

A Fuzzy Ontology Based Semantic Data Integration System

This volume contains the proceedings of the International Conference on Information Computing and Applications (ICICA 2010), which was held in Tangshan, China, October 15-18, 2010. As future-generation information technology, information computing and applications become specialized, information computing and applications - cluding hardware, software, communications and networks are growing with ever-increasing scale and heterogeneity and becoming overly complex. The complexity is getting more critical along with the growing applications. To cope with the growing and computing complexity, information computing and applications focus on intelligent, selfmanageable, scalable computing systems and applications to the maximum extent possible without human intervention or guidance. With the rapid development of information science and technology, information computing has become the third approach of science research. Information computing and applications is the field of study concerned with constructing - telligent computing, mathematical models, numerical solution techniques and using computers to analyze and solve natural scientific, social scientific and engineering problems. In practical use, it is typically the application of computer simulation, intelligent computing, internet computing, pervasive computing, scalable computing, trusted computing, autonomy-oriented computing, evolutionary computing, mobile computing, computational statistics, engineering computing, multimedia networking and computing, applications and other forms of computation problems in various scientific disciplines and engineering. Information computing and applications is an important underpinning for techniques used in information and computational science and there are many unresolved problems that address worth studying.

The 2013 International Conference on Cyber Science and Engineering (CyberSE 2013) will be held on in Guangzhou, China during December 14– 15, 2013. CyberSE is an annual conference to call together researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Cyber Science and Engineering. CyberSE 2013 is sponsored by International Association for Cyber Science and Engineering, Hong Kong. CyberSE 2013 has received more than 200 submissions from 15 countries and regions. The papers come from both academia and industry reflecting the international flavor of this event in the topics of Cyber Science and Engineering. About 20 PC members and 40 International reviewers worked hard in reviewing the submissions. Based on the review reports, about 63 papers were accepted to be presented in CyberSE 2013 by the chairs. The papers were grouped into five sessions viz., 1. Computer and Information Technologies, 2. Communication Technologies, 3. Artificial Intelligence, 4. Management and Services Science, 5. Circuits and Systems. All the accepted papers have been presented on the conference, mainly by oral presentations. During the conference, many novel research works caught the attentions of the participants. The participants came to an agreement that they will participate in the CyberSE 2014 next year. All the presented papers will be published by DEStech Publications, USA. DEStech will have the proceeding indexed in ISI (Institute of Scientific Information), CPCI-S (ISTP), Google Book Search, EI and other worldwide online citation of qualified papers. We express our thanks to all the members of the General Committee Chairs, Program Committee Chairs, Technical Program Committee and Volunteers who worked so hard to prepare the conference and chair the five sessions in CyberSE 2013 . We hope that CyberSE 2013 will be successful and enjoyable to all participants. We look forward to seeing all of you next year at the CyberSE 2014. Deyao Tan, International Association for Cyber Science and Engineering, China

Knowledge is power: In today's era of knowledge-based economies, constantly changing business environments, severe competition, and

globalization, gaining the knowledge edge will greatly empower an organization to stay on the cutting edge. Intelligence Methods and Systems Advancements for Knowledge-Based Business examines state-of-the-art research in decision sciences and business intelligence, and the applications of knowledge-based business with information systems. This comprehensive volume will provide researchers, academics, and business professionals with the research and inspiration they need to strengthen and empower their businesses in today's world.

This book constitutes the refereed proceedings of the Second Conference on Creativity in Intelligent Technologies and Data Science, CIT&DS 2017, held in Volgograd, Russia, in September 2017. The 58 revised full papers and two keynote papers presented were carefully reviewed and selected from 194 submissions. The papers are organized in topical sections on Knowledge Discovery in Patent and Open Sources for Creative Tasks; Open Science Semantic Technologies; Computer Vision and Knowledge-Based Control; Pro-Active Modeling in Intelligent Decision Making Support; Data Science in Energy Management and Urban Computing; Design Creativity in CASE/CAI/CAD/PDM; Intelligent Internet of Services and Internet of Things; Data Science in Social Networks Analysis; Creativity and Game-Based Learning; Intelligent Assistive Technologies: Software Design and Application.

This book constitutes the proceedings of the 4th Joint International Semantic Technology Conference, JIST 2014, held in Chiang Mai, Thailand, in November 2014. The theme of the JIST 2014 conference was "Open Data and Semantic Technology". JIST 2014 conference consisted of main technical tracks including regular paper track (full and short papers), in-use track and special track, poster and demo session, two workshops and four tutorials. The 32 papers in this volume were carefully reviewed and selected from 71 submissions. The paper topics are divided into eight categories: ontology and reasoning, linked data, learning and discovery, rdf and sparql, ontological engineering, semantic social Web, search and querying and applications of semantic technology.

The two-volume set LNAI 7802 and LNAI 7803 constitutes the refereed proceedings of the 5th Asian Conference on Intelligent Information and Database Systems, ACIIDS 2013, held in Kuala Lumpur, Malaysia in March 2013. The 108 revised papers presented were carefully reviewed and selected from numerous submissions. The papers included are grouped into topical sections on: innovations in intelligent computation and applications; intelligent database systems; intelligent information systems; tools and applications; intelligent recommender systems; multiple modal approach to machine learning; engineering knowledge and semantic systems; computational biology and bioinformatics; computational intelligence; modeling and optimization techniques in information systems, database systems and industrial systems; intelligent supply chains; applied data mining for semantic Web; semantic Web and ontology; integration of information systems; and conceptual modeling in advanced database systems.

This book constitutes the refereed proceedings of the First Asian Semantic Web Conference, ASWC 2006, held in Beijing, China, in September 2006. The 36 revised full papers and 36 revised short papers presented together with three invited contributions were carefully reviewed and selected from 208 full paper submissions. The papers are organized in topical sections.

This book presents innovative and high-quality research regarding advanced decision support systems (DSSs). It describes the foundations, methods, methodologies, models, tools, and techniques for designing, developing, implementing and evaluating advanced DSSs in different fields, including finance, health, emergency management, industry and pollution control. Decision support systems employ artificial intelligence methods to heuristically address problems that are cannot be solved using formal techniques. In this context, technologies such as the Semantic Web, linked data, big data, and machine learning are being applied to provide integrated support for individuals and

organizations to make more rational decisions. The book is organized into two parts. The first part covers decision support systems for industry, while the second part presents case studies related to clinical emergency management and pollution control.

This volume contains the lecture notes of the 11th Reasoning Web Summer School 2015, held in Berlin, Germany, in July/August 2015. In 2015, the theme of the school was Web Logic Rules. This Summer School is devoted to this perspective, and provides insight into the semantic Web, linked data, ontologies, rules, and logic.

Technology has dramatically changed the way in which knowledge is shared within and outside of traditional classroom settings. The application of fuzzy logic to new forms of technology-centered education has presented new opportunities for analyzing and modeling learner behavior. Fuzzy Logic-Based Modeling in Collaborative and Blended Learning explores the application of the fuzzy set theory to educational settings in order to analyze the learning process, gauge student feedback, and enable quality learning outcomes. Focusing on educational data analysis and modeling in collaborative and blended learning environments, this publication is an essential reference source for educators, researchers, educational administrators and designers, and IT specialists. This premier reference monograph presents key research on educational data analysis and modeling through the integration of research on advanced modeling techniques, educational technologies, fuzzy concept maps, hybrid modeling, neuro-fuzzy learning management systems, and quality of interaction.

"This book addresses the Semantic Web from an operative point of view using theoretical approaches, methodologies, and software applications as innovative solutions to true knowledge management"--Provided by publisher.

This book constitutes the refereed proceedings of the 10th International Conference on Asian Digital Libraries, ICADL 2007, held in Hanoi, Vietnam, in December 2007. The 41 revised full papers, 15 revised short papers, and extended abstracts of 10 poster papers presented together with three keynote and three invited papers were carefully reviewed and selected from a total of 154 submissions. The papers are organized in topical sections.

Knowledge existing in modern information systems usually comes from many sources and is mapped in many ways. There is a real need for representing "knowledge pieces" as rather universal objects that should fit to multi-purpose a- ing systems. According to great number of information system's tasks, knowledge representation is more or less detailed (e.g. some level of its granularity is - sumed). The main goal of this paper is to present chosen aspects of expressing granularity of knowledge implemented in intelligent systems. One of the main r- sons of granularity phenomena is diversification of knowledge sources, therefore the next section is devoted to this issue. 2. Heterogeneous Knowledge as a Source for Intelligent Systems Knowledge, the main element of so-called intelligent applications and systems, is very often heterogeneous. This heterogeneity concerns the origin of knowledge, its sources as well as its final forms of

presentation. In this section the selected criteria of knowledge differentiation will be presented, in the context of potential sources of knowledge acquisition. In Fig. 1 an environment of intelligent systems is shown, divided into different knowledge sources for the system. Fig. 1. Potential knowledge sources for intelligent information/reasoning system.

Source: own elaboration based on (Mach, 2007) p. 24.

This three volume set (CCIS 853-855) constitutes the proceedings of the 17th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, IPMU 2017, held in Cádiz, Spain, in June 2018. The 193 revised full papers were carefully reviewed and selected from 383 submissions. The papers are organized in topical sections on advances on explainable artificial intelligence; aggregation operators, fuzzy metrics and applications; belief function theory and its applications; current techniques to model, process and describe time series; discrete models and computational intelligence; formal concept analysis and uncertainty; fuzzy implication functions; fuzzy logic and artificial intelligence problems; fuzzy mathematical analysis and applications; fuzzy methods in data mining and knowledge discovery; fuzzy transforms: theory and applications to data analysis and image processing; imprecise probabilities: foundations and applications; mathematical fuzzy logic, mathematical morphology; measures of comparison and entropies for fuzzy sets and their extensions; new trends in data aggregation; pre-aggregation functions and generalized forms of monotonicity; rough and fuzzy similarity modelling tools; soft computing for decision making in uncertainty; soft computing in information retrieval and sentiment analysis; tri-partitions and uncertainty; decision making modeling and applications; logical methods in mining knowledge from big data; metaheuristics and machine learning; optimization models for modern analytics; uncertainty in medicine; uncertainty in Video/Image Processing (UVIP).

"This book provides an overview of current research and development activities in the area of web semantics and ontology, giving an in-depth description of different issues, including modeling, using ontologies in enterprise systems, querying and knowledge discovering of ontologies"--Provided by publisher.

These are exciting times in the fields of Fuzzy Logic and the Semantic Web, and this book will add to the excitement, as it is the first volume to focus on the growing connections between these two fields. This book is expected to be a valuable aid to anyone considering the application of Fuzzy Logic to the Semantic Web, because it contains a number of detailed accounts of these combined fields, written by leading authors in several countries. The Fuzzy Logic field has been maturing for forty years. These years have witnessed a tremendous growth in the number and variety of applications, with a real-world impact across a wide variety of domains with humanlike behavior and reasoning. And we believe that in the coming years, the Semantic Web will be major field of applications of Fuzzy Logic. This book, the first in the new series Capturing Intelligence, shows the positive role Fuzzy Logic, and more generally Soft Computing, can play in the

development of the Semantic Web, filling a gap and facing a new challenge. It covers concepts, tools, techniques and applications exhibiting the usefulness, and the necessity, for using Fuzzy Logic in the Semantic Web. It finally opens the road to new systems with a high Web IQ. Most of today's Web content is suitable for human consumption. The Semantic Web is presented as an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation. For example, within the Semantic Web, computers will understand the meaning of semantic data on a web page by following links to specified ontologies. But while the Semantic Web vision and research attracts attention, as long as it will be used two-valued-based logical methods no progress will be expected in handling ill-structured, uncertain or imprecise information encountered in real world knowledge. Fuzzy Logic and associated concepts and techniques (more generally, Soft Computing), has certainly a positive role to play in the development of the Semantic Web. Fuzzy Logic will not supposed to be the basis for the Semantic Web but its related concepts and techniques will certainly reinforce the systems classically developed within W3C. In fact, Fuzzy Logic cannot be ignored in order to bridge the gap between human-understandable soft logic and machine-readable hard logic. None of the usual logical requirements can be guaranteed: there is no centrally defined format for data, no guarantee of truth for assertions made, no guarantee of consistency. To support these arguments, this book shows how components of the Semantic Web (like XML, RDF, Description Logics, Conceptual Graphs, Ontologies) can be covered, with in each case a Fuzzy Logic focus. First volume to focus on the growing connections between Fuzzy Logic and the Semantic Web

Keynote chapter by Lotfi Zadeh The Semantic Web is presently expected to be a major field of applications of Fuzzy Logic It fills a gap and faces a new challenge in the development of the Semantic Web It opens the road to new systems with a high Web IQ Contributed chapters by Fuzzy Logic leading experts

these are split between Asia (18) and Europe (17), with an additional 2 from the USA.

This two-volume set constitutes the proceedings of the Third Conference on Creativity in Intellectual Technologies and Data Science, CIT&DS 2019, held in Volgograd, Russia, in September 2019. The 67 full papers, 1 short paper and 3 keynote papers presented were carefully reviewed and selected from 231 submissions. The papers are organized in topical sections in the two volumes. Part I: cyber-physical systems and Big Data-driven world. Part II: artificial intelligence and deep learning technologies for creative tasks; intelligent technologies in social engineering.

Technology is currently playing a vital role in revolutionizing education systems and progressing academia into the digital age. Technological methods including data mining and machine learning are assisting with the discovery of new techniques for improving learning environments in regions across the world. As the educational landscape continues to rapidly transform, researchers and administrators need to stay up to date on the latest advancements in order to elevate

the quality of teaching in their specific institutions. Machine Learning Approaches for Improvising Modern Learning Systems provides emerging research exploring the theoretical and practical aspects of technological enhancements in educational environments and the popularization of contemporary learning methods in developing countries. Featuring coverage on a broad range of topics such as game-based learning, intelligent tutoring systems, and course modelling, this book is ideally designed for researchers, scholars, administrators, policymakers, students, practitioners, and educators seeking current research on the digital transformation of educational institutions.

One of the primary topics at the center of discussion, and very often debate, between industry professionals, government officials, and the general public is the current healthcare system and the potential for an overhaul of its processes and services. Many organizations concerned for the long-term care of patients wish to see new strategies, practices, and organizational tools developed to optimize healthcare systems all over the world. One of the central engines of the current shift toward reorientation of healthcare services is virtual and mobile healthcare. Virtual and Mobile Healthcare: Breakthroughs in Research and Practice explores the trends, challenges, and issues related to the emergence of mobile and virtual healthcare. The book also examines how mobile technologies can best be used for the benefit of both doctors and their patients. Highlighting a range of topics such as smart healthcare, electronic health records, and m-health, this publication is an ideal reference source for medical professionals, healthcare administrators, doctors, nurses, practitioners, and researchers in all areas of the medical field.

"This book contains revised versions of most of the peer-reviewed papers presented at the Fifth Symposium for Artificial Intelligence Researchers (STAIRS), which took place in Lisbon, Portugal, in conjunction with the 19th European Conference on Artificial Intelligence (ECAI) and the Sixth Conference on Prestigious Applications of Intelligent Systems (PAIS) in August 2010. STAIRS is an international meeting which aims to support AI researchers from all countries at the beginning of their career, and PhD students or those who have held a PhD for less than one year. It offers doctoral students and young post-doctoral AI fellows a unique and valuable opportunity to gain experience in presenting their work in a supportive scientific environment, where they can obtain constructive feedback on the technical content of their work as well as advice on how to present it, and where they can also establish contacts with the broader European AI research community. The topics cover a broad spectrum of subjects in the field of AI: learning and classification, ontologies and the semantic web, agent programming and planning, logic and reasoning, economic approaches, games, dialogue systems, user preferences and recommender systems. Offering an opportunity to glimpse the current work of the AI researchers of the future, this book will be of interest to anyone whose work involves the use of artificial intelligence and intelligent systems."--Publisher description.

This open access book reports on cutting-edge electrical engineering and microelectronics solutions to foster and support digitalization in the semiconductor industry. Based on the outcomes of the European project iDev40, which were presented at the two first conference editions of the European Advances in Digital Transformation Conference (EADCT 2018 and EADTC 2019), the book covers different, multidisciplinary aspects related to digital transformation, including technological and industrial developments, as well as human factors research and applications. Topics include modeling and simulation methods in semiconductor operations, supply chain management issues, employee training methods and workplaces optimization, as well as smart software and hardware solutions for semiconductor manufacturing. By highlighting industrially relevant developments and discussing open issues related to digital transformation, the book offers a timely, practice-oriented guide to graduate students, researchers and professionals interested in the digital transformation of manufacturing domains and work environments.

The Atlantic Web Intelligence Conference brings together scientists, engineers, computer users, and students to exchange and share their experiences, new ideas, and research results about all aspects (theory, applications and tools) of intelligent methods applied to Web based systems, and to discuss the practical challenges encountered and the solutions adopted. Previous AWIC events were held in Spain – 2003, Mexico – 2004, Poland – 2005, Israel – 2006, France – 2007 and Czech Rep. – 2009. The present 7th Atlantic Web Intelligence Conference (AWIC'2011) was held during January 26-28, 2011, at the University of Applied Sciences of Fribourg, Switzerland. AWIC2011 is organized by the Multimedia Information System Group (MISG), Institute of the Technologies of Information and Communication (iTIC) of the University of Applied Sciences of Fribourg.

This volume contains some lecture notes of the 12th Reasoning Web Summer School (RW 2016), held in Aberdeen, UK, in September 2016. In 2016, the theme of the school was “Logical Foundation of Knowledge Graph Construction and Query Answering”. The notion of knowledge graph has become popular since Google started to use it to improve its search engine in 2012. Inspired by the success of Google, knowledge graphs are gaining momentum in the World Wide Web arena. Recent years have witnessed increasing industrial take-ups by other Internet giants, including Facebook's Open Graph and Microsoft's Satori. The aim of the lecture note is to provide a logical foundation for constructing and querying knowledge graphs. Our journey starts from the introduction of Knowledge Graph as well as its history, and the construction of knowledge graphs by considering both explicit and implicit author intentions. The book will then cover various topics, including how to revise and reuse ontologies (schema of knowledge graphs) in a safe way, how to combine navigational queries with basic pattern matching queries for knowledge graph, how to setup a environment to do experiments on knowledge graphs, how to deal with inconsistencies and fuzziness in ontologies and knowledge graphs,

and how to combine machine learning and machine reasoning for knowledge graphs.

This book constitutes the thoroughly refereed short papers, workshops and doctoral consortium papers of the 23rd European Conference on Advances in Databases and Information Systems, ADBIS 2019, held in Bled, Slovenia, in September 2019. The 19 short research papers and the 5 doctoral consortium papers were carefully reviewed and selected from 103 submissions, and the 31 workshop papers were selected out of 67 submitted papers. The papers are organized in the following sections: Short Papers; Workshops Papers; Doctoral Consortium Papers; and cover a wide spectrum of topics related to database and information systems technologies for advanced applications.

This book constitutes the refereed proceedings of the First International Conference on Intelligent Cloud Computing, ICC 2019, held in Riyadh, Saudi Arabia, in December 2019. The two-volume set presents 53 full papers, which were carefully reviewed and selected from 174 submissions. The papers are organized in topical sections on Cyber Security; Data Science; Information Technology and Applications; Network and IoT.

This book comprises of 74 contributions from the experts covering the following topics. " Information Communication Technologies " Network Technologies " Wireless And Sensor Networks " Soft Computing " Circuits and Systems " Software Engineering " Data Mining " Bioinformatics " Data and Network Security
Fuzzy Knowledge Management for the Semantic WebSpringer

Recently, the Semantic Web has gained huge popularity to address these challenges. Semantic web technologies have the opportunity to transform the way healthcare providers utilize technology to gain insights and knowledge from their data and make decisions. Both big data and semantic web technologies can complement each other to address the challenges and add intelligence to healthcare management systems. The aim of this book is to analyze the current status on how Semantic Web is used to solve the health data integration and interoperability problem, how it provides advanced data linking capabilities that can improve search and retrieval of medical data. There are chapters in the book which analyze the tools and approaches to semantic health data analysis and knowledge discovery. The book discusses the role of semantic technologies in extracting and transforming healthcare data before storing it in repositories. It also discusses different approaches for integrating heterogeneous healthcare data. To summarize, the book will help readers understand key concepts in semantic web applications for biomedical engineering and healthcare.

This carefully edited book comprises the papers from EUROFUSE 2011 Workshop on Fuzzy Methods for Knowledge-based Systems. EUROFUSE was established in 1998 as the EURO (the Association of European Operational Research Societies) Working Group on Fuzzy Sets, as a successor of the former European Chapter of IFSA (the International Fuzzy Systems Association). The present EUROFUSE 2011 workshop is held at Régua, Portugal, 21-23 September, in

the World Heritage Site of the Douro Wine Region and is organised by Pedro Melo-Pinto and Pedro Couto. The workshop is devoted to Fuzzy Methods for Knowledge-based Systems. And has the goal to bring together researchers and practitioners developing and applying fuzzy techniques in preference modelling and decision making in an informal atmosphere. EUROFUSE 2011 has three distinguished invited speakers: Francisco Herrera (Granada, Spain), Radko Mesiar (Bratislava, Slovakia) and Jose Luis Garcia Lapresta (Valladolid, Spain). Next to the invited speakers, the three day program consists of 37 lectures. In total, there are 70 participants from 10 countries. This edited volume contains the final revised manuscripts on the basis of which the program was put together.

This book goes to great depth concerning the fast growing topic of technologies and approaches of fuzzy logic in the Semantic Web. The topics of this book include fuzzy description logics and fuzzy ontologies, queries of fuzzy description logics and fuzzy ontology knowledge bases, extraction of fuzzy description logics and ontologies from fuzzy data models, storage of fuzzy ontology knowledge bases in fuzzy databases, fuzzy Semantic Web ontology mapping, and fuzzy rules and their interchange in the Semantic Web. The book aims to provide a single record of current research in the fuzzy knowledge representation and reasoning for the Semantic Web. The objective of the book is to provide the state of the art information to researchers, practitioners and graduate students of the Web intelligence and at the same time serve the knowledge and data engineering professional faced with non-traditional applications that make the application of conventional approaches difficult or impossible.

This book discusses the recent advances in natural computation, fuzzy systems and knowledge discovery. Presenting selected, peer-reviewed papers from the 15th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2019), held in Kunming, China, from 20 to 22 July 2019, it is a useful resource for researchers, including professors and graduate students, as well as R&D staff in industry.

This book constitutes the refereed proceedings of the 22 International Conference on Database and Expert Systems Applications, DEXA 2011, held in Toulouse, France, August 29 - September 2, 2011. The 52 revised full papers and 40 short papers presented were carefully reviewed and selected from 207 submissions. The papers are organized in topical sections on XML querying and views; data mining; queries and search; semantic web; information retrieval; business applications; user support; indexing; queries, views and data warehouses; ontologies; physical aspects of databases; Design; distribution; miscellaneous topics.

The book is a collection of high-quality peer-reviewed research papers presented in International Conference on Soft Computing Systems (ICSCS 2015) held at Noorul Islam Centre for Higher Education, Chennai, India. These research papers provide the latest developments in the emerging areas of Soft Computing in Engineering and Technology. The book is organized in two volumes and discusses a wide variety of industrial, engineering and scientific applications of the emerging techniques. It presents invited papers from the inventors/originators of new applications and advanced technologies.

This 4-Volume-Set, CCIS 0251 - CCIS 0254, constitutes the refereed proceedings of the International Conference on Informatics Engineering and Information Science, ICIEIS 2011, held in Kuala Lumpur, Malaysia, in November 2011. The 210 revised full papers presented together with invited papers in the 4 volumes were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on e-learning, information security, software engineering, image processing, algorithms, artificial intelligence and soft computing, e-commerce, data mining, neural networks, social networks, grid computing, biometric technologies, networks, distributed and parallel computing, wireless networks, information and data management, web applications and software systems, multimedia, ad hoc networks, mobile computing, as well as miscellaneous topics in digital information and communications.

2012 International Conference on Affective Computing and Intelligent Interaction (ICACII 2012) was the most comprehensive conference focused on the various aspects of advances in Affective Computing and Intelligent Interaction. The conference provided a rare opportunity to bring together worldwide academic researchers and practitioners for exchanging the latest developments and applications in this field such as Intelligent Computing, Affective Computing, Machine Learning, Business Intelligence and HCI. This volume is a collection of 119 papers selected from 410 submissions from universities and industries all over the world, based on their quality and relevancy to the conference. All of the papers have been peer-reviewed by selected experts.

One of the most successful methodology that arose from the worldwide diffusion of Fuzzy Logic is Fuzzy Control. After the first attempts dated in the seventies, this methodology has been widely exploited for controlling many industrial components and systems. At the same time, and very independently from Fuzzy Logic or Fuzzy Control, the birth of the Web has impacted upon almost all aspects of computing discipline. Evolution of Web, Web2.0 and Web 3.0 has been making scenarios of ubiquitous computing much more feasible; consequently information technology has been thoroughly integrated into everyday objects and activities. What happens when Fuzzy Logic meets Web technology? Interesting results might come out, as you will discover in this book. Fuzzy Mark-up Language is a son of this synergistic view, where some technological issues of Web are re-interpreted taking into account the transparent notion of Fuzzy Control, as discussed here. The concept of a Fuzzy Control that is conceived and modeled in terms of a native web wisdom represents another step towards the last picture of Pervasive Web Intelligence.

One of the major limitations of the Ambient Intelligent Systems today is the lack of semantic models of those activities on the environment, so that the system can recognize the specific activity being performed by the user(s) and act accordingly. In this context, this thesis addresses the general problem of knowledge representation in Smart Spaces. The main objective is to develop knowledge-based models, equipped with semantics to learn, infer and monitor human behaviours in Smart Spaces. Moreover, it is easy to recognize that some aspects of this problem have a high degree of uncertainty, and therefore, the developed models must be equipped with mechanisms to manage this type of information. As an added value, this system should be sufficiently simple and flexible to be managed by non-expert users, and thus, facilitate the transfer of research to industry. To do this, we develop graphical models to represent human behaviour in Smart Spaces, in order to provide them with more usability in the final application. As a result, human behaviour recognition can help assisting people with special needs such as independent elders, in remote rehabilitation monitoring, industrial process guidelines, and many other cases.

The six volume set LNCS 10634, LNCS 10635, LNCS 10636, LNCS 10637, LNCS 10638, and LNCS 10639 constitutes the proceedings of the 24rd International Conference on Neural Information Processing, ICONIP 2017, held in Guangzhou, China, in November 2017. The 563 full papers presented were carefully reviewed and selected from 856 submissions. The 6 volumes are organized in topical sections on

Acces PDF A Fuzzy Ontology Based Semantic Data Integration System

Machine Learning, Reinforcement Learning, Big Data Analysis, Deep Learning, Brain-Computer Interface, Computational Finance, Computer Vision, Neurodynamics, Sensory Perception and Decision Making, Computational Intelligence, Neural Data Analysis, Biomedical Engineering, Emotion and Bayesian Networks, Data Mining, Time-Series Analysis, Social Networks, Bioinformatics, Information Security and Social Cognition, Robotics and Control, Pattern Recognition, Neuromorphic Hardware and Speech Processing.

[Copyright: c507c2833fd10e77cd6b936e7afa1836](#)