GUEST EDITORIAL



Guest editorial for EMMSAD'2019 special section

Iris Reinhartz-Berger¹ · Jelena Zdravkovic²

Received: 10 November 2020 / Accepted: 16 November 2020 / Published online: 5 January 2021 © Springer-Verlag GmbH Germany, part of Springer Nature 2021

The EMMSAD (Exploring Modeling Methods for Systems Analysis and Development) conference series organized 24 events from 1996 to 2019, associated with CAiSE (Conference on Advanced Information Systems Engineering). From 2009. EMMSAD has become a two-days working conference. From 2017, EMMSAD best papers are invited to submit extended versions for considering their publication in the Journal of Software and Systems Modeling (SoSyM). The main topics of the EMMSAD series have the focus on models and modeling methods for software and information systems development, requirements engineering, enterprise modeling and architecture, and business process management. The conference further addresses evaluation of modeling methods through a variety of empirical and nonempirical approaches. The aims, topics, and history of EMMSAD can be also found on its website at http://www.emmsad.org/.

1 Scope

This special section follows the 24th edition of the EMMSAD series, organized in conjunction with CAiSE'19 in Rome, Italy, June 2019. The program of this edition introduced five tracks that emphasized the variety of EMMSAD topics: (1) Foundations of Modeling and Method Engineering; (2) Enterprise, Business Process and Capability Modeling; (3) Information Systems and Requirements Modeling; (4) Domain-Specific and Ontology Modeling; and (5) Evaluation of Modeling Approaches. Each track involved two chairs whose aim was to encourage submissions in the relevant topics and help during the decision-making phase of the review process. The accepted papers have been published in [1]. The program further included a keynote given by Jordi Cabot on "Modeling and AI: friends or foes?" and a panel on "Responsible Information Systems—the role of modeling methods".

2 The papers selected for this special section

This special section presents five papers, where all are the extended versions of papers included in EMMSAD 2019 program. The papers went through a rigid review process of two to three rounds. Below is the list of papers:

- Azzam Maraee and Arnon Sturm. "Imperative versus declarative constraint specification languages: a controlled experiment"—the article comparatively examines the usage, comprehensibility, and development limitations of Object Constraint Language (OCL) and Java for specifying constraints.
- 2. Xin Dong, Tong Li, Rui Song, and Zhiming Ding. "Profiling users via their reviews: an extended systematic mapping study"—the article presents a systematic mapping study on review-based user profiling, with an emphasis on identifying current challenges and suggesting a generic analysis process of the profiling.
- Andreas L. Opdahl and Bjørnar Tessem. "Ontologies for finding journalistic angles"—the article explores how journalistic knowledge graphs can be augmented with support for news topics ("angles"), which can help journalists detect newsworthy events in big data sets and make them relevant and presentable for the intended audience.
- 4. Drazen Brdjanin, Stefan Ilic, Goran Banjac, Danijela Banjac, and Slavko Maric. "Automatic derivation of conceptual database models from differently serialized business process models"—the article suggests an approach to automatic derivation of conceptual database models from business process models represented by different notations, with particular focus on differently serialized process models; the proposal is implemented using the web-based model-driven tool Amadeos.
- 5. Alex R. Sabau, Simon Hacks, and Andreas Steffens. "Implementation of a continuous delivery pipeline for enterprise architecture model evolution"—the article proposes a conceptual framework for automated enterprise modeling maintenance, by using the standpoint that



University of Haifa, Haifa, Israel

Stockholm University, Stockholm, Sweden

the evolution of EA model artifacts shows similarities to the evolution of software artifacts and accordingly leverages the practices of continuous development to practices of EA maintenance.

6. Georgios Koutsopoulos, Martin Henkel, and Janis Stirna. "An analysis of capability meta-models for expressing dynamic business transformation"—the article deals with how organizations are able to facilitate business transformation using capability modeling by reviewing how the concepts relevant to business change have been modeled in existing approaches.

Acknowledgements We wish to thank the PC committee of EMMSAD 2019 and especially the following reviewers for their timely and valuable reviews during the review process for this special section: Ilia Bider, Robert Buchmann, Nelly Condori-Fernández, Peter Fettke, Hans-Georg Fill, Frederik Gailly, Paul Grefen, Martin Henkel, Evangelia Kavakli, John Krogstie, Florian Matthes, Raimundas Matulevicius, Andreas Opdahl, Oscar Pastor, Barbara Pernici, Geert Poels, Marcela Ruiz, Pnina Soffer, Arnon Sturm, Janis Stirna, and Anna Zamansky. We would also like to thank the track chairs for their help in EMMSAD advertising and decision-making: Oscar Pastor and Jolita Ralyté for track 1, Paul Grefen and Dimitris Karagiannis for track 2, Monique Snoeck and Arnon Sturm for track 3, Tony Clark and Heinrich C. Mayr for track 4, and Renata Guizzardi and Jennifer Horkoff for track 5. Special thanks go to the organizing committee of CAiSE 2019, IFIP WG8.1, the Editors-in-Chief of the Journal of Software and Systems Modeling (SoSyM)—Jeff Gray and Bernhard Rumpe, SoSyM Assistant Editor-Martin Schindler, and EMMSAD advisory committee-John Krogstie and Henderik A. Proper. Finally, our gratitude goes to all authors of the selected papers who made this special section possible by submitting their work and revising it according to the comments of the reviewers and editors.

References

 Reinhartz-Berger, I., Zdravkovic, J., Gulden, J., Schmidt, R. (eds.): Enterprise, Business-Process and Information Systems Modeling: 20th International Conference, BPMDS 2019, 24th International Conference, EMMSAD 2019, Held at CAiSE 2019, Rome, Italy, June 3–4, 2019, Proceedings (vol. 352). Springer (2019)

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Iris Reinhartz-Berger is the chair of the Department of Information Systems, University of Haifa, Israel. She received her M.Sc. and Ph.D. in Information Management Engineering from the Technion—Israel Institute of Technology, and her B.Sc. in computer science and applied mathematics from the Technion—Israel Institute of Technology. Her research interests include conceptual modeling, domain analysis, modeling languages and techniques for

analysis and design, and requirements engineering. She co-organized a series of domain engineering workshops, in conjunction with the CAiSE conference, and co-edited a book entitled "Domain Engineering: Product Lines, Languages, and Conceptual Models". She co-chairs EMMSAD—Exploring Modeling Methods for Systems Analysis and Development since 2017. She is in the Editorial Board of Software and Systems Modeling (SoSyM), Data and Knowledge Engineering (DKE), and Requirements Engineering (RE) journals.



Jelena Zdravkovic is a Professor and Vice Head of Computer and Systems Sciences (DSV) Department at Stockholm University. She has Ph.D. in Computer and Systems Sciences at The Royal Institute of Technology (KTH), as well as the MBA degree in E-commerce. Jelena's research activities include requirements engineering, and capability-driven development. Jelena has published around 100 refereed papers in international conferences scientific journals on the topics of

requirements engineering and capability-driven development. She is in the Editorial Board of Springer BISE and RE Journals, as well as a regular reviewer and guest editor for a number of other international journals including several of Springer, Elsevier's Journal of Systems and Software and Information and Software Technology Journal, and IEEE Computing. Jelena has organized a number of international conferences and workshops in the IS Engineering discipline, and she serves in the program committees of many of them.

