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## TMRF e-Book on Advances in Semantic Computing

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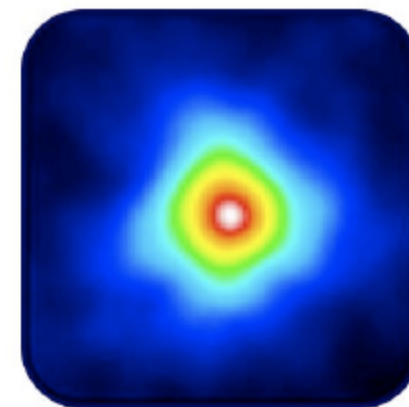
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An Open Access  
Online Publication

e-Book on  
Advances in Semantic  
Computing

# Call for Chapters



## TMRF e-Book Series

Technomathematics Research  
Foundation,  
Kolhapur, India

## TMRF e-Book on Advances in Semantic Computing

### PURPOSE

This e-Book is planned as a collection of recent advances in various topics of semantic computing. The e-book will be organized in self-contained chapters to provide modularity and flexibility for readers. We solicit original and high quality chapter submissions on theoretical findings in, and practical applications of, semantic computing.

The main goals of the e-Book are:

- To provide a peer-reviewed state-of-the art online collection of research and development on key semantic computing topics.
- To strengthen the exchange of knowledge and experience among scholars, researchers, practitioners, and engineers in semantic computing.
- To identify recent accomplishments, best practices, and open challenges regarding semantic computing worldwide.

The book will offer the academic community a unique resource that can serve as an open-access reference for undergraduate/graduate courses in Computer Science (including Artificial Intelligence) and related disciplines such as Software Engineering, Business Informatics, Information and Communication Science, Library Science, and Web Science .

### TARGET AUDIENCE

The focus of this e-Book will be on Computer Science and the related disciplines listed in PURPOSE. The e-Book will assist academic and professional organizations in the private and public sector as a foundation for decision-making. The e-Book will also be helpful in offering researchers, scientists, academics, postgraduate students, practitioners and professionals with access to the latest knowledge relating to major aspects of semantic computing.

### TOPICS

Chapters on the following topics are solicited, with suggestions about their contents listed as subbullets. However, variant and alternative submissions of high-quality chapters in semantic computing will be equally considered.

#### WEB CONTENT ANALYSIS

*Natural-language parsing and processing*  
*Semantic image and video analysis*  
*Semantic audio and speech analysis*  
*Analysis of structured/semi-structured data and semantic information extraction*  
*Semantic analysis of click streams, workflows, and behaviors in software, services, and networks*

#### INTEGRATION OF SEMANTIC REPRESENTATIONS

*Database schema integration*  
*Ontology alignment and integration*  
*Interoperability and service integration*  
*Rule-based transformation of semantic representations*  
*Integration architectures*

#### SEMANTIC INTERFACES

*Natural-language interfaces*  
*Multimodal interfaces*  
*Ontology and rulebase browsers*  
*GUIs for Semantic Desktops and Semantic Intranets*  
*Semantics-focused interfaces to reduced-display (e.g., hand-held) devices*

#### FOUNDATIONAL SEMANTIC TOOLS

*Ontology development (including ontology population) environments*  
*Ontology and rulebase interchange languages and processors*  
*Triple stores and their mapping to relational databases*  
*Tools for benchmarking/scalability*  
*Metadata publishing and management tools*  
*Scalable semantic search engines*

#### SOCIAL SEMANTIC WEB (WEB 3.0)

*Semantically enabled social networks*  
*Semantic profiles in FOAF and ontology/rule extensions*  
*Policies on privacy/disclosure (including their semantic representations)*  
*Models measuring benefits of social semantic collaborations*  
*Analysis, visualization, presentation of social networks*  
*Analysis of emergent effects within social software*

#### SEMANTIC WEB SERVICES

*Semantics in Service Oriented Architecture, business process management, & multi-agent systems*  
*Formal foundations of semantic Web service technology (e.g., Petri nets, Abstract State Machines, Transaction Logics, Process Algebras, Pi-Calculus)*  
*Semantic interface specification and Web service composition*  
*Languages for semantic Web services (OWL-S, WSMO, SAWSDL, etc.)*  
*Enterprise Service Bus systems and Semantic Web services*  
*Communication infrastructures using Web services*

#### APPLICATIONS

*Applications of (combinations of) the above task areas*  
*Applications in the following domains*  
*Semantic Web industry verticals (e.g., biomedical, environmental, energy, materials, financials, ...)*  
*Semantic eLearning (e.g., metadata standards)*  
*Semantic eGovernment/eCitizen*  
*Semantic eTourism*  
*Semantic eScience*

### SUBMISSIONS OF PAPERS

Researchers and practitioners are invited to submit, on or before **June 21, 2009**, a 2-page manuscript proposal (MS Word) clearly outlining the focus of the proposed chapter. Authors of accepted proposals will be notified by **July 5, 2009** about the status of their proposals and, if applicable, will be sent organizational guidelines for drafting their chapters. Full chapters are expected to be submitted by **September 27, 2009**. Submission lengths should not exceed 30 pages and must adhere to the manuscript style provided on the e-Book series web page. All submitted chapters will be reviewed on the basis of double-blind reviews. Acceptance will be based on relevance, technical soundness, originality, and clarity of presentation.

### IMPORTANT DATES

1-2 page proposal deadline: **June 21, 2009**

Proposal notification: **July 5, 2009**

Full Chapter deadline: **September 27, 2009**

Revision notification: **October 18, 2009**

Revised Version (along with copies of the permissions to include other copyrighted material (if any) and duly signed Author's Warranty and Publication Agreement) due: **November 29, 2009**

e-Publication: **December 20, 2009**

We recommend to authors to register with the <http://www.easychair.org/conferences/?conf=tmrfeseries2009>

**The e-Book and e-Book Series will have an ISBN and ISSN respectively.**

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