

Editorial

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This is the fourth and final issue of volume 17 of the Journal of the Brazilian Computer Society, which brings us five interesting contributions in different Computer Science topics. Two of them are regular papers and three extend previous work presented at conferences sponsored by the Brazilian Computer Society, having been recommended to JBCS by conference chairs. In these cases, authors have submitted revised and extended versions of their original contributions to JBCS, which went through additional peer reviewing.

The first paper, by Ellen Francine Barbosa and José Carlos Maldonado, addresses the systematic development of educational modules. They describe an approach for modeling learning content that is aimed at tackling conceptual, instructional and didactic issues in an integrated manner, and illustrate how this approach has been applied in the development of educational modules for different domains.

The paper by Luciano Bernardes de Paula, Rodolfo da Silva Villaça and Maurício Ferreira Magalhães deals with the problem of conceptual search on the Semantic Web. They propose an approach to organize multimedia data in Locality Sensitive Hashing functions using conceptual classifications derived from simple ontologies, aiming at facilitating the conceptual search in distributed peer-to-peer networks. A previous version of this work has appeared at WEBMEDIA 2010, the *Simpósio Brasileiro de Sistemas Multimídia e Web* (<http://www.ufmg.br/swib/>).

The third paper extends work previously published at SBSC 2010, the *Simpósio Brasileiro de Sistemas Colaborativos* (<http://www.ufmg.br/swib/>). The authors, Vinícius P. Freire and Daniel R. Figueiredo, report a study on the structural properties of the global and Brazilian scientific collab-

oration networks in Computer Science. They use DBLP as a source to characterize and compare these two networks. They also propose a new method to identify the most influential researchers in such networks. The method is evaluated against existing metrics and the rankings of researchers and graduate programs established by Brazilian research (CNPq) and higher education (CAPES) funding agencies.

The contribution by Ivre Marjorie R. Machado, Rafael Odon de Alencar, Roberto de Oliveira Campos Jr. and Clodoveu A. Davis Jr. is on geographic information retrieval. They propose a new structure for gazetteers, which are geographic dictionaries of place names. Their solution uses ontology concepts to establish and maintain semantically richer relationships between places. Authors also illustrate how to employ the semantically enhanced gazetteer in typical geographic information retrieval tasks. A previous version of their work has been published at GEOINFO 2010, the XII Brazilian Symposium on Geoinformatics (<http://www.geoinfo.info/geoinfo2011/>).

The final paper in this volume brings a contribution on theoretical computer science. The authors, Raphael Machado and Celina de Figueiredo, discuss results on the sub-class of unichord-free graphs, which has proved to be useful with respect to the study of the complexity of graph coloring problems. They discuss recent results based on the concept of “separating class” and describe the class of bipartite unichord-free as a final missing separating class with respect to edge-coloring and total-coloring problems, by proving that the problem of total coloring bipartite unichord-free graphs is NP-complete.

I take this opportunity to express my gratitude to reviewers and editorial board members who kindly donated their time to JBCS, providing a priceless contribution to the quality of the journal. Thanks also to the authors and readers for their continuing support.

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