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Advances in Web Semantics I

Ontologies, Web Services and Applied Semantic Web

Springer

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Preface

The all pervasive web is influencing all aspects of human endeavour. In order to strengthen the description of web resources, so that they are more meaningful to both humans and machines, web semantics have been proposed. These allow better annotation, understanding, search, interpretation and composition of these resources. The growing importance of these has brought about a great increase in research into these issues.

We propose a series of books that will address key issues in web semantics on an annual basis. This book series can be considered as an extended journal published annually. The series will combine theoretical results, standards, and their realizations in applications and implementations. The series is titled "Advances in Web Semantics" and will be published periodically by Springer to promote emerging Semantic Web technologies. It will contain the cream of the collective contribution of the International Federation for Information Processing (IFIP) Web Semantics Working Group; WG 2.12 & WG 12.4. This book, addressing the current state of the art, is the first in the series. In subsequent years, books will address a particular theme, topic or issue where the greatest advances are being made. Examples of such topics include: (i) process semantics, (ii) web services, (iii) ontologies, (iv) workflows, (v) trust and reputation, (vi) web applications, etc. Periodically, perhaps every five years, there will be a scene-setting state of the art volume. This will provide a collection of work by the top experts and minds in the field, in an area of the utmost importance to business, IT and industry.

The IFIP Web Semantics Working Group 2.12 & 12.4 (http://www.ifipsemanticweb.curtin.edu.au/) constitutes a timely active international community of scientists, engineers, and practitioners dedicated to advancing the state of the art of research and practice in the emerging field of the Semantic Web, and meanwhile providing input and guidance on the direction, scope, and importance of different aspects of artificial intelligence, data modeling, and software theory and practice in web semantics. It is unique in that it seeks to synthesize concepts from these diverse fields in a comprehensive fashion in the context of the semantics of the Web.

The primary goal of this book series is to investigate, present and promote core concepts, ideas and exemplary technologies for the next generation of semantic web research, from a range of state-of-the-art research institutions (both academic and industrial).

Each book will be carefully written to provide maximum exposure to collective knowledge, well thought out, providing insights into ground breaking research results and present emerging trends for the present and the future of the Semantic Web. The series will promote and present emerging semantic web technologies to governments, researchers and industry and commercial practitioners. This book series, in contrast to other available literature, will focus not only on the existing concepts and ideas but also on the future of the Semantic Web. Moreover, concepts covered in the

book will serve as a good reference point for academic and industrial researchers who want to familiarize themselves with emerging trends in semantic web research, technologies and applications.

October 2008

Tharam Dillon
Elizabeth Chang
Robert Meersman
Katia Sycara

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