

Contents

Part I Fundamental Technologies Supporting Service Science

Data Mining for Service	3
Katsutoshi Yada	
Feature Selection Over Distributed Data Streams	11
Jacob Kogan	
Learning Hidden Markov Models Using Probabilistic Matrix Factorization	27
Ashutosh Tewari and Michael J. Giering	
Dimensionality Reduction for Information Retrieval Using Vector Replacement of Rare Terms	41
Tobias Berka and Marian Vajteršic	
Panel Data Analysis via Variable Selection and Subject Clustering	61
Haibing Lu, Shengsheng Huang, Yingjiu Li and Yanjiang Yang	

Part II Knowledge Discovery from Text

A Weighted Density-Based Approach for Identifying Standardized Items that are Significantly Related to the Biological Literature	79
Omar Al-Azzam, Jianfei Wu, Loai Al-Nimer, Charith Chitraranjan and Anne M. Denton	
Nonnegative Tensor Factorization of Biomedical Literature for Analysis of Genomic Data	97
Sujoy Roy, Ramin Homayouni, Michael W. Berry and Andrey A. Purotskiy	

Text Mining of Business-Oriented Conversations at a Call Center . . .	111
Hironori Takeuchi and Takahira Yamaguchi	

Part III Approach for New Services in Social Media

Scam Detection in Twitter	133
Xiaoling Chen, Rajarathnam Chandramouli and Koduvayur P. Subbalakshmi	
A Matrix Factorization Framework for Jointly Analyzing Multiple Nonnegative Data Sources	151
Sunil Kumar Gupta, Dinh Phung, Brett Adams and Svetha Venkatesh	
Recommendation Systems for Web 2.0 Marketing	171
Chen Wei, Richard Khoury and Simon Fong	

Part IV Data Mining Spreading into Various Service Fields

Handling Imbalanced and Overlapping Classes in Smart Environments Prompting Dataset.	199
Barnan Das, Narayanan C. Krishnan and Diane J. Cook	
Change Detection from Heterogeneous Data Sources	221
Tsuyoshi Idé	
Interesting Subset Discovery and Its Application on Service Processes	245
Maitreya Natu and Girish Keshav Palshikar	
Text Document Cluster Analysis Through Visualization of 3D Projections.	271
Masaki Aono and Mei Kobayashi	

Data Mining for Service

Yada, K. (Ed.)

2014, VIII, 291 p. 109 illus., 12 illus. in color., Hardcover

ISBN: 978-3-642-45251-2