Editorial

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This special issue on semantic web services and interoperability of the *International Journal of Web Science* contains six extended papers selected from the third edition of the International Conference on Web and Information Technologies (ICWIT'2010) held in Marrakech, Morocco, from 16–19 June 2010.

In the first paper 'Data mediation towards semantic web service interoperability', Mechri et al. present service-oriented architecture for developing the interoperability mechanism in the information systems of companies. The core of this architecture is a web services semantic mediation infrastructure using a semantic model and the SAWSDL language for resolving mismatches. In addition, the authors also present the global approach then retail the data mediation and the semantic model which is based on the ontologies and the notion of context.

Next, in the second paper 'A framework for reengineering web applications towards semantic web services', Bouchiha and Malki present a framework for reengineering web applications into WSMO-based semantic web services. The proposed framework consists in reverse engineering web applications towards conceptual models specified with a proposed UML profile, from what syntactic and semantic descriptions of new SWS are generated.

Referring to the third paper 'A user-centric Mashuped SOA', Benhaddi et al. present a solution to enhance SOA, by enjoying the benefits of Web 2.0 technologies, and more particularly of Mashups. First, the authors describe the benefits of the Mashup used with SOA, based on several case studies. Further, they present the new approach for a user-centric SOA, becoming possible through a Mashup stack that contains the technologies aiming at enhancing SOA and making it user centric for more added value to enterprises.

In the fourth paper 'Development of context-aware web services using the MDA approach', Seridi et al. propose a meta model allowing modelling any contextual information and taking into account the separation of aspects and the context in the early stages of development. Seridi et al. aim to integrate the separation between aspects for the context aware services development process by using the MDA taking maximum advantages of this approach.

In the fifth paper 'A new approach to discover the complex mappings between ontologies', Kaabi and Gargouri present a hybrid, extensional and asymmetric matching approach designed to find out complex matching between ontologies. In this approach, Kaabi and Gargouri use the association rule to discover implicative and conjunctive mapping containing complex matching.

Lastly, in the additional paper 'An adaptive teaching strategy model in e-learning using learners' preference: LearnFit framework', El Bachari et al. propose an innovative learning approach by considering the learner's preferences. Using the Myers-Briggs Type Indicator's (MBTI) tools, a framework for adaptive teaching strategies has been developed in e-learning context. Moreover, Elbachari et al. present an experiment in order to evaluate the performance of the proposed approach. The results of the system tested in real environments show that considering the learner's preferences increases learning quality and satisfies the learner.

In conclusion, the papers of this special issue provide rich evidence of the potential and technical viability of semantic web services and interoperability. We would like to thank all authors who submitted and contributed papers to this special issue. In particular, we would also like to thank Ladjel Bellatreche (LISI/ENSMA, University of Poitiers, France), Djamal Benslimane (LIRIS, University of Lyon1, France), Hassan Mountassir (LIFC, University of Franche-Comté, France), Faiez Gargouri (ISIMSF, University of Sfax, Tunisia), Mahieddine Djoudi (LISI, University of Poitiers, France), Stéphane Jean (LISI/ENSMA, University of Poitiers, France), Idir Aitsadoune (SUPELEC, Gif-sur-Yvette, France) for their expertise and support in creating this special issue.