About the Contributors

Emilio Soria received a M.S. degree in Physics in 1992 and the Ph.D. degree in 1997 in electronics engineering from the Universitat de Valencia, Spain. He is an Assistant Professor at the University of Valencia since 1997. His research is centered mainly in the analysis and applications of adaptive and neural systems.

José David Martín-Guerrero was born in Valencia, Spain in 1974. He received a BS degree in Physics (1997), a BS degree in Electronics Engineering (1999), a MS Degree in Electronic Engineering (2001) and a PhD Degree in Electronic Engineering (2004) from the University of Valencia (Spain). He is currently an Assistant Professor at the Department of Electronic Engineering, University of Valencia. His research interests include Machine Learning algorithms and their potential real application. Lately, his research has been especially focused on the study of Reinforcement Learning algorithms.

Rafael Magdalena received the M.S. and the Ph.D. degrees in Physics from the University of Valencia, Spain in 1991 and 2000 respectively. He has alse been a lecturer with the Politechnic University of Valencia, a funded researcher with the Research Association in Optics and has held industrial positions with several electromedicine and IT companies. Currently he is a Labour Lecturer in Electronic Engineering with the University of Valencia, position held since 1998. He has conducted research in telemedicine, biomedical engineering and signal processing. He is a Member of the IEICE.

Marcelino Martinez received his B.S. and Ph.D. degrees in Physics in 1992 and 2000 respectively from the Universitat de Valencia(Spain). Since 1994 he has been with the Digital Signal Processing Group at the Department of Electronics Engineering. He is currently an Asistant Professor. He has worked on several industrial projects with private companies (in the areas such as industrial control, real-time signal processing and digital control) and with public funds (in the areas of foetal electrocardiography and ventricular fibrillation). His research interests include real time signal processing, digital control using DSP and biomedical signal processing.

Antonio J. Serrano received a B.S. degree in Physics in 1996, a M.S. degree in Physics in 1998 and a Ph.D. degree in Electronics Engineering in 2002, from the University of Valencia. He is currently an associate professor in the Electronics Engineering Department at the same university. His research interest is machine learning methods for biomedical signal processing.

* * *

Mariano Alcañíz was born in 1962. He completed his M.Sc. in Industrial Engineering at the Technical University of Valencia (UPV) in 1985 and Ph.D. in 1992. Since 1986 he has been a scientific fellow at the Department of Graphical Engineering at the Technical University of Valencia, where he has dealt with Computer Graphics. His current position is Full Professor of Computer Graphics at Technical University of Valencia and director of the Human Centered Technology Lab (LabHuman) composed by a multidisciplinary team of researchers focused on how technology can augment human ability, studying technology-augmented human cognition and action, human computer interaction, and communication applications of emerging technologies.

Nuria Aleixos received a B.Sc. (1992) and Ph.D. degree in Computer Science from the Polytechnic University of Valencia (1999). She worked for private companies developing solutions for commercial CAD systems (1990-1994) and at the Public Research Institute IVIA developing machine vision systems (1995-1996). She joined the Department of Technology at Jaume I University of Castelló (UJI), Spain, in 1996. During 2007 she has been the head of the faculty of Industrial Design at UJI until she joined the Graphics Engineering Department of the Polytechnic University of Valencia in October 2007, where she currently works as associate professor. Her fields of interest are focused on *Modelling methodologies for CAD applications*, *Computer aided design*, *Image processing* and *Calligraphic interfaces*

Kin-fan AU is an associate professor in the Institute of Textiles and Clothing of The Hong Kong Polytechnic University. His research interest is in the business aspects of fashion and textiles, particularly in the area of global trading of fashion and textile products. Dr. Au has published many papers in textiles and related journals on topics of world trading, offshore production and modelling of textiles and apparel trade.

Paulo J. Azevedo received is MSc and PhD degrees in Computing from Imperial College at the University of London in 1991 and 1995. He is an Auxiliar Professor at Departamento de Inform·tica of the University of Minho. His research interests include bioinformatics, data mining, machine learning, data warehousing and logic programming.

Dr. Raju S. Bapi obtained BTech (EE) from Osmania University, India, MS and PhD from University of Texas at Arlington, USA. He has over 10 years of teaching and research experience in neural networks, machine learning and artificial intelligence andtheir applications. Currently he is a Reader in the Department of Computer and Information Sciences, University of Hyderabad. He has over 50 publications (Journal/Conference). His main research interests include Biological and Artificial NeuralNetworks, Neural and Cognitive Modelling, Machine Learning, Pattern Recognition, Neuroimaging and Bioinformatics.

Teresa M.A. Basile got the Laurea degree in Computer Science at the University of Bari, Italy (2001). In March 2005 she obtained the Ph.D. at the University of Bari defending a dissertation titled "A Multistrategy Framework for First-Order Rules Learning." Since April 2005, she is a research at the Computer Science Department of the University of Bari. Her research interests concern the investigation of symbolic machine learning techniques. She is author of about 60 papers published on National and International journals and conferences/workshops proceedings and was/is involved in various National and European projects.

Antonio Bella finished his degree in Computer Science at the Technical University of Valencia in 2004 and started Ph.D. studies in Machine Learning in the Department of Information System and Computation at the same university. He also obtained a MSc in Corporative Networks and Systems Integration (2005) and he is currently completing a degree in Statistical Science and Technology at the University of Valencia.

Marenglen Biba is a third year Ph.D student at the Department of Computer Science, University of Bari, Italy. He received his Masters Degree in Computer Science (summa cum laude) from the same department in 2004. His main research area is Machine Learning with a particular interest in the integration of logical and statistical learning with applications in computational biology, social and biological networks analysis and document understanding.

José Blasco received a B.Sc. (1994) and Ph.D. degree in Computer Science from Polytechnic University of Valencia, UPV, (2001). He also received a M.Sc. in Computer Aided Design and Manufacturing (CAD/CAM) from UPV in 1995. He worked during two years at Industrial Business Machine (IBM) Spain as system analyst before he joined at the Public Research Institute, IVIA in 1996. Since then, he is the manager of the Computer Vision Lab at the Agricultural Engineering Centre of IVIA. His field of interest is mainly focused on *Computer Vision, Image Processing, Real time inspection and Machine vision*.

Dr. Mahil Carr currently teaches at the IDRBT at Hyderabad. Dr. Mahil Carr has a Bachelor's degree in Mathematics from the American College, Madurai Kamaraj University, Madurai, a Master of Computer Applications from St. Joseph's College, Bharathidasan University, Trichy and was awarded a doctoral degree in Information Systems from the City University of Hong Kong. His current research interests are in the areas of software engineering, information systems security and electronic/mobile commerce. Dr. Carr is on the editorial board of the International Journal of E-Services and Mobile Applications (IJESMA) and the International Journal of Information Systems and Social Change (IJISSC).

Manuel Castejón-Limas received his engineering degree from the Universidad de Oviedo in 1999 and his Ph.D. degree from the Universidad de La Rioja in 2004. From 2002 he teaches project management at the Universidad de León. His research is oriented towards the development of data analysis procedures that may aid project managers on their decision making processes.

Tsan-Ming Choi is an associate professor at the Hong Kong Polytechnic University. His current research interests mainly focus on supply chain management. He has published in journals such as Computers and Operations Research, Decision Support Systems, European Journal of Operational Research, IEEE Transactions (various), International Journal of Production Economics, Journal of Industrial and Management Optimization, Journal of the Operational Research Society, Omega: The International Journal of Management Science, etc. He is a member of IEEE and INFORMS.

Sanjoy Das received his Ph.D. in Electrical Engineering from Louisiana State University, in 1994. He received postdoctoral training at the University of California, Berkeley between 1994 and 1997, and worked for three years as a Senior Scientist at ITT Systems & Sciences, Colorado Springs. At present he is an Associate Professor in the Department of Electrical & Computer Engineering, at Kansas State

University, where he has been employed since 2001. Prof. Das has co-authored over 130 research papers, and has supervised several masters and doctoral students. His areas of interest are evolutionary algorithms, neural networks, multi-objective optimization, and artificial life.

Tomás de la Rosa, is an assistant lecturer at the University Carlos III de Madrid. He belongs to the Planning and Learning research group and his research topics are heuristic planning and Case-Based Reasoning.

Yi Ding received the B.S. degree in communication engineering from Xi'an University of Technology, China, and the M.S. degree in communication engineering from Xidian University, China, in 2002 and 2005 respectively. He is currently working toward the Ph.D. degree in the School of Electrical and Computer Engineering, Oklahoma State University, Stillwater, OK. His research interests include multimedia content analysis, pattern recognition, image processing, and computer vision.

Jie Du is a Ph.D. student in the Department of Information Systems at the University of Maryland, Baltimore County. She received her M.S. in Information Systems from Beijing Jiaotong University in 2004 and her B.A. in Information Management and Information Systems from Southwest Jiaotong University in 2001. Her research interests are intelligent financial investing.

Floriana Esposito, ECCAI Fellow, is since 1994 Full Professor of Computer Science at the University of Bari. Among her scientific interests there are similarity based learning, integration of numerical and symbolic methods in learning and classification, logical foundations of conceptual learning techniques, revision of logical theories by incremental learning, multistrategy learning, inductive logic programming. The major application fields are Document processing and Digital Libraries and, recently, Bioinformatics. She is author of more than 250 papers which published in international journals and Proceedings. She is in the pc of the most important scientific conferences on Machine Learning and Artificial Intelligence.

Guoliang Fan received his B.S. degree in Automation Engineering from Xi'an University of Technology, Xi'an, China, M.S. degree in Computer Engineering from Xidian University, Xi'an, China, and Ph.D. degree in Electrical Engineering from the University of Delaware, Newark, DE, USA, in 1993, 1996, and 2001, respectively. Since 2001, Dr. Fan has been with the School of Electrical and Computer Engineering, Oklahoma State University (OSU), Stillwater, OK, where he is currently an Associate Professor. Dr. Fan is a recipient of the National Science Foundation (NSF) CAREER award (2004). He received the Halliburton Excellent Young Teacher Award (2004), Halliburton Outstanding Young Faculty award (2006) and IEEE-OSU Outstanding Faculty Award (2008). His research interests are image processing, computer vision, and machine learning.

Mohammad Abdul Haque Farquad is holding Masters Degree in Information Systems from Osmania University and currently pursuing Ph. D in Computer Science from Department of Computer and Information Sciences, University of Hyderabad and Institute for Development and Research in Banking Technology (IDRBT), Hyderabad. His research interests include Machine Learning, Soft Computing, Artificial Neural Network and Data Mining. He is financially supported by IDRBT.

Stefano Ferilli was born in 1972. He got a PhD in Computer Science at the University of Bari, and is currently an Associate Professor at the Computer Science Department of the University of Bari. His research interests include Logic and Algebraic Foundations of Machine Learning, Inductive Logic Programming, Multistrategy Learning, Knowledge Representation, Digital Document Processing and Digital Libraries. He participated in various National and European (ESPRIT e IST) projects on these topics, and is a (co-)author of more than 100 papers published on journals, books and proceedings of national and international workshops/conferences.

Carlos Fernández was born in Madrid, Spain (1963). He received the Ph.D degree in Agricultural Engineering from the Politechnic University at Madrid, Spain, in 1993. He made a post doctorate stage at University of Californa (Animal Science Department), Davis during 1993 and 1994. He is Associate Professor at the Politechnic University of Valencia. His research is centered in data analysis, modelling and simulation in Animal Science. He specially worked in animal nutrition and production systems for small ruminant animals. He has worked on several industrial projects with private companies (in the areas natural aditives for animal nutrition) and with public funds (in the areas of nutrition feeding, sustentability and animal performance).

Susana Fernández Arregui, *i*s an assistant lecturer at the University Carlos III de Madrid. She received her PhD in learning search control for classical planning in 2006. She belongs to the Planning and Learning research group. Her research topics are learning search control for planning and the study of the role of emotions in AI.

Pedro Gabriel Ferreira has a degree in Systems and Informatics Engineer and a PhD in Artificial Intelligence from University of Minho in 2002 and 2007. He is now a Bioinformatics Pos-Doctoral Researcher at Center for Genomic Regulation, Barcelona, Spain. His research interests include Data Mining and Machine Learning and its applications to Computational Biology and Bioinformatics

Cèsar Ferri is an associate professor of computer science at the Department of Information Systems and Computation, Technical University of Valencia, Spain, where he has been working since 1999. He obtained his BSc at the Technical University of Valencia, and his MSc at the University of Pisa, Italy. His research interests include machine learning, cost-sensitive learning, relational data mining, and declarative programming. He has published several journal articles, books, book chapters and conference papers on these topics.

Aníbal R. Figueiras-Vidal received the Ph.D. degree from Universidad Politécnica de Barcelona in 1976. He is currently a Professor in Signal Theory and Communications at Universidad Carlos III de Madrid. His research interests include digital signal processing, digital communications, neural networks, and learning theory; and he has either authored or coauthored more than 300 journal and conference papers in these areas. Dr. Figueiras-Vidal received a Honoris Causa Doctorate from the Universidad de Vigo in 1999. He is the President of the Spain Royal Academy of Engineering.

Patrick Flandrin is currently with the Physics Department at Ecole Normale Supérieure de Lyon, where he works as a CNRS senior researcher. His research interests include mainly nonstationary signal processing at large (with emphasis on time-frequency and time-scale methods), scaling processes and

complex systems. He was awarded the Philip Morris Scientific Prize in Mathematics in 1991, the SPIE Wavelet Pioneer Award in 2001and the Michel Monpetit Prize from the French Academy of Sciences in 2001. He is a Fellow of the IEEE since 2002.

Todor D. Ganchev received the Diploma Engineer degree in Electrical Engineering from the Technical University of Varna, Varna, Bulgaria, in 1993 and the Ph.D. degree from the Department of Electrical and Computer Engineering, University of Patras, Patras, Greece, in 2005. From February 1994 to August 2000, he consequently held Engineering, Research, and Teaching Staff positions at the Technical University of Varna. Since September 2000, he has been a Research Fellow at the Wire Communications Laboratory, University of Patras, Greece. Currently, he holds a Senior Researcher position at the Wire Communications Laboratory. His research interests are in the areas of pattern recognition, signal processing, and applications.

Pedro J. García-Laencina received the MS degree in telecommunication engineering in 2004 from Universidad Politécnica de Cartagena, Spain. He is currently a researcher pursuing his Ph. D. degree at the same university. His research interests are machine learning, signal processing, statistical pattern recognition, and image processing. He is a student member of the IEEE.

Adam E. Gaweda received the M.Eng. degree in Electrical Engineering from Czestochowa University of Technology, Poland, and the Ph.D. degree in Computer Science and Engineering from University of Louisville, Louisville, KY, in 1997 and 2002, respectively. In 2002 he joined the Department of Medicine, Division of Nephrology, University of Louisville, where he currently holds the position of Assistant Professor. His research interests focus on application of computational intelligence and control methods to pharmacodynamic modeling and adaptive treatment planning.

Juan Gómez-Sanchis received a B.Sc. degree in Physics (2000) and a B.Sc. degree in Electronics Engineering from the University of Valencia (2003). He worked during one year at professor in the Department of Electronics Engineering at the Universitat de València in pattern recognition using neural networks. He joined at the Public Research Institute IVIA in 2004, developing is Ph.D. in hyperspectral computer vision systems applied to the agriculture.

Ana González-Marcos received her engineering and Ph.D. degrees from the Universidad de La Rioja in 2006. She taught project management at the Universidad de León from 2003 to 2007. In 2007 she moved to the Universidad de La Rioja, where she works as a Lecturer in the Department of Mechanical Engineering. Her research interests include the application of multivariate analysis and artificial intelligence techniques in order to improve the quality of industrial processes. Research projects usually concerned real processes, such as steel making and automotive industries.

Prof. Dr. Alexander Gorban obtained his PhD degree in differential equations and mathematical physics in 1980, and Dr. Sc. degree in biophysics in 1990. He holds now a chair of Applied Mathematics at the University of Leicester, UK, and he is the Chief Scientist at the Institute for Computational Modelling Russian Academy of Sciences (Krasnoyarsk, Russia). His scientific interest include interdisciplinary problem of model reduction, topological dynamics, physical and chemical kinetics, mathematical biology and data mining.

Juan F. Guerrero received the B.Sc. degree in physics and the Ph.D. degree in electronic engineering in 1985 and 1988, respectively, from the Universitat de Valencia, Spain.Since 1985, he has been with the Digital Signal Processing Group (GPDS),Department of Electronic Engineering, University of Valencia, where he is an Associate Professor. His research interests include biomedical digital signal processing and biosignal instrumentation.

José Hernández-Orallo, BSc, MSc (Computer Science, Technical University of Valencia, Spain), MSc (Computer Science, ENSEA, Paris), Ph.D. (Logic, University of Valencia). Since 1996, he has been with the Department of Information Systems and Computation, Technical University of Valencia, where he is currently an Associate Professor. His research interests centre on the areas of artificial intelligence, machine learning, data mining, data warehousing and software engineering, with several books, book chapters, journal and conference articles on these topics.

Paul Honeine received the Dipl.-Ing. degree in mechanical engineering in 2002 and the M.Sc. degree in industrial control in 2003, both from the Faculty of Engineering, the Lebanese University, Lebanon. In 2007, he received the Ph.D. degree in System Optimisation and Security from the University of Technology of Troyes, France, and was a Postdoctoral Research associate with the Systems Modeling and Dependability Laboratory, from 2007 to 2008. Since September 2008, he has been an assistant Professor at the University of Technology of Troyes, France. His research interests include nonstationary signal analysis, nonlinear adaptive filtering, machine learning, and wireless sensor networks.

Sergio Jiménez Celorrio, is an assistant lecturer at the University Carlos III de Madrid. He belongs to the Planning and Learning research group and his research topics are relational learning and planning under uncertainty.

Chin Kim On was born in Tawau, Sabah, Malaysia, in 1979. The author received his Master Degree in Software Engineering with Universiti Malaysia Sabah in 2005. The author's research interests included the evolutionary multi-objective optimization, evolutionary robotics, neural networks, and biometric security systems with the main focus on fingerprint and voice recognition. He is currently pursuing his PhD in the area of evolutionary robotics using multi-objective optimization for RF-localization and swarming behaviors with Universiti Malaysia Sabah. Currently, he has over 15 publications. Mr. Kim On is a student member of IEEE and IAENG societies.

Jorge Larrey-Ruiz received the M.S. degree in Telecommunications Engineering in 2000 from the Universidad Politécnica de Valencia, Spain, and the Ph.D. in the same field in 2008 from the Universidad Politécnica de Cartagena, Spain, where he is currently a researcher and Assistant Professor of Signal and Communications Theory. His technical interests include image registration and fusion, and digital filtering.

Dapeng Li received his B. Eng. from Xi'an University of Technology, China, and M. Eng. from Shanghai University, China, in 2001 and 2004 respectively. Between 2004 and 2005, he worked as a full-time research assistant in the Department of Electrical Engineering at Hong Kong Polytechnic University. Between 2005 and 2006, he worked as a power system engineer in the Hygrand Electronic Equipment Company, China. At present he is pursuing a Ph.D. in under the guidance of Prof. Das and

Prof. Pahwa at Kansas State University, in the applications of multi-objective evolutionary algorithms to power distribution systems.

Francisco J. Martínez-de-Pisón graduated in Industrial Engineering at the Universidad de La Rioja in 1999. In 2003 he completed a PhD degree at the same university in the area of industrial optimisation through data mining techniques. His main research interests are data mining; patter recognition; artificial intelligence and industrial optimisation. He has published several papers in journals and is author of several books and industrial patents. He has been researcher of several Spanish and European data mining Projects. Currently, he supervises several MSc and PhD students in the area of data mining.

Nicola Di Mauro got the Laurea degree in Computer Science at the University of Bari, Italy. In March 2005 he discussed a Ph.D. thesis in Computer Science at the University of Bari titled "First Order Incremental Theory Refinement" facing the problem of Incremental Learning in ILP. Since January 2005, he is an assistant professor at the Department of Computer Science, University of Bari. His research activities concern Relational Learning. He is author of about 60 papers published on international and national journals and conference proceedings. He took part to European and national projects.

Enrique Moltó received his B.Sc. degree (1987) and Ph.D. degree in Agricultural Engineering from the Polytechnic University of Valencia (1991). He also received a B.Sc. degree in Computer Science at Polytechnic University of Valencia (1991). Since 1987 he worked as engineer at Polytechnic University of Valencia, until he joined IVIA in 1994, where he is currently head of the Agricultural Engineering Centre. He has chaired the fields of interest "Machine Vision" and "Automation and Emerging Technologies" of the European Society of Agricultural Engineers (EurAgEng) (1994-2004) and has been founder and member of the governing board of the equivalent national society (SEA). His research is focused on *computer vision, real time inspection, electronic sensors and agricultural engineering*

Carlos Monserrat-Aranda is a Computer Engineer of the LabHuman research group of the Technical University of Valencia. He is a Computer Engineer and has obtained his Doctoral studies in 1999 obtaining the highest qualification. He is currently an associated professor at the Computer Science Department of the Technical University of Valencia. His research interests include real-time deformable models, virtual reality and simulation of physical behavior in virtual environments.

Juan Morales-Sánchez received the B.S. degree in 1992 from the Universidad de Alcalá, Spain, the M.S. degree in Telecommunications Engineering in 1996 from the Universidad Politécnica de Valencia, Spain, and the Ph.D. in the same field in 2005 from the Universidad Politécnica de Cartagena (UPCT), Spain. Since 1999, he has been involved in different research and development projects at UPCT, where he is currently Assistant Professor of Signal and Communications Theory. His technical interests include image processing and medical imaging.

Dr. Iván Olier completed his PhD at Technical University of Catalonia (UPC), Barcelona, Spain, in 2008. He is currently a postdoctoral researcher at Autonomous University of Barcelona (UAB), Spain. Research interests include machine learning, time series modeling, as well as their application in biomedicine.

Joaquín Ordieres-Meré is a full professor at Universidad Politécnica de Madrid, academically responsible for project management topics and with research interests close related to knowledge management and knowledge discovering from data. Usually his team implement and develop new algorithms in order to address in a better way problems under consideration. He has special knowledge and interest in knowledge manangement in industrial applications, including refinement of models or even, development of new models for processes like steel production (flat and section products), extrusion of rubber for automotive components as well as environmental applications from waste management plants.

Frank Padberg received the master's degree in mathematics from the University of Erlangen, Germany, and the PhD degree in computer science from Saarland University, Germany. He works on fundamental topics in software engineering, including software process optimization, software reliability, and lean software development. Before joining the university, he gave seminars in the industry on networking technology and operating systems. He has been supported by fellowships and research grants from the Deutsche Forschungsgemeinschaft DFG. Recently, he was ranked among the Top 50 International Scholars in Software Engineering. Currently, he holds a prestigious Heisenberg research fellowship awarded by the DFG.

B. K. Panigrahi has completed his B. Sc. Engg, ME and Ph.D in 1990, 1995 and 2004 respectively. He is involved in teaching since 1990 and at present works as Assistant Professor in the Department of Electrical Engineering, IIT, Delhi, India. He is a senior member of IEEE. Prof. Panigrahi has published nearly 75 papers in international journals and international conference proceedings of repute. His current research area includes development of soft computing and evolutionary computing techniques and their engineering applications. In particular his research focuses in the application of the above techniques to power system planning, operation and control.

S. S. Pattnaik is presently working as Professor and Head of Electronics and Communication Engineering and Educational Television Centre of the National Institute of Technical Teachers' Training and Research (NITTTR), Chandigarh, India. Prof. Pattnaik received his Ph.D from Sambalpur University, India, and postdoctoral training from the University of Utah, USA. He has nearly 20 years of teaching and research experience. During this period he has published more than 155 research papers. Prof. Pattnaik is senior member of IEEE, as well as several national organization. His areas of interest are soft computing and application to antenna, video, image and MIMO systems.

Eduard Plett received his Master's degree in Electrical Engineering from Kansas State University in 2003. At present, he is an Assistant Professor in the department of Electronic & Computer Engineering Technology at Kansas State University, Salina. He is also working on his PhD in Electrical Engineering. His areas of interest are control systems and artificial intelligence. He also worked as an electronic technician for 12 years and as an electrical engineer for 5 years. Most recently he has been working as a consultant for the Advanced Manufacturing Institute in Manhattan, KS, designing and building control systems for automated testing machines

Roy Rada is a professor in the Department of Information Systems at the University of Maryland, Baltimore County. He received his Ph.D. in computer science from University of Illinois at Champaign-Urbana in 1980. His research interest is evolutionary computation applied to finance.

María José Ramírez-Quintana received the BSc from the University of Valencia (Spain) and the Msc and PhD in Computer Science from the Technical University of Valencia (Spain). She is currently an associate professor at the Department of Information Systems and Computation, Technical University of Valencia. She has given several courses on software engineering, functional and logic programming, and multiparadigm programming. Her research interests include mutiparadigm programming, machine learning, data mining algorithms, model combination and evaluation, and learning from structured data, with more than 60 publications in these areas, including journal articles, books, book chapters and conference contributions.

Dr. Vadlamani Ravi is an Assistant Professor in IDRBT, Hyderabad since April 2005. He holds a Ph.D. in Soft Computing from Osmania University, Hyderabad & RWTH Aachen Germany. Earlier, he was a Faculty at NUS, Singapore for three years. He published 62 papers in refereed Journals / Conferences and invited book chapters. He edited *"Advances in Banking Technology and Management: Impacts of ICT and CRM"* published by IGI Global, USA. He is a referee for several international journals and on the Editorial board of IJIDS, IJDATS, IJISSS, IJSDS & IJITPM. He is listed in the Marquis Who's Who in the World in 2009.

Cédric Richard received the M.S. degree in 1994 and the Ph.D. degree in 1998 from Compiègne University of Technology, France, in electrical and computer engineering. Since 2003, he is a Professor at the Systems Modelling and Dependability Laboratory, Troyes University of Technology. His current research interests include statistical signal processing and machine learning. Dr. Richard is the author of over 100 papers. He is a Senior Member of the IEEE, and serves as an associate editor of the IEEE Transactions on SP since 2007. He is a member of the SPTM technical committee of the IEEE SP society since 2009.

María José Rupérez was born in Murcia, Spain in 1973. She received a B.Sc. Degree in Physics by the University of Valencia in Spain (2001). She is a research fellow in LabHuman group from 2005. She is working towards the M.Sc Degree in non-linear elasticity into the PhD program of Mechanics and Material Engineering of the Technical University of Valencia in Spain. Her main areas of research are Finite Elements Methods and Deformable Models, which have been mainly applied to the study of the shoe upper deformation in gait.

Albert Ali Salah worked as a research assistant in the Perceptual Intelligence Laboratory of Boğaziçi University in Istanbul, where he was part of the team working on machine learning, pattern recognition and human-computer interaction. After receiving his PhD in Computer Engineering, he joined the Signals and Images research group at the Center for Mathematics and Computer Science (CWI) in Amsterdam. With his work on face biometrics, he received the inaugural European Biometrics Research Award of the European Biometrics Forum (EBF) in 2006. His recent scientific assignments related to biometrics include program committee memberships for *European Workshop on Biometrics and Identity Management* (BIOID'08), biometrics track of *Int. Conf. of Pattern Recognition* (ICPR'08), and *Int. Conf. on Biometrics* (ICB'09).

José-Luis Sancho-Gómez received the Ph.D. degree in telecommunication engineering from Universidad Carlos III de Madrid in 1999. He is currently an Associate Professor of the Universidad

Politécnica de Cartagena. His research areas include digital signal processing, digital image processing, statistical pattern recognition and machine learning.

Azali Saudi was born in Sabah, Malaysia in 1974. The author received his Master in Artificial Intelligence from the University of Edinburgh at the Department of Artificial Intelligence in 2001, researching Mobile Robotics that relies upon behavior-based architectures. The author's main research interest is in the area of mobile robotics, robot vision, and software engineering. Since 2001, he has been a Lecturer in computer science at the School of Engineering and Information Technology, Universiti Malaysia Sabah. Currently, he has over 30 publications in the areas of artificial intelligence, particularly robotics-related work and software development.

Jude Shavlik is a Professor of Computer Sciences and of Biostatistics and Medical Informatics at the University of Wisconsin, and is a Fellow of the Association for the Advancement of Artificial Intelligence. He served for three years as editor-in-chief of the AI Magazine, serves on the editorial board of about a dozen journals, and has served as chair or co-chair of several conferences including ICMB, ICML, KCAP, ICDM, and ILP. His current research interests include machine learning and computational biology, with an emphasis on using rich sources of training information, such as human-provided advice.

Marina Sokolova, Ph.D.: Marina Sokolova's current interests include applications of Machine Learning to text analysis, text anonymization and privacy protection in free-form unstructured texts, and text data mining of medical texts and health care records. She has worked in Machine Learning (data-based algorithms, statistical learning theory, measures for performance evaluation, learning from multi-modal data) and in application of Machine Learning to NLP (opinion mining, analysis of human communication, electronic negotiations).

Zhan-Li Sun received his PhD degree from the University of Science & Technology of China in 2005. He worked as a Research Associate at The Hong Kong Polytechnic University in 2006–2007 and a Research Fellow at Nanyang Technological University in 2007–2008. He is currently with the National University of Singapore. His research interests include machine learning, signal and image processing.

Stan Szpakowicz, Ph.D.: Stan Szpakowicz's current interests include text summarization (including summarization of literary prose), automatic and semi-automatic development of lexical resources (in particular Roget's Thesaurus and Polish WordNet), sentiment analysis and applications of Machine Learning in NLP. He has worked in NLP (for nearly 40 years) on grammars, parsers, user interfaces, semantic relations and semantic relatedness, language of negotiations, text summarization and emotion analysis.

Jason Teo received his Doctor in Information Technology from the University of New South Wales @ ADFA in 2003, researching Pareto artificial evolution of virtual legged organisms. His current research interest is in the application of evolutionary multi-objective optimization to robotics, games, and co-evolution. He is currently Deputy Dean and Senior Lecturer at the School of Engineering and Information Technology, Universiti Malaysia Sabah. He has over 100 publications in the areas of evolutionary

computing, artificial life, evolutionary robotics and swarm intelligence. He has been a professional member of the ACM since 2005 and IEEE since 2006.

Lisa Torrey is a 2009 doctoral candidate in Computer Science at the University of Wisconsin, working under the supervision of Professor Jude Shavlik in the area of machine learning. Her dissertation research is on transfer learning, and in particular, on the transfer of relational knowledge in the context of reinforcement learning. In fall 2009, she will become an Assistant Professor in the department of Mathematics, Computer Science, and Statistics at St. Lawrence University.

Dr. Alfredo Vellido received his degree in Physics from the Department of Electronics and Automatic Control of the University of the Basque Country (Spain) in 1996. He completed his PhD at Liverpool John Moores University (UK) in 2000. After a few years of experience in the private sector, he briefly joined Liverpool John Moores University again as research officer in a project in the field of computational neurosciences. He is a Senior Researcher at Technical University of Catalonia. Research interests include, but are not limited to, pattern recognition, machine learning and data mining, as well as their application in medicine, market analysis, ecology, and e-learning, on which subjects he has published widely.

Rafael Verdú-Monedero received the MS degree in telecommunications engineering in 2000 from the Universidad Politécnica de Valencia (UPV), and the PhD in the same field in 2005 from the Universidad Politécnica de Cartagena (UPCT). He is currently a researcher and assistant teacher in signal and communications theory at UPCT. His technical interests are modeling and inverse problems in image analysis. He is an associate member of the IEEE since 1999.

K. Vinaykumar obtained Bachelor's degree of Technology in Computer Science from Jawaharlal Nehru Technological University, Hyderabad. He holds M. Tech (Information Technology) with specialization Banking Technology & Information Security from Institute for Development and Research in Banking Technology and University of Hyderabad, Hyderabad. Presently he is working as Software Engineer in ROCSYS Technologies, Hyderabad. His research interests include Software Engineering, Neural Networks, Advanced Algorithms and Data Structures.

Donald Wunsch, PhD, is the M.K. Finley Missouri Distinguished Professor at Missouri University of Science & Technology. Previously, he was with Texas Tech, Boeing, Rockwell International, and International Laser Systems. Dr. Wunsch has over 275 publications, has attracted over $5.9M in research funding, and produced thirteen PhD graduates in three disciplines. His key contributions are in adaptive resonance and reinforcement learning hardware and applications, neurofuzzy regression, improved Traveling Salesman Problem heuristics, clustering, and bioinformatics. He is an IEEE Fellow, 2005 International Neural Networks Society (INNS) President, and Senior Fellow of the INNS.

Lei Xu, IEEE Fellow, Fellow of International Association for Pattern Recognition, and member of European Academy of Sciences. Received PhD from Tsinghua Univ in 1997, he worked at several universities, including Peking Univ, Harvard and MIT. He joined Chinese Univ Hong Kong in 1993 and became chair professor since 2002. He served as associate editor for several journals, governor of international neural network society(INNS), past president of Asian-Pacific Neural Networks

Assembly(APNNA), and Fellow committee member of IEEE Computational Intelligence Society. He has received 1993 Chinese National Nature Science Award, 1995 INNS Leadership Award and 2006 APNNA Outstanding Achievement Award.

Rui Xu, PhD, is a research associate in the Department of Electrical and Computer Engineering at Missouri University of Science & Technology. His main research interests include computational intelligence, machine learning, data mining, neural networks, pattern classification, clustering, and bioinformatics. Dr. Xu is a member of the IEEE, the IEEE Computational Intelligence Society (CIS), and Sigma Xi.

Yong Yu is currently a postdoctoral research associate at the Hong Kong Polytechnic University. He received his PhD from the Hong Kong Polytechnic University. His current research interest is in artificial intelligence, forecasting, decision support systems.

Dr. Andrei Zinovyev obtained his university formation in theoretical physics (cosmology). In 2001 he obtained his PhD degree in Computer Science at the Institute for Computational Modelling of Russian Academy of Sciences (Krasnoyarsk, Russia). After defending his PhD, he moved to France, at Institut des Hautes Etudes Scientifiques in Bures-sur-Yvette to work as a post-doc during 3 years in the mathematical biology group of Professor Misha Gromov. Since January 2005, he is the head of the computational systems biology of cancer team at Institut Curie (INSERM Unit U900 "Bioinformatics and Computational Systems Biology of Cancer") in Paris. His main area of scientific expertise is bioinformatics, systems biology of cancer, dimension reduction in high-throughput data analysis and model reduction in the dynamical models