

## GUEST EDITORIAL PREFACE

# Special Issue from the 8th IEEE International Conference on Research Challenges in Information Science (RCIS) 2014, Marrakesh, Morocco

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The series of the IEEE International Conferences on Research Challenges in Information Science (RCIS) aims at providing an international forum for scientists, researchers, engineers and developers on a wide range of information science areas to exchange ideas and approaches in this evolving field. In this special issue, we present three papers that are based on the best papers in the system engineering field presented at the eight IEEE International RCIS conference, held in 2014 in Morocco. These best papers of the conference (among 41 long papers selected over 152 submissions) have been asked to submit extended version to a new, and independent review process for IJSMD.

The RCIS conference stimulates exchange of ideas on a wide variety of topics. The three papers in this issue treat topics in goal modeling, intention mining and web search retrieval.

Intentions and goals play a key role in information systems engineering. Aiming to understand the progress that has been made in integrating goal models with downstream system development, *Horkoff et al.* conducted a systematic survey on goal models, producing a roadmap of work summarizing 243 publications on the domain. Furthermore, the authors selected the 50 most cited publications to perform an in-depth literature review. They studied a variety of proposals, paradigms, goal models and targets. They also performed some social network and citation analysis on authorship in the area.

Research on process modeling has highlighted that specifying intentions can expressly mitigate many problems encountered in process modeling as lack of flexibility or adaptation. One of the aims of the Process Mining field is to discover activity process models from event

logs. *Khodabandelou et al.* apply this principle on intentional process models. To identify and formalize intentions from event logs, this work presents a novel approach of process mining, called Map Miner Method (MMM). Intentional process models allow to model humans' cognition operators which is not possible with activity-oriented process models. The discovered Map process model then answers to the problems of why a process is enacted.

Log files are mainly used in web search. Some approaches in Information Retrieval exploit the previous searches for a single user. On the contrary, approaches that deal with past searches collectively are less common. The work of *Gutiérrez-Soto and Hubert* presented in this issue deals with such an approach, by using

past results of similar past queries submitted by other users, to build the answers for new submitted queries. It proposes two probabilistic algorithms of the Monte Carlo category to select documents from past results.

As guest editors of this special issue, we wish to thank all reviewers of the RCIS Program Committee that helps us in the reviewing process of this Special Issue. Finally, we want to thank the support that IJISMD is giving to this publication process.

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