

Contents

Part I Introduction to Agents and Data Mining Interaction

1	Introduction to Agent Mining Interaction and Integration	3
	Longbing Cao	
2	Towards the Integration of Multiagent Applications and Data Mining	37
	Célia Ghedini Ralha	
3	Agent-Based Distributed Data Mining: A Survey	47
	Chayapol Moemeng, Vladimir Gorodetsky, Ziye Zuo, Yong Yang and Chengqi Zhang	

Part II Data Mining Driven Agents

4	Exploiting Swarm Behaviour of Simple Agents for Clustering Web Users' Session Data	61
	Shafiq Alam, Gillian Dobbie, and Patricia Riddle	
5	Mining Temporal Patterns to Improve Agents Behavior: Two Case Studies	77
	Philippe Fournier-Viger, Roger Nkambou, Usef Fahihi, Engelbert Mephu Nguifo	
6	A Multi-Agent System for Extracting and Analysing Users' Interaction in a Collaborative Knowledge Management System	93
	Doina Alexandra Dumitrescu, Ruth Cobos and Jaime Moreno-Llorena	
7	Towards Information Enrichment through Recommendation Sharing	103
	Li-Tung Weng, Yue Xu, Yuefeng Li and Richi Nayak	

8	A Multiagent-based Intrusion Detection System with the Support of Multi-Class Supervised Classification	127
	Mei-Ling Shyu and Varsha Sainani	
9	Automatic Web Data Extraction Based on Genetic Algorithms and Regular Expressions	143
	David F. Barrero, David Camacho, and María D. R-Moreno	
10	Establishment and Maintenance of a Knowledge Network by Means of Agents and Implicit Data	155
	Jaime Moreno-Llorena, Xavier Alamán and Ruth Cobos	
11	Equipping Intelligent Agents with Commonsense Knowledge acquired from Search Query Logs: Results from an Exploratory Story	167
	Markus Strohmaier, Mark Kröll, and Peter Prettenhofer	
12	A Multi-Agent Learning Paradigm for Medical Data Mining Diagnostic Workbench	177
	Sam Chao and Fai Wong	

Part III Agent Driven Data Mining

13	The EMADS Extendible Multi-Agent Data Mining Framework	189
	Kamal Ali Albashiri, and Frans Coenen	
14	A Multiagent Approach to Adaptive Continuous Analysis of Streaming Data in Complex Uncertain Environments	201
	Igor Kiselev and Reda Alhajj	
15	Multiagent Systems for Large Data Clustering	219
	T.Ravindra Babu, M. Narasimha Murty, and S.V.Subrahmanya	
16	A Multiagent, Multiobjective Clustering Algorithm	239
	Daniela S. Santos, Denise de Oliveira, and Ana L. C. Bazzan	
17	Integration of Agents and Data Mining in Interactive Web Environment for Psychometric Diagnostics	251
	Velibor Ilić	
18	A Multi-Agent Framework for Anomalies Detection on Distributed Firewalls Using Data Mining Techniques	267
	Kamel Karoui, Fakher Ben Ftima and Henda Ben Ghezala	
19	Competitive-Cooperative Automated Reasoning from Distributed and Multiple Source of Data	279
	Amin Milani Fard	

20	Normative Multi-Agent Enriched Data Mining to Support E-Citizens	291
	Stanislaw A. B. Stane and Mariusz Zytniewsk	
21	CV-Muzar - The Virtual Community Environment that Uses Multiagent Systems for Formation of Groups	305
	Ana Carolina Bertoletti De Marchi and Márcia Cristina Moraes	
22	Agent based Video Contents Identification and Data Mining Using Watermark based Filtering	315
	HeungKyu Lee	
	Index	325



<http://www.springer.com/978-1-4419-0521-5>

Data Mining and Multi-agent Integration

Cao, L. (Ed.)

2009, XIV, 334 p., Hardcover

ISBN: 978-1-4419-0521-5