
Semantic Applications

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Editors

Semantic Applications

Methodology, Technology, Corporate Use



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Preface by the Editors

“Why are there hardly any publications about semantic applications in corporate use?”

We asked ourselves this question a few years ago. Most publications about semantic technologies and the Semantic Web are primarily centered around the technology itself, just illustrating them either by toy examples or isolated applications. By developing semantic applications for corporate use, we gained some expertise ourselves, and we were highly interested in exchanging and sharing this knowledge with peers and learning from each other. Therefore, we established the Corporate Semantic Web community in Germany.

In the years 2014–2017, we organized annual Dagstuhl workshops. Making our learnings available to the wider community was our intention from the beginning, so we published our first book “Corporate Semantic Web – Wie semantische Anwendungen in Unternehmen Nutzen stiften” (in German) in 2015. Subsequently, we published two articles on emerging trends in Corporate Semantic Web in the *Informatik Spektrum* magazine. Due to the high interest in those publications, we decided on starting a new book project. We have deliberately chosen English as the language for this book in order to share our experience with a worldwide community. We dedicated the 2017 Dagstuhl workshop to this book because we wanted to create more than a loose collection of articles: a coherent work which demonstrates the various aspects of engineering semantic applications.

Semantic applications are slowly but steadily being adopted by corporations and other kinds of organizations. By *semantic applications* we mean software applications which explicitly or implicitly use the semantics (i.e., the meaning) of a domain in order to improve usability, correctness, and completeness. We would like to show how to develop semantic applications in a broad range of business sectors. This book is a collection of articles describing proven methodologies for developing semantic applications including technological and architectural best practices. It is written by practitioners for practitioners. Our target audience includes software engineers and knowledge engineers, but also managers, lecturers and students. All of our co-authors are experts from industry and academia with experience in developing semantic applications. One result of the intense community effort over the years is an increasingly aligned understanding of do’s and don’ts in developing such applications.

Schloss Dagstuhl, “where Computer Science meets”, has been a wonderful host and is a true incubator for developing and sharing new insights. Therefore, our first thanks go to the friendly and competent staff members of Schloss Dagstuhl.

The most important contributors to this book are, of course, our co-authors: 45 experts in their fields and also in writing high-quality texts. Thank you very much for the great collaboration and for meeting (most) deadlines! We would like to thank in particular Wolfram Bartussek, Hermann Bense, Ulrich Schade, Melanie Siegel, and Paul Walsh, who supported us as extended editorial board. Especially, we would like to thank Timothy Manning for proofreading the entire book and literally suggesting hundreds of improvements!

Finally, we would like to thank the team at Springer, particularly Hermann Engesser and Dorothea Glaunsinger for supporting us over the last years and Sabine Kathke for guiding us in this book project. The collaboration with you has truly been friendly, constructive, and smooth.

Darmstadt and Berlin, Germany, December 2017

Thomas Hoppe, Bernhard Humm, and Anatol Reibold

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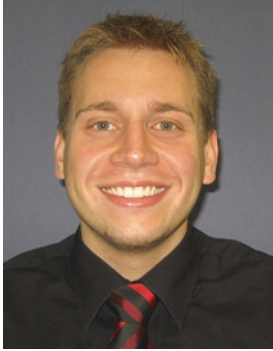
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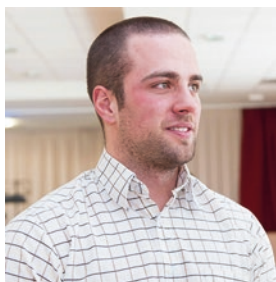
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