EDITORIAL

Editorial

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I welcome the readers to the Journal of the Brazilian Computer Society. Although this is its first issue published by Springer, JBCS is already well known to Brazilian researchers in computer science and related fields. Published by the Brazilian Computer Society since 1995, it is recognized as an important research dissemination venue in Brazil. Therefore, readers and collaborators alike are delighted with the prospect of JBCS reaching a wider audience and gaining international exposure as a result of the recent partnership between the Brazilian Computer Society and Springer publishers.

This first issue of 2010 includes three invited papers and two regular papers on diverse computer science topics.

The invited paper by Sergio España, Nelly Condori-Fernandez, Arturo González, and Óscar Pastor addresses the problem of assessing the quality of functional requirements specifications. They focus on the completeness and granularity of requirements models, and extend previous model quality theoretical frameworks by introducing new metrics. The authors report results from an empirical evaluation comparing two different requirements engineering approaches based on the proposed metrics and discuss some key issues for future research in this area.

In another invited paper, Luis André Paes Leme, Marco A. Casanova, Karin K. Breitman, and Antonio L. Furtado tackle the fundamental issue of matching two distinct database conceptual schemas. They adopt an instance-based approach and describe a matching technique for a dialect of the web ontology language OWL. They report results from experimental studies conducted with web data sources and also propose a data model for storing provenance data about the matchings.

In the third invited paper, Tiziana Margaria, Bernhard Steffen, and Christian Kubczak describe an approach aimed at providing automatic or semiautomatic support for evolution and change management in heterogeneous legacy systems. They illustrate their approach with a concrete case study based on the Semantic Web Service Challenge, a recently established benchmark for Semantic Web Service discovery and mediation, showing how to enhance its Mediation Scenario toward real life business applications.

On the regular papers, Lasaro Camargos, Rodrigo Schmidt, Edmundo Madeira, and Fernando Pedone address protocols for coordinating multiple agents in a distributed application. The authors review previous contributions on multicoordination, a particular mode of execution for agent agreement protocols. Moreover, they introduce a novel agreement protocol for agents organized in groups, a scenario that reflects network topologies typical of many organizations, such as online retailers.

Finally, César Manuel Vargas Benítez and Heitor Silvério Lopes contribute a paper on bioinformatics, presenting a master-slave parallel genetic algorithm for the protein structure prediction problem, using the 3D-HP side-chain model. The proposed fitness function includes information not only about the free-energy of the conformation, but also on the compactness of the side-chains. They report results from testing their solution on synthetic sequences.

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