

Editorial Preface

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In your hands, the first issue of 2021 of the *International Journal of Web Portals*, that includes five relevant contributions.

Touching keywords such as Web analysis and mining, and privacy protection, you will find in this issue five contributions combining the views of a highly international set of renowned authors from Algeria, Brazil, Croatia, France, Portugal, Saudi Arabia and Tunisia, briefly introduced below.

In e-Business, some of the most critical steps in successful transformation pertain not only to data and information acquisition and digitalization but also adequate publishing and organization of these information resources. Structuring of the web content becomes critical during the digital transformation of business. In the first article of this issue, “Ontology-based Analysis of Website Structure for Benchmarking in Retail Business: Ontology-Based Website Analysis in Retail”, Nikola Vlahovic, Andrija Brljak and Mirjana Pejic-Bach present a conceptual model of a managerial tool based on semantic analysis of web sites in order to obtain information about the structure of web sites in a particular domain. The resulting ontological model contains information about best practices in web information organization and can be a valuable resource for management when deciding on the organization of their own web content.

In mobile business (m-business), a client sends its exact locations to service providers, which may cause privacy issues. In the second article, “A survey on privacy preservation in location-based mobile business: Research Directions”, Ahmed Aloui and Okba kazar identify different system architectures and different protection goals, providing an overview of the privacy protection techniques and mechanisms currently applied by location-based mobile business.

Stored information in the databases is heterogeneous and the Web service selection becomes nontrivial. Using the keyword-based search method users are struggling to choose the best Web services among those having similar features. Different researches challenge the traditional methods, introducing semantic discovery process, to enable relevant and desired search results. These approaches don't give importance to users' opinions and the selection history. The classical development of the ontology is typically entirely based on high human participation. In this article, “QoS-Based Collaborative Filtering for Web Service Mining”, Ilhem Feddaoui, Faïçal Felhi, Fahad Algarni and Jalel Akaichi use ontology-based querying, user profile to know the history, new collaborative filtering to calculate user and query similarity and QoS for Web service selection. Their approach combines the syntactic and semantic methods to increase the selection precision.

Responsive web design emerged as a very useful technique that allows the dynamic adaptation of the design regardless of the size and resolution of the access device. Despite the unequivocal advantages associated with this technique, there are also limitations which turn this approach not feasible or advisable for all projects. In “Exploring the Limitations of Responsive Design Through a Case Study Approach”, Fernando Almeida and José Monteiro present a study based on the realization of five case studies seeks to identify the main limitations of responsive design and responsive design frameworks. The study suggests further development models that may be more effective in the

dynamic adaptation of the design and contents according to the features of the access device, such as the adoption of adaptive design, use of native apps and hybrid models.

Information retrieval systems built with a service-oriented architecture have numerous advantages, and portlets are a key technology to implement services which interact with each other in the presentation layer as discussed by Glauber Vaz and Jayme Barbedo in “An Information Retrieval System Based on Multiple Portlets: Communication Between Its Components”. Their work presents an efficient approach for the communication between the components of an information retrieval system based on multiple portlets in a single user interface, and the architecture and main methods of the system implemented as a case of use for this approach. It is shown that the proposed solution yields the best inter-portlet communication mechanism in each situation, while possessing the ability to deliver aggregated search and superior user experience.

This issue was prepared while the world deals with the pandemic crisis COVID-19. We hope this publication will find you safe and in good health, able find here an interesting and a valuable source of knowledge and ideas.

Enjoy your reading!

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Editor-in-Chief
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