

# Contents

## Big Data Analytics

Smart Energy Management: A Computational Approach . . . . .	3
<i>Krithi Ramamritham, Gopinath Karmakar, and Prashant Shenoy</i>	
Big Data Analytics Enabled Smart Financial Services: Opportunities and Challenges . . . . .	15
<i>Vadlamani Ravi and Sk Kamaruddin</i>	
A Framework to Improve Reuse in Weather-Based DSS Based on Coupling Weather Conditions . . . . .	40
<i>A. Mamatha, P. Krishna Reddy, Anirban Mondal, Seishi Ninomiya, and G. Sreenivas</i>	
Holistic Analysis of Multi-source, Multi-feature Data: Modeling and Computation Challenges . . . . .	59
<i>Abhishek Santra and Sanjukta Bhowmick</i>	

## Information and Knowledge Management

Entity Markup for Knowledge Base Population. . . . .	71
<i>Lili Jiang</i>	
Mining Credible and Relevant News from Social Networks . . . . .	90
<i>Ankur Garg, Varun Syal, Pankaj Gudlani, and Dhaval Patel</i>	
Integration of Text Classification Model with Speech to Text System . . . . .	103
<i>T. S. Aswin, Rahul Ignatius, and Mathangi Ramachandran</i>	
Modern Column Stores for Big Data Processing . . . . .	113
<i>K. T. Sridhar</i>	

## Mining of Massive Datasets

Improving Infrastructure for Transportation Systems Using Clustering . . . . .	129
<i>Prashant Rajput, Durga Toshniwal, and Apeksha Aggarwal</i>	
Temporal Topic Modeling of Scholarly Publications for Future Trend Forecasting . . . . .	144
<i>Amol P. Bhopale and Sowmya Kamath Shevgoor</i>	

Trip Planning and Scheduling Queries in Spatial Databases: A Survey. . . . . 164  
*Tanzima Hashem and Mohammed Eunos Ali*

Precision/Recall Trade-Off Analysis in Abnormal/Normal Heart  
Sound Classification . . . . . 179  
*Jeevith Bopaiah and Ramakanth Kavuluru*

**Computational Modeling**

Analysis of the Co-purchase Network of Products to Predict  
Amazon Sales-Rank . . . . . 197  
*Utpal Prasad, Nikky Kumari, Niloy Ganguly, and Animesh Mukherjee*

Model-Free Optimal Control: A Critical Analysis . . . . . 215  
*Vijaysekhar Chellaboina*

Computational Core for Plant Metabolomics: A Case for  
Interdisciplinary Research. . . . . 223  
*Vikram Pudi, Pratibha Rani, Abhijit Mitra, and Indira Ghosh*

Semantic Interoperability in Electronic Health Record Databases:  
Standards, Architecture and e-Health Systems. . . . . 235  
*Subhash Bhalla, Shelly Sachdeva, and Shivani Batra*

Big Data Analytics Advances in Health Intelligence, Public Health,  
and Evidence-Based Precision Medicine. . . . . 243  
*Asoke K. Talukder*

**Data Mining and Analysis**

A Flexible and Efficient Indexing Scheme for Placement of Top-Utility  
Items for Different Slot Sizes . . . . . 257  
*Parul Chaudhary, Anirban Mondal, and Polepalli Krishna Reddy*

Parallel Evolving Clustering Method for Big Data Analytics Using Apache  
Spark: Applications to Banking and Physics. . . . . 278  
*Sk Kamaruddin, Vadlamani Ravi, and Pritman Mayank*

An Introduction to Adversarial Machine Learning . . . . . 293  
*Atul Kumar, Sameep Mehta, and Deepak Vijaykeerthy*

Investigating the Role of Twitter in E-Governance by Extracting  
Information on Citizen Complaints and Grievances Reports . . . . . 300  
*Swati Agarwal and Ashish Sureka*

**Author Index** . . . . . 311



<http://www.springer.com/978-3-319-72412-6>

Big Data Analytics

5th International Conference, BDA 2017, Hyderabad,  
India, December 12-15, 2017, Proceedings

Reddy, P.K.; Sureka, A.; Chakravarthy, S.; Bhalla, S.  
(Eds.)

2017, XII, 311 p. 112 illus., Softcover

ISBN: 978-3-319-72412-6