowledge of the domain. Such integration was evaluated on two real world healthcare datasets. The results thus obtained show that knowledge acquired through the FCA exploration process coupled with the domain experts' knowledge has better classification accuracy.

The last of *ITI 2013* originated papers is *A Derivative-free Algorithm for Finding Least Squares Solutions of Quasi-linear and Linear Systems* by Nikica Hlupić, Ivo Beroš, Danko Basch. In this paper a novel derivative-free algorithm for solving quasi-linear systems is presented. Although resembling to the "classical" optimization approach, this algorithm greatly simplifies computation, resulting in fast execution and numerical stability. The algorithm is clearly developed and mathematically founded, and its properties are examined by comparisons with other methods.

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Editor-in-Chief