Data Warehousing and Web Engineering

Table of Contents

Foreword .............................................................................................................................. vii
    Shirley Becker
    Florida Institute of Technology, USA

Preface .................................................................................................................................... ix

Chapter 1. An Introduction to Information Technology and Business Intelligence ......................................................... 1
    Stephan Kudyba, Economic Consultant, USA
    Richard Hopcroft, Consultant, The Netherlands

Chapter 2. Some Issues in Design of Data Warehousing Systems .... 22
    Ladjel Bellatreche and Kamalakar Karlapalem
    University of Science Technology, Hong Kong
    Mukesh Mohania, Western Michigan University, USA

Chapter 3. Benchmarking Data Mining Algorithms ......................... 77
    Balaji Rajagopalan, Oakland University, USA
    Ravi Krovi, University of Akron, USA

Chapter 4. Justifying Data Warehousing Investments .................... 100
    Ram L. Kumar, University of North Carolina-Charlotte, USA

Chapter 5. Data Mining: A New Arsenal for Strategic Decision-making ................................................................. 103
    Sufi M. Nazem and Bongsik Shin
    University of Nebraska-Omaha, USA

Chapter 6. What’s in a Name? Exploring the Metaphysical Implications of Data Warehousing in Concept and Practice .......... 113
    Elizabeth J. Davidson, University of Hawaii-Manoa, USA

Chapter 7. Incremental Data Allocation and Reallocation in Distributed Database Systems ......................................... 137
    Amita Goyal Chin, Virginia Commonwealth University, USA
Chapter 8. Using Business Rules Within a Design Process of Active Databases .................................................................161
Youssef Amghar, Madjid Meziane and Andre Flory
National Institute of Applied Sciences, France

Chapter 9. A Methodology for Datawarehouse Design: Conceptual Modeling .................................................................185
Jose Maria Cavero and Esperanza Marcos,
Universidad Rey Juan Carlos, Spain
Mario Piattini, Universidad de Castilla-La Mancha, Spain
Adolfo Sanchez, Cronos Iberica, Spain

Chapter 10. Assessing and Improving the Quality of Knowledge Discovery Data ............................................................198
Herna L. Viktor and Niek F. du Plooy
University of Pretoria, South Africa

Chapter 11. Complementing the Data Warehouse with Information Filtered from the Web ..................................................206
Witold Abramowicz, Pawel Jan Kalczynski and Krzysztof Wecel
The Poznan University of Economics, Poland

Chapter 12. Justification of Data Warehousing Projects ..................219
Reinhard Jung and Robert Winter
University of St. Gallen, Switzerland

Chapter 13. A Survey of Spatial Data Mining Methods Databases and Statistics Point of Views ................................................229
Karine Zeitouni, University of Versailles

Chapter 14. Efficient Query Processing with Structural Join Indexing in an Object Relational Data Warehousing Environment ..............243
Vivekanand Gopalkrishnan and Qing Li, City University of Hong Kong, China
Kamalakar Karlapalem, University of Science and Technology, Hong Kong, China

Chapter 15. An Electronic Commerce Framework for Small and Medium Enterprises ..........................................................257
Anne Banks Pidduck, University of Waterloo-Ontario, Canada
Quang Ngoc Tran, TurboLinux