About the Contributors

**Ramon F. Brena** is full professor at the Tecnologico de Monterrey, Mexico, since 1990, where he is head of a research group in Distributed Knowledge and Multiagent Systems. Dr Brena is the head of the Master level graduate programs in Computer Science and Artificial Intelligence. Dr. Brena holds a PhD from the INPG, Grenoble, France, where he presented a doctoral Thesis related to Knowledge in Program Synthesis. His current research and publication areas include Intelligent Agents and Multiagent Systems, Ubiquitous computing and Ambient Intelligence, Formal Methods in Software Engineering, Knowledge representation and reasoning, Semantic Web, and Artificial Intelligence in general. He has been visiting professor at the U. of Texas at Dallas and the Université de Montréal. Dr Brena is member of the ACM, and is recognized as an established researcher by the official Mexican research agency, CONACyT (SNI level I).

**Adolfo Guzmán-Arenas** is a Computer Science professor at Centro de Investigación en Computación, Instituto Politécnico Nacional, Mexico City, of which he was Founding Director. He holds a B. Sc. in Electronics from ESIME-IPN, and a Ph. D. from MIT. He is an ACM Fellow, IEEE Life Fellow Member, member of MIT Educational Council, member of the Academia de Ingeniería and the Academia Nacional de Ciencias (Mexico). From the President of Mexico, he has received (1996) the National Prize in Science and Technology and (2006) the Premio Nacional a la Excelencia “Jaime Torres Bodet.” He works in semantic information processing and AI techniques, often mixed with distributed information systems. More at http://alum.mit.edu/www/aguzman.

***

**Gloria Bordogna** holds the position of senior researcher at the National Research Council Institute for the Dynamics of Environmental Processes. She received a laurea degree in Physics from the University of Milano. Her research interests concern soft computing in the area of information retrieval, flexible query languages and Geographic Information Systems. She was involved in several European projects such as Ecourt, PENG and IDE-Univers, edited three volumes and a special issue of JASIST in her research area, participated to the organization of several events among which the 2009 IEEE/WIC/ACM International Conferences on Web Intelligence (WI’09) and Intelligent Agent Technology (IAT’09) and in the program committee of several conferences such as FUZZ-IEEE, ACM SIGIR, ECIR, FQAS, CIKM, IEEE-ACM WI/IAT, WWW.
**Hiram Calvo** obtained his Master degree in Computer Science in 2002 from National Autonomous University of Mexico, with a thesis on mathematical modeling, and his PhD degree in Computer Science with honors in 2006 from the Computing Research Center of the National Polytechnic Institute, Mexico, with a thesis on natural language processing. Since 2006 he is a lecturer at the Computing Research Center of the National Polytechnic Institute. He was awarded with the Lázaro Cárdenas Medal given by the president of Mexico in 2006 as the best Ph. D. student of IPN in the area of physics and mathematics. Currently he is a visiting researcher at the Nara Institute of Science and Technology, Japan. His interests are automatic common sense knowledge acquisition, and unsupervised methods for pattern recognition and machine learning.

**Alessandro Campi** is a researcher at the Politecnico di Milano. His works exploit the possibility of extending XQuery in several directions, more precisely, the possibility to add active rules, to execute fuzzy queries, to mine data and to draw the query without writing directly XQuery. Other research activities are related to investigating automatic construction and verification of data intensive Web site and on methodologies and tools for e-learning. He taught Programming languages, Data Structures and Algorithms, Database and Software Engineering at the Politecnico di Milano.

**Rocío L. Cecchini** is a Teaching Assistant at the Computer Science and Engineering Department at Universidad Nacional del Sur in Argentina and an Assistant Researcher at CONICET. In 2006 she obtained an Engineering degree in Computer Science at Universidad Nacional del Sur. Since then she has been conducting research in the areas of multi-objective evolutionary algorithms, knowledge discovery, datamining and more recently, biocomputing. She has obtained a PhD degree in Computer Science in May 2010 funded by fellowships from Universidad Nacional del Sur and CONICET. Email: rlc@cs.uns.edu.ar.

**Fabio Ciravegna** is Full Professor of Language and Knowledge Technologies at the University of Sheffield where he coordinates the Organisations, Information and Knowledge (OAK) Group. His research field concerns methodologies and technologies for the Intelligent and Semantic Web, with focus on Knowledge Management applications. He has considerable engagement with industry and user communities with projects funded by Rolls Royce, Kodak Eastman, Lycos, and the Environment Agency. He is part of the editorial board of the International Journal on “Web Semantics” and of the International Journal of Human Computer Studies. He is director of research of K-Now, a spin-off company of the University of Sheffield focusing on supporting dynamic distributed communities in large organizations. He holds a PhD from the University of East Anglia and a doctorship from the University of Torino, Italy.

**Celia Bertha Reyes Espinoza** obtained her Master of Science degree in Electronics and Computer Science from “Mixtec Technological University” in Huajuapan de León; Oaxaca; Mexico in 2008. She is currently a full professor researcher of the Mixtec Technological University, author of 10 scientific publications. Her research interests include computational linguistics and information retrieval from Internet.
René Arnulfo García Hernández is Professor at the University of the State of Mexico in the Software Engineering Department. He received the B.Sc degree as Computational System Engineering in 2001 and received the M.Sc degree in computer science from National Center for Technological Research and Development in 2003. He obtained a Ph.D. in computer science from National Institute of Astrophysics Optics and Electronics in 2007. He is member of the National System of Researchers. His research interests include text and data mining, and natural language processing.

Kentaro Inui gain his Doctor of Engineering in 1995, Tokyo Institute of Technology. Has been Associate Professor at the Kyushu Institute of Technology, and then Associate Professor at Nara Institute of Science and Technology from 2002 to 2010. Currently he is Professor at Tohoku University, Japan. He has received the Best Asian NLP Paper award in COLING/ACL-2006, the Best Paper Award at the 10th Annual Meeting of the Association of Natural Language Processing in 2004 and 2003. He is currently developing a system for evaluating credibility of web information. His interests are paraphrasing, text simplification, question answering, text-based knowledge acquisition, dialogue processing, co-reference resolution, and affective text understanding.

Carlos M. Lorenzetti is a Teaching Assistant and a Postdoctoral fellow at the Computer Science and Engineering Department at Universidad Nacional del Sur in Argentina. In 2005 he obtained an Engineering degree in Computer Science at Universidad Nacional del Sur. In April 2006 he started his doctoral thesis research with a fellowship granted by CONICET, and obtained a PhD degree in Computer Science in March 2011. His research interests include datamining, knowledge discovery and information retrieval. Email: cml@cs.uns.edu.ar.

Ana G. Maguitman is an Adjunct Professor at the Computer Science and Engineering Department at Universidad Nacional del Sur in Argentina and an Adjunct Researcher at CONICET. She obtained a Ph.D. in Computer Science from Indiana University in 2004 and has been a Visiting Researcher at the School of Informatics of that Institution until 2006. She heads the Knowledge Capture and Information Retrieval Group at the Universidad Nacional del Sur and is currently pursuing research in the areas of knowledge capture, recommendation systems, context-based search, and web mining. She is the author of more than 70 scientific publications in these areas. Email: agm@cs.uns.edu.ar.

Davide Magatti graduated in 2007 in Computer Science at Università degli studi di Milano – Bicocca and received the Ph.D in Computer Science in 2011 at Università degli studi di Milano – Bicocca with a thesis on “Graphical Models for Text Mining: knowledge extraction and performance estimation”. He works in the “Models and Algorithms for Data and Text Mining Laboratory (M.A.D)” at Department of Informatics Systems and communications (DISCo) of Milano-Bicocca university. His research area is Text Mining and in particular document clustering and supervised models for information extraction. He mainly works with probabilistic graphical models for topic extraction and information extraction models. He is also interested in the interplays between Text Mining and document management systems and in the development of solutions that integrate semantic web with text mining and machine learning.
About the Contributors

**Pavel Makagonov** is D.Sc from 1978. He is currently a professor researcher of the Mixtec Technological University in Huajuapan de León; Oaxaca; Mexico. Dr. Pavel Makagonov is author of more than 100 scientific publications, including 6 monographs. His research interests include computational linguistics, natural language processing, system analysis and urban computing.

**Yuji Matsumoto** is currently a Professor of Information Science, Nara Institute of Science and Technology, head of the Computational Linguistics Laboratory. He received his M.Sc. and Ph.D. degrees in information science from Kyoto University in 1979 and in 1989. He joined Machine Inference Section of Electrotechnical Laboratory in 1979. He has then experienced an academic visit at Imperial College of Science and Technology, London; a deputy chief of First Laboratory at ICOT, and an associate professor at Kyoto University. His main research interests are natural language understanding, knowledge representation, linguistic knowledge acquisition and machine learning. He is author of more than 200 publications on these subjects.

**Duoqian Miao** received the Ph.D degree in 1997 from Institute of Automation, Chinese Academy of Science. He is currently a professor and vice dean of the school of Electronics and Information Engineering at Tongji University, P.R. China. His research interests include: Rough Sets, Granular Computing, Principal Curve, Machine learning, Web Intelligence, Data Mining etc. He has published 3 academic books and over 140 scientific papers in international journals and conferences. He has been honored with the Award of Scientific and Technological Progress of Ministry of Education (1st class) in China in 2007. He is a senior member of the China Computer Federation (CCF), a committee member of the CCF Artificial Intelligence and Pattern Recognition, the CCF Machine Learning; a committee member of the Chinese Association for Artificial Intelligence (CAAI), a vice chair of the Chinese Association for Artificial Intelligence (CAAI) Rough Set and Soft Computing Society, a committee member of the CAAI Machine Learning; a committee member of the Chinese Association of Automation(CAA) Intelligent Automation; a committee member and chair of Shanghai Computer Society (SCA) Computing Theory and Artificial Intelligence, is also a committee member of International Rough Sets Society.

**Jesús-Ariel Carrasco-Ochoa** received his PhD in Computer Science from the Center for Computing Research of the National Polytechnic Institute (CIC-IPN), Mexico, in 2001. He works as fulltime researcher at Computer Science Department of the National Institute for Astrophysics, Optics and Electronics (INAOE) of Mexico. His current research interests include Logical Combinatorial Pattern Recognition, Data Mining, Feature and Prototype Selection, Document Analysis, Fast Nearest Neighbor Classifiers and Clustering.

**Giuseppe Psaila** is assistant professor at the Faculty of Engineering at University of Bergamo. He obtained the degree in Electronic Engineering from Politecnico di Milano, and the Ph.D. in Computer Engineering from Politecnico di Torino. His research interests are in the field of databases, in particular database models and languages, data mining, XML and workflow systems. He participated to several European funded research projects in the database field, such as the IDEA Project (development of an active, deductive and object oriented database system), Mietta (on Multilingual Information Extraction) and cInq (consortium on knowledge discovery by Inductive Queries).
Eduardo H. Ramirez Rangel holds a Ph.D. on Intelligent Systems from the Tecnologico de Monterrey, Mexico where he has worked on Large Scale Topic Modeling technologies. During the course of his studies he had interned with companies like Microsoft Research and Yahoo! Research working in areas related to search-spam, search quality measurement and personalized search. Before joining the Ph.D. program he was co-founder and software architect of Ensitech de Mexico, a startup company specializing on e-Commerce and Internet Marketing software. He has also performed consultancy on topics like XML standards, software engineering, website performance and information architecture. His research interests include unsupervised learning, data mining, cloud computing, Internet economics and contextual advertising.

Alma Delia Cuevas Rasgado holds a degree in computer science from Instituto Tecnologico del Istmo located in Mexico. She currently holds a position in the University of Computing at the Instituto Politécnico Nacional as professor, Escuela Superior de Computo. Her area of research is ontology fusion with recent developments in Information System to Assurance quality in the Centralized Technological Institutes, Book about Process Orientes Information Systems at ITComplements company (writer).

Stefania Ronchi graduated cum laude in Computer Science Engineering, curriculum Information Systems, at the University of Bergamo in February 2008. She participated in the Italian regional research project “Dote Ricercatore” for the development of research projects in the technical-scientific area. She won a PhD grant in Information Engineering at the Department of Electronics and Information of Politecnico di Milano, where she currently carries out her research activity in the database area, dealing mainly with Web search, IR and Semantic Web. She authored two publications on her research topics in the proceedings of international conferences.

Grigori Sidorov obtained his PhD in Computational and Structural Linguistics from “Lomonosov” Moscow State University, Russia, in 1996. He is currently a full professor of the Natural Language Processing Laboratory, Center for Computing Research, Instituto Politecnico Nacional in Mexico City, Mexico. Dr. Sidorov is National Researcher of Mexico level 3 (highest level), member of Mexican Academy of Sciences, Editor-in-Chief of the research journal “Polibits”, author of more than 150 scientific publications. His research interests include computational linguistics, natural language processing and application of machine learning techniques to NLP tasks.

Fabio Stella graduated in Computer Sciences in February 1991 at the Università degli Studi di Milano. From 1991 to 1994 he worked as research assistant for the EEC IMPROD project on semiconductors failure diagnosis, analysis and quality improvement. In January 1994 he became Assistant Professor of Operations Research at the Università degli Studi di Milano. He received the Ph.D. in Computational Mathematics and Operations Research in 1995. In 2001 he became Associate Professor of Operations Research at the Università degli Studi di Milano-Bicocca. He directs the Models and Algorithms for Data and Text Mining Laboratory and actively collaborates with many Italian SMEs in the area of document management, financial risk management, and analysis of clinical and microarray data. He has been advisor of several Ph.D. students in Computer Science at the Università degli Studi di Milano-Bicocca. His main research interests include; continuous time Bayesian networks, data mining, text mining with specific reference to topic models, and computational finance with specific reference to on-line algorithms for portfolio selection.
José Francisco Martínez-Trinidad received his B.S. degree in Computer Science from Physics and Mathematics School of the Autonomous University of Puebla (BUAP), Mexico, in 1995, his M.Sc. degree in Computer Science from the faculty of Computers Science of the Autonomous University of Puebla, Mexico, in 1997 and his Ph.D. degree in the Center for Computing Research of the National Polytechnic Institute (CIC, IPN), Mexico, in 2000. Professor Martinez-Trinidad edited/authored six books and over one hundred journal and conference papers, on subjects related to Pattern Recognition.

Zhihua Wei received the Ph.D degree in 2010 from Department of Computer Science and Technology, Tongji University, China. She is currently a lecturer at Tongji University. Her research interests include Text mining, Machine Learning and Natural Language Processing.

Ruizhi Wang received the Ph.D degree in 2008 from Department of Computer Science and Technology, Tongji University, China. She is currently a lecturer at Tongji University. Her research interests include Clustering Analysis, Granular Computing and Data Mining.

Zhifei Zhang received the B.E degree in 2008 from Department of Computer Science and Technology, Tongji University. He is currently a Ph.D candidate at Tongji University, China. His research interests include Text Mining, Machine Learning, and Natural Language Processing.

Ziqi Zhang is a Research Associate at the University of Sheffield. He is a member of the Organisations, Information and Knowledge (OAK) Group. His research field concerns Human Language related technologies with focus on Information Extraction, text mining and Natural Language Processing. He has worked on a number of Information Extraction and Knowledge Management related projects and produced a number of relevant publications in some major conference venues such as Knowledge Engineering and Knowledge Management by the Masses (EKAW) and Language Resources Evaluation Conference (LREC). He currently holds a Master degree from the University of Birmingham, and is pursuing his PhD in the field of Information Extraction.