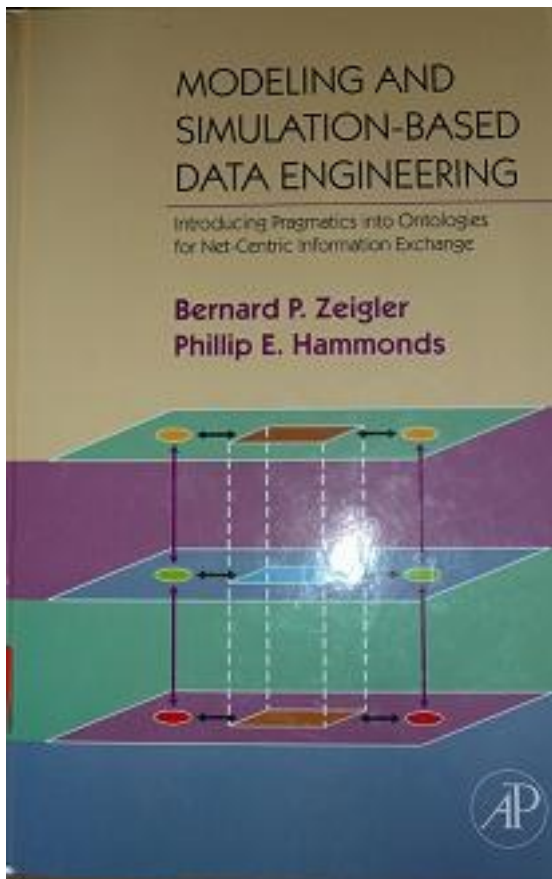# Modeling and Simulation-Based Data Engineering

[Modeling and Simulation-Based Data Engineering_下载链接1_](#)

著者:Zeigler, Bernard P./ Hammonds, Phillip

出版者:Academic Pr

出版时间:2007-8

装帧:HRD

isbn:9780123725158

Data Engineering has become a necessary and critical activity for business, engineering, and scientific organizations as the move to service oriented architecture and web services moves into full swing. Notably, the US Department of Defense is mandating that all of its agencies and contractors assume a defining presence on the Net-centric Global Information Grid. This book provides the first practical approach to

data engineering and modeling, which supports interoperabililty with consumers of the data in a service- oriented architectures (SOAs). Although XML (eXtensible Modeling Language) is the lingua franca for such interoperability, it is not sufficient on its own.The approach in this book addresses critical objectives such as creating a single representation for multiple applications, designing models capable of supporting dynamic processes, and harmonizing legacy data models for web-based co-existence. The approach is based on the System Entity Structure (SES) which is a well-defined structure, methodology, and practical tool with all of the functionality of UML (Unified Modeling Language) and few of the drawbacks. The SES originated in the formal representation of hierarchical simulation models. So it provides an axiomatic formalism that enables automating the development of XML dtds and schemas, composition and decomposition of large data models, and analysis of commonality among structures.Zeigler and Hammond include a range of features to benefit their readers. Natural language, graphical and XML forms of SES specification are employed to allow mapping of legacy meta-data. Real world examples and case studies provide insight into data engineering and test evaluation in various application domains. Comparative information is provided on concepts of ontologies, modeling and simulation, introductory linguistic background, and support options enable programmers to work with advanced tools in the area.The website of the Arizona Center for Integrative Modeling and Simulation, co-founded by Zeigler in 2001, provides links to downloadable software to accompany the book. This is the only practical guide to integrating XML and web services in data engineering. It introduces linguistic levels of interoperability for effective information exchange. It covers the interoperability standards mandated by national and international agencies. It complements Zeigler's classic Theory of Modeling and Simulation.

作者介绍:

目录:

Modeling and Simulation-Based Data Engineering_下载链接1_

标签

doctorial.research

评论

[Modeling and Simulation-Based Data Engineering_下载链接1_](#)

书评

[Modeling and Simulation-Based Data Engineering_下载链接1_](#)

[Modeling and Simulation-Based Data Engineering_下载链接1_](#)

书评