

# Lecture Notes in Business Information Processing

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# E-Commerce and Web Technologies

13th International Conference, EC-Web 2012  
Vienna, Austria, September 4-5, 2012  
Proceedings

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ISSN 1865-1348

e-ISSN 1865-1356

ISBN 978-3-642-32272-3

e-ISBN 978-3-642-32273-0

DOI 10.1007/978-3-642-32273-0

Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2012943574

ACM Computing Classification (1998): J.1, K.4.4, I.2.11, H.3.5, H.4

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*Typesetting:* Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

# Preface

We welcome you to the proceedings of the 13th International Conference on Electronic Commerce and Web Technologies—EC-Web 2012—which took place at Vienna University of Technology, Austria, during September 3–7, 2012.

The series of EC-Web conferences provides a platform for researchers and practitioners interested in the theory and practice of e-commerce and Web technologies. In 2012, EC-Web focused on the following topics:

**Recommender systems.** Recommender and business intelligence systems supporting both the customer and the provider in making better business decision is still a challenging issue.

**e-Business architectures.** E-business architectures leverage Web technologies to implement mission-critical e-business systems. Still there is a need for design principles, methods, and technologies for describing the structure of e-business systems, its composition of subsystems, and their relationship with the external environment.

**Semantic representation of e-business and e-commerce information.** Managing knowledge for the coordination of e-business processes through the systematic application of Semantic Web technologies is the focus of semantic e-business. It builds up on Semantic Web technologies, knowledge management, and e-business processes.

**Agent-based e-commerce.** Agents are computer systems situated in an environment and capable of autonomous action to meet their design objectives. Research on agent-based e-commerce has a vigorous tradition. However, new trends and concerns are emerging.

**e-Business case studies.** In constructive research, new prototypes to conduct e-business have emerged over the last couple of years. Although EC-Web focuses on new research ideas, we also welcome case studies that report on applying recent research results in real-world environments.

We were happy to see that our community was still active in contributing to the body of knowledge on future trends in e-commerce and Web technologies. Accordingly, we received 45 submissions from authors of 22 countries addressing the EC-Web topics mentioned above. Each submission received at least three review reports from Program Committee members, whereby the reviews were based on four criteria—originality, quality, relevance, and presentation—which resulted in a recommendation of each reviewer. Based on these recommendations we selected 15 full papers for publication and presentation at EC-Web 2012. Accordingly, the acceptance rate of EC-Web 2012 for full papers was about 33.3%.

In addition, these proceedings include four short papers that were presented at EC-Web 2012 as well.

These accepted papers were organized in six sessions:

- Recommender Systems I and II (2 sessions)
- Security and Trust
- Mining and Semantic Services
- Negotiation
- Agents and Business Services

When organizing a scientific conference, one always has to count on the efforts of many volunteers. We are grateful to the members of the Program Committee who devoted a considerable amount of their time in reviewing the submissions to EC-Web 2012. Not only did they deliver high-quality reviews that greatly facilitated our selection of papers, but they also performed these reviews in time.

We were privileged to work together with highly motivated people to arrange the conference and to publish these proceedings. We appreciate all the tireless support by the Publicity Chair Christian Pichler for announcing our conference on various lists. Special thanks go to Amin Anjomshoaa, who was always of great help in managing the conference submission system. Last, but not least, we want to express our thanks to Gabriela Wagner, who dedicated hours and hours in making EC-Web 2012 a success. Not only was she always of great help in solving organizational matters, but she also maintained the EC-Web 2012 website and was responsible for the compilation of all the papers in the proceedings.

We hope that you find these proceedings a valuable source of information on e-commerce and Web technologies.

September 2012

Christian Huemer  
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