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Nota di contenuto	Web Intelligence Meets Brain Informatics -- Neuroscience: New Insights for AI? -- Network Thinking and Network Intelligence -- Synergy of Web Intelligence and Brain Informatics -- Web Intelligence Meets Brain Informatics at the Language Barrier: A Procrustean Bed? -- Conversational Informatics Where Web Intelligence Meets Brain

Informatics -- Intelligence for Upgrading Information -- Toward Perception Based Computing: A Rough-Granular Perspective -- Granular Computing: Modeling Human Thoughts in the Web by Polyhedron -- Cognitive Science, Neuroscience, and Brain Informatics -- Biophysical Models of Neural Computation: Max and Tuning Circuits -- Cognitive Architectures and the Challenge of Cognitive Social Simulation -- ACT-R Meets fMRI -- The Neural Mechanism of Human Numerical Inductive Reasoning Process: A Combined ERP and fMRI Study -- Central Nervous Processing for Acupuncture at Liv3 with fMRI: A Preliminary Experience -- A Role for Signal Propagation Through the Hippocampal CA2 Field in Memory Formation -- Genetic Granular Cognitive Fuzzy Neural Networks and Human Brains for Pattern Recognition -- Domain-Oriented Data-Driven Data Mining (3DM): Simulation of Human Knowledge Understanding -- An Ontology-Based Mining System for Competitive Intelligence in Neuroscience -- Web Intelligence Applications -- Supervised Web Document Classification Using Discrete Transforms, Active Hypercontours and Expert Knowledge -- Fuzzy Web Surfer Models: Theory and Experiments -- Intuitive Display for Search Engines Toward Fast Detection of Peculiar WWW Pages -- GridMiner: An Advanced Grid-Based Support for Brain Informatics Data Mining Tasks -- A Semantically Enabled Service Oriented Architecture -- Spam Filtering and Email-Mediated Applications -- Ontology Based Web Mining for Information Gathering -- A Reasonable Rough Approximation for Clustering Web Users -- E-Business Intelligence Via MCMP-Based Data Mining Methods -- Intelligence Metasynthesis in Building Business Intelligence Systems -- Risk Mining in Medicine: Application of Data Mining to Medical Risk Management -- Using Cryptography for Privacy Protection in Data Mining Systems.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the First WICI International Workshop on Web Intelligence meets Brain Informatics, WImBI 2006, which was held in Beijing, China, in December 2006. The WICI (International WIC Institute) is an international, open-educational research organization of the Web Intelligence Consortium (WIC). The institute is affiliated with Beijing University of Technology (BJUT). The 26 revised full-length papers presented together with 3 introductory lectures are all invited post-workshop contributions that have been carefully reviewed and selected for inclusion in this state-of-the-art survey. The workshop explores a new perspective of Web Intelligence (WI) research from the viewpoint of Brain Informatics (BI) - a new interdisciplinary field to systematically study human information processing mechanisms from both macro and micro points of view by cooperatively using experimental cognitive neuroscience and advanced WI-centric information technology. The workshop was the first in the field to focus on the interplay between intelligent technologies, especially in the context of Web Intelligence, and studies on human intelligence as explored in neuroscience, cognitive psychology, and brain science instrumentation. After the propaedeutic contributions to the new emerging field the papers are organized in topical sections on the synergy of Web Intelligence and Brain Informatics; cognitive science, neuroscience, and brain informatics; and Web Intelligence applications.