About the Contributors

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**Nabil R. Adam** is a Professor at Rutgers University and founding Director of the Rutgers CIMIC Research Center. He is currently on an assignment at the Science & Technology Directorate, US Department of Homeland Security. He has directed numerous R&D projects with funding over $18 million from various federal and state agencies including NSF, NSA, NOAA, U.S. EPA, DLA, NLM, NASA, and NJMC. He has published numerous technical papers covering such topics as information management, information security and privacy, data mining, Web services, and modeling & simulation. His papers appeared in referred journals and conference proceedings including, IEEE Transactions on Software Engineering, IEEE Transactions on Knowledge and Data Engineering, ACM Computing Surveys, Communications of the ACM. He co-authored/co-edited ten books. Dr. Adam is the co-founder and the Executive-Editor-in-Chief of the International Journal on Digital Libraries and serves on the editorial board of a number of journals.

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About the Contributors

Ajat Shatru Arora was born in Utrakhand, UP, India on April Sept 27, 1969. He received the graduation degree (1990) in Electrical Engineering, post graduation degree (1992) in PAED from University of Roorkee, UP, India and doctorate (2002) in Biomedical Engineering from Indian Institute of Roorkee, UP, India. He has teaching experience of 17 years. He is currently serving Principal of DAV Institute of Engineering & Technology, Jalandhar, Punjab, India. His research interests are in the field of Biomedical Engineering with an emphasis on bio signal analysis, artificial neural networks, support vector machines, statistical analysis and microprocessor based system development. He has published 50 National/ International Journal and Conference papers in these areas.

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Helmut Bez, received a first class honours degree in Mathematics from the University of Wales in 1972, and M.Sc. and D.Phil. degrees from Oxford University in 1973 and 1976 respectively. He joined Rolls Royce Aero Engines in 1976 and in 1980 was appointed to the academic staff of the Department of Computer Science at Loughborough University, where he now holds the title of Reader in Geometric Computation. His doctoral thesis was on applications of group theory to classical and quantum mechanics. His current research interests include: the determination and application of the invariant properties of path and surface functions, rational parametrisation, image processing and parallel computation. He is the author of over 40 journal papers in these topics.

Rafae Bhatti is an information security professional at the Oracle Corporation, Redwood Shores, California. Rafae received his PhD from the Center of Excellence in Information Security at Purdue University. Rafae has experience in Web-based information management systems, in evaluating and analyzing large scale data warehousing workloads, in the design and development of secure database systems and has worked with National Institute of Standards and Technology (NIST) on the development of applications based on the Role Based Access Control (RBAC) standard. Recently, Rafae has published a book on “A Policy Engineering Framework for Federated Access Management”.

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Soon Ae Chun is an assistant professor of Information Systems in CUNY/CSI. Her research and development interests include Dynamic Workflow Composition and Management, Information Security and Privacy, Policy-based Web Service Composition, Ontologies and the Semantic Web, and Geospatial information and satellite image Database systems. Her research projects focus on application areas of e-government, homeland security, environmental and medical informatics, addressing the issues of the process design and personalization, security and privacy, information sharing, interoperability and mobile and geospatial data integration. She received her Ph.D. and M.B.A. in Information Technology from Rutgers University, and M.S. in Computer Science from SUNY Buffalo.

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Monique Frize has been a Professor for 20 years, first at University of New Brunswick (1989-1997), then at Carleton University and the University of Ottawa (1997-2010). She currently is Distinguished Professor at Carleton and Professor Emerita at University of Ottawa. Dr. Frize was a biomedical engineer for 18 years in hospitals (1971-1989). She published over 200 papers in journals and conference proceedings on artificial intelligence in medicine, infrared imaging and ethics. She is Senior Member of IEEE, Fellow of the Canadian Academy of Engineering (1992) and of Engineers Canada (2010), Officer of the Order of Canada (1993) and recipient of the 2010 Gold Medal from Professional Engineers Ontario and the Ontario Society of Professional Engineers. She received five honorary doctorates in Canadian universities since 1992. Her book: The Bold and the Brave: A history of women in science and engineering was released by University of Ottawa Press in November 2009.

Mariacristina Gagliardi was born in Lamezia Terme in 1983 and graduated in Chemical Engineering in 2006 at the University of Pisa. In 2010 got the Ph.D. degree of Chemical and Materials Engineering at the University of Pisa. From 2008 she delivered lessons on Biomaterials, Bionanotechnologies and Biomedical implantable devices at the Faculty of Engineering of the University of Pisa. From 2009 she is professor assistant of Chemistry. At the present she is a post-doctoral researcher at the Department of Chemical Engineering, Industrial Chemistry and Materials Science of the University of Pisa. Her research activity concerns: synthesis of novel biocompatible polymers and their physicochemical and mechanical characterisation; preparation of polymeric drug-delivery systems; preparation of polymeric scaffolds for
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**James Geller** received an Electrical Engineering Diploma from the Technical University, Vienna, Austria, in 1979, and the MS Degree (1984) and Ph.D. degree (1988) in Computer Science from the State University of New York at Buffalo. Dr. Geller joined the Computer Science Department of the New Jersey Institute of Technology (NJIT) in 1988. He was granted tenure and promoted to associate professor in 1993. Subsequently he was promoted to full professor in 2000. Dr. Geller has authored and co-authored over fifty journal papers and over fifty conference papers. These papers are in a number of areas, including Knowledge Representation, Parallel Reasoning, Semantic Modeling in Object-Oriented Databases, Web Mining, Medical Informatics, Medical Vocabularies, and Auditing of Ontologies and Medical Terminologies.

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Vijender Kumar Jain was born in Sonepat, Haryana, India on Sept 27, 1955. He received the graduation (1977), post graduation (1979) and doctorate degrees (1995) in Electrical Engineering from Kurukshetra University, Haryana. He has teaching experience of 31 years. His area of interest is Biomedical Image and Signal Processing, Reliability Engineering, Control and Energy Systems. He is currently working as Professor and Head of Electrical and Instrumentation Engineering Department at Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, Punjab, India. His research interests are in the field of Biomedical Image and Signal Processing, Reliability Engineering, Control and Energy Systems. He has published 78 National/ International Journal and Conference papers in these areas.
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Ashish Joshi is a Research Assistant Professor of Department of Information Systems and a Research Director of Consortium for Information Technology and Health Outcomes Research (CITHOR) at UMBC. Dr. Joshi is a trained physician and obtained his Masters in Public Health (majors in Epidemiology and Biostatistics) from Boston University School of Public Health and a certificate in Public Health Informatics from University of Maryland, College Park. Dr. Joshi’s research interests includes public health informatics, designing and evaluating tele-health systems for chronic disease management, computer mediated health education and analyses of large clinical, administrative health care databases.

Gurmanik Kaur was received the Diploma (2002) in Electronics and Communication Engineering from Government Polytechnic for Girls, Patiala, Punjab, India, the graduation degree (2005) in Electronics and Instrumentation Engineering from Adesh Institute of Engineering and Technology, Faridkot, Punjab, India, the post graduation degree (2007) with Silver Medal in Instrumentation and Control Engineering from Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, Punjab, INDIA. During her post graduation degree, she has worked on a project funded by Ministry of Human Resource Development (MHRD), India. She is currently doing regular Ph.D. with scholarship in Electrical and Instrumentation Engineering Department from Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur, Punjab, India. Her research interest is in the field of Biomedical Engineering with an emphasis on bio signal analysis, artificial neural networks, support vector machines, statistical analysis. She has published 13 National/ International Journal and Conference papers in these areas.

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**Guixian Xu** is a lecturer at College of Information Engineering in Minzu University of China since 2004. She is currently pursuing her Ph.D. degree at College of Computer Science in Beijing Institute of Technology. Her research fields include machine learning and artificial intelligence. As a visiting scholar, she worked and studied at Department of Biostatistics, Bioinformatics, and Biomathematics of Georgetown University from March 2008 to March 2009. She cooperated with Dr. Hongfang Liu and conducted research on biological text mining. Her research topics focused on imbalanced text classification as well as semi-supervised learning of text classification on protein-protein interaction documents during the visiting time.

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