Editorial Preface

Special issue “Strategic Information Technology: Modeling Some Solutions to Real-World Problems”

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Broadly, the work compiled in this special issue of International Journal of Strategic Information and applications (IJSITA) addresses many aspects in different areas of computer research to model some solutions to real-world problems such as: developing new variants of existing algorithms, performance comparison of known techniques, novel ways of modeling problems in contemporary and niche areas while relating different theories. This special issue contains four revised and extended papers selected from the JERI 2019 conference.

The first paper in this issue presents a dynamic replication strategy to improve provider gain over a wide range of cloud and SLA-conditions without neglecting customer satisfaction, where the authors propose an algorithm that mixes all these solutions for good replication management. As result, the main contribution is to improve provider gain over a wide range of cloud and SLA-conditions without neglecting customer satisfaction.

In the second paper, the authors describe the ONTEM alignment method with the results obtained according to OAEI LargeBio Track 2018, corresponding to the evaluation modalities of the SEALS platform, and focus on the issue of large-scale ontology alignment for the Semantic Web. Indeed, the variety of ontologies of the same domain in the semantic web has led to heterogeneity and therefore to the development of ontology alignment methods. The main aim of this work is to meet the challenge of scaling up alignment method.

The third paper deals with the applications of video surveillance such as the detection and tracking of moving objects begin with background subtraction step. The contribution of this work is to manage dynamically the number of Gaussians based on the AIRS algorithm instead of fixing them a priori by the user, the authors proceeded to generate a set of new Gaussians using two different strategies: a random generation, where the proposed system stars with a learning phase using the GMM algorithm and creates several background models for each pixel.

The last paper is based on an EPP extreme points privacy for trips and home identification in vehicular social networks, that exploits the nature of the end points that are common between VSN users in order to create shared zones to anonymize them. In addition, the authors contribute by detailing the environment used and the exact day time-period (which is the rush hours period) in where and when the evaluation took place. EPP takes into account the number of gates and the possible headings from each gate. This analytical study is accompanied by simulations in order to evaluate the effectiveness of EPP scheme.

We hope the readers will find this IJSITA special issue “Strategic Information Technology: Modeling Some Solutions to Real-World Problems” very useful, and trust that it motivates its readers to take the next steps ahead constructing novel tools and techniques for future approaches and applications.

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