Table of Contents

Big Data and Cloud Computing

Big Data in Online Social Networks: User Interaction Analysis to Model User Behavior in Social Networks	1
An Inductive and Semantic Model of Constraints for Master Data Management under Cloud Computing	17
Efficient Selection of Various k-objects for a Keyword Query Based on MapReduce Skyline Algorithm	40
Astronomical Data Management	
Implementing the Palomar Transient Factory Real-Time Detection Pipeline in GLADE: Results and Observations	53
Exploratory Analysis of Light Curves: A Case-Study in Astronomy Data Understanding	67
Business Data Analytics and Visualization	
Implementing Agent-Based Resource Management in Tsunami Modeling Preliminary Considerations	95
A Dataflow Platform for In-silico Experiments Based on Linked Data Paolo Bottoni and Miguel Ceriani	112
Knowledge Visualization of Reasoning for Financial Mathematics with Statistical Theorems	132
Yukari Shirota, Takako Hashimoto, and Sakurako Suzuki	

Business Data Analytics in Sciences

Database of Differential Cross Sections for Hydrogen Ionization	
by Proton Impact	144
Handling Domain Specific Document Repositories for Application of Query Languages	152
Development of eAgromet Prototype to Improve the Performance of Integrated Agromet Advisory Service	168
MARST: Multi-Agent Recommender System for e-Tourism Using Reputation Based Collaborative Filtering	189
A Model of Privacy and Security for Electronic Health Records Pulkit Mehndiratta, Shelly Sachdeva, and Sudhanshu Kulshrestha	202
Minimizing Wind Resistance of Vehicles with a Parallel Genetic Algorithm	214
Geo-spatial Decision Making and Query Languages	
Kaguya Moon Mission Data Repository: New Query Language Interface for Locating GIS Objects	232
Search System for City Information Using Multiple Public Transportation Information Resources	256
WISE-CAPS: Overcoming Information Gathering Challenges in Lunar Surface Exploration	266
Author Index	275