About the Contributors

**Joseph Tan** is the Wayne C. Fox Chair in eBusiness Innovation and Professor of eHealth Informatics at McMaster University. Professor Tan specializes in the innovative design, implementation and diffusion of advancing e-technology to improve health services delivery system efficiencies and effectiveness. Serving as Editor-in-Chief of the International Journal of Health Information Systems & Informatics, IGI Global (www.igi-global.com), Professor Tan’s research interests cut across multiple disciplines, with emphasis on the application of strategic e-business and e-health models to improve health systems operational efficiencies, individual or group decision effectiveness, and community health behaviors. He teaches health IT/IS project management and special topics in eHealth. His current research focuses on assessing the impact of decision aids and e-learning mechanisms for promoting healthy lifestyles and healthy aging behaviors for chronically ill individuals, groups and populations.

* * *

**Neda Aliabadi** is a Master of Art student of Information Technology Management at Allameh Tabataba’i University in Tehran, Iran. She received her BSc in Government Management from University of Tehran, Iran.

**J. Anitha** received her Bachelor degree in Electronics and Communication Engineering from Bharathiar University, India in 2002 and her Master degree in Applied Electronics from Anna University, India in 2004. Currently, she is working as Assistant Professor in the Department of ECE of Karunya University, India. Her research interests include neural networks, retinal image processing and optimization algorithms.

**Mashhour Bani Amer** received the B.Sc and M.Sc in Medical Electronics from Wroclaw University of Technology, and the Ph.D. degree in Biomedical Engineering from Silesian University of Technology, Gliwice, Poland, 1993. He is an Associate Professor at the Biomedical Engineering Department in Jordan University of Science and Technology. His research interests include design of intelligent medical systems, mobile phone-based medical systems, fuzzy and neuro-fuzzy-based systems, intelligent medical sensors, intelligent therapeutic systems and remote monitoring of physiological signals. He has two granted patents and published more than 30 research papers in international journals and conference proceedings.
Saugat Bhattacharyya is a graduate in Biomedical Engineering from Siliguri Institute of Technology. He is currently pursuing his Masters degree from Jadavpur University, India. He is actively involved in the research activities under Ankur Ganguly in Heart Rate Variability.

Ayo K. Charles holds a B.Sc., M.Sc. and Ph.D. in Computer Science. His research interests include mobile computing, Internet programming, e-business and government, and object oriented design and development. He is a member of the Nigerian Computer Society (NCS), and Computer Professional Registration Council of Nigeria (CPN). He is currently an Associate Professor of Computer Science in Covenant University, Ota, Ogun State, Nigeria, Africa.

Uwadia O. Charles holds a B.Sc., M.Sc. and Ph.D. in Computer Science. His research interests include Software Engineering. He is the present President of the Nigerian Computer Society (NCS), and Computer Professional Registration Council of Nigeria (CPN). He is a Professor of Computer Science in the University of Lagos, Nigeria, Africa.

Somsirsa Chatterjee is a graduate engineer in Biomedical Engineering from Siliguri Institute of Technology. He is actively involved in the research activities with Ankur Ganguly in Heart Rate Variability.

Charles Chen is a doctoral candidate in the Graduate Institute of Management at National Kaohsiung First University of Science and Technology in Taiwan. He is also a Senior Lecturer at the Department of Information Management, Fooyin University in Taiwan. He received his MS degree in computer science from Bradley University in USA, and BS degree in Mathematics from National Tsing-Hua University in Taiwan. He has worked in IT industry fields over 15 years in USA, Canada and Taiwan. His research interests include ERP system, Healthcare system, Information system Innovation, RFID, Web Service, Semantic Web, and Ontology. Part of his works has been published at national and international journals, has been presented at the PACIS, e-Technology, and other international conferences.

Shih-Wei Chou is a professor in the department of MIS (Management of Information Systems) at National Kaohsiung First University of Science and Technology in Taiwan. He received his doctorate in Computer Science (CS) from Illinois Institute of Technology, and he holds a master degree in CS from Mississippi State University. Prior to getting his doctorate, he spent two years working in a tele-communication industry. His research interests include knowledge management, IS development and design, ERP systems, e-learning. His work has appeared in the Journal of Information Science, Journal of Computer-aided Learning, and Expert Systems with Applications, and has been presented at the PACIS, HICSS, and other international conferences.

Steven P. Friesen has been studying and researching the relationship between environmental design and healthcare for the past 10 years. He holds a B.Sc. in psychology and is completing graduate work at the Faculty of Environmental Design at the University of Calgary. Since 2003 he has held a Research Associate position with Alberta Health Services and worked on a variety of health service research and environmental design evaluation projects.
Ankur Ganguly is the Head of the Department, Department of Biomedical Engineering in Siliguri Institute of Technology, Siliguri, W.B, India. He is actively involved in research activities on Heart Rate Variability for the past three years.

Janet G. Gilmour is an Associate Clinical Professor of Medicine at the University of Calgary. She received her MD at the University of Toronto, and completed specialty training in Internal Medicine at the University of Toronto. As a clinician in an academic centre her interests include medical education, quality of care and patient outcomes. She works internationally as a clinical mentor with expertise in the care and treatment of persons with HIV/AIDS.

B. Gopinath received his B.E. degree in Electrical and Electronics Engineering from K.S.Rangasamy college of Technology, Tiruchengode, Tamilnadu, India in 1999 and M.E. degree in Applied Electronics form Dr. M.G.R. Engineering College, Chennai, Tamilnadu, India under Madras University in 2001. He is currently assistant professor at Electronics and Communication Engineering department of SNS College of Technology, Coimbatore, Tamilnadu, India and pursuing Ph.D. degree in Anna University Coimbatore, Tamilnadu, India. His main research interests include biomedical image processing, analysis and pattern recognition. He is a life member of ISTE.

B.R. Gupta received B.Sc. (Engg.) (Hons) in Electrical Engineering from Punjab Engineering College, Chandigarh in 1961, M.Sc. (Engg.) with distinction from the same college in 1967 and Ph.D. degree from Punjab University in 1979. He is a retired Dean/Professor of Electrical Engineering from Punjab Engineering College, Chandigarh and he was with the Electrical and Electronics Engineering department of K.S.Rangasamy college of Technology, Tiruchengode, Tamilnadu, India. Currently he is servicing as research supervisor under Anna University Coimbatore. He has over 40 years experience in teaching, research, consultancy and educational administration. He has been the Principal Investigator of two sponsored research projects during the period 1973-86. He has authored over 105 research papers and 19 books. He has received two medals for distinction in Engineering and Technology from Central Board of Irrigation and Power and two research awards from Institution of Engineers (India). Dr. B.R. Gupta is a Senior Member, IEEE (USA) and Member, Institution of Engineers (India).

Dennis C. Guster is a Professor of Information Systems and Director of the Business Computing Research Laboratory at St. Cloud State University, Minnesota, U.S. His research interests include network design, network performance analysis and computer network security. Dennis has over 25 years of teaching experience in higher education and has served as a consultant and provided industry training to organizations such as Compaq, NASA, DISA, USAF, Motorola, and ATT. Undertaking various sponsored research projects, Dennis has published his works in computer networking/security journals.

Payam Hanafizadeh is an Assistant Professor of Industrial Management at Allameh Tabataba’i University in Tehran, Iran and a member of the Design Optimization under Uncertainty Group at the University of Waterloo, Canada. He received his MSc and PhD in Industrial Engineering from Tehran Polytechnic University and pursues his research in Information Systems and Decision-making under Uncertainty. He has published in such journals as the Information Society, Journal of Global Information Management, Telecommunications Policy, Mathematical and Computer Modeling, Expert Systems with Applications, International Journal of Information Management, among others. He has been serving on the Editorial Review Board for JITR, IJITSA, IJEIS, JECO, IJDSST.
**About the Contributors**

**D. Jude Hemanth** received his Bachelor degree in Electronics and Communication Engineering from Bharathiar University, India in 2002 and his Master degree in Communication Systems from Anna University, India in 2006. Currently, he is working as Assistant Professor in the Department of ECE of Karunya University, India. His research interests include brain image analysis, computer vision and artificial intelligence techniques. He is a life member of ISTE.

**A. Kandaswamy** is Professor and Head of Biomedical Engineering at PSG College of Technology, Coimbatore. He has a bachelor’s degree in Electrical Engineering from PSG College of Technology, masters degree from Madras University and PhD from Bharathiar University. He has 38 years of teaching experience and has published more than 80 papers in national and international journals. His fields of interest are Signal processing, Image processing in Medicine and Wireless Communication.

**R. Kalpana** completed M.S.(By Research) in Anna University, Chennai. She has around 18 years of professional experience. She has published five papers in national and international journals/conference. Her main area of interest is to analyse brain fiber tracts on ageing under normal and pathological conditions. She is currently pursuing doctorate programme in Anna University Chennai.

**P. Rajesh Kumar** graduated in Electronics Engineering from CBIT Osmania University and post graduated in Control System from A.U, Visakhapatnam and he obtain his Ph.D from ECE dept., Andhra University, Visakhapatnam. His research interested areas include Image processing, Radar signal processing and measuring and processing of Bio-electric Signals. He is currently Associate Professor in ECE dept. A.U, Visakhapatnam.

**Jane B. Lemaire** is a Clinical Professor of Medicine and Vice Chair of Physician Wellness and Vitality in the Department of Medicine at the University of Calgary. Her research focuses on identifying the determinants of wellness for physicians and other health care providers while translating the knowledge gained from this research into effective wellness programs and establishing strong collaborative partnerships with health care leaders in order to realize these goals.

**Olivia Lee** is an Assistant Professor Marketing at St. Cloud State University, Minnesota, U.S. She has worked as an operation manager at two university hospitals, and as a senior e-business market analyst in a business-to-business company prior to her academic career. Her research focuses on technology practices in business environments, healthcare and service organizations, and business resilience strategies. She has published her work in Psychology and Marketing, Healthcare Marketing Quarterly, International Journal of Organization Analysis, Journal of Information Technology Management and Review of Business Research.

**V. Mahesh** is an Assistant Professor in the Department of Information Technology at PSG College of Technology, Coimbatore. He has a bachelor’s degree in Electronics and Communication Engineering & masters degree in Applied Electronics from PSG College of Technology, Coimbatore. He is currently pursuing his PhD in the area of Biomedical Engineering. He has 18 years of Industrial and 7 years of teaching experience. His fields of interest are Biomedical Engineering, Microprocessors and Microcontrollers.
S. Muttan completed his master’s programme in CEG, Anna University, Chennai and also obtained doctorate from the same university in the year 2001. He has 24 years of professional experience and he is attached to various universities as a member of academic council. He has published 54 papers and around nine research scholars are working under him. He is interested in Bio-informatics and Medical image processing.

Sridhar Nerur is an associate professor of Information Systems at the University of Texas at Arlington. He holds an Engineering degree in Electronics from Bangalore University, a PGDM (MBA) from the Indian Institute of Management, Bangalore, India, and a Ph.D. in Business Administration from the University of Texas at Arlington. His publications include articles in leading journals such as MIS Quarterly, the Strategic Management Journal, Communications of the ACM, Communications of the AIS, the DATA BASE for Advances in Information Systems, European Journal of Information Systems, and Information Systems Management. He served as an Associate Editor of the European Journal of Information Systems. His research and teaching interests are in the areas of software design, adoption of software development methodologies, cognitive aspects of programming, dynamic IT capabilities, and agile software development.

Oladipupo O. Olufunke holds a B.Sc., M.Sc. in Computer Science and she is currently a Ph.D. student in Covenant University. Her current research interests include data mining, fuzzy logic and expert system. She is a member of the Nigerian Computer Society (NCS), and Computer Professional Registration Council of Nigeria (CPN).

Indrajit Pan is a Lecturer of Information Technology. He is presently associated with RCC Institute of Information Technology, Kolkata. His current research interest includes System Biology and Intelligent Systems. He has several publications in the field of System Biology, Disability Management and Grid Computing Concepts.

Neda Rastkhiz Paydar is a Master of Art student of Information Technology Management at Allameh Tabataba’i University in Tehran, Iran. She received her BSc in Industrial Engineering from Iran University of Science and Technology. She has published in International Conference on Computer and Automation Engineering (ICCAE) and 2nd International Conference of Iranian Operations Research Society.

Wullianallur Raghupathi is professor of information systems in the graduate School of Business, Fordham University, New York. Prior to that, he was professor of information systems at California State University, Chico, California. He is co-editor for North America of the International Journal of Health Information Systems & Informatics. He has also guest edited (with Dr. Joseph Tan) a special issue of Topics in Health Information Management (1999) and guest edited a special section on healthcare information systems for Communications of the ACM (1997). He was the founding editor of the International Journal of Computational Intelligence and Organizations. He also served as an Ad Hoc Editorial Review Board Member, Journal of Systems Management of the Association for Systems Management. Prof. Raghupathi has published over 90 papers in referred journals, conference proceedings, abstracts in international conferences, book chapters, editorials and reviews, including several in the health care IT field.
**About the Contributors**

**V. Rajesh** graduated in Electronics Engineering from The Institution of Engineers (India) and post graduated in Instrumentation from SRTMU, NANDED and currently research scholar in ECE dept Andhra University and research interests includes measuring and processing of Bio-Electric Signals, Virtual Instrumentation and Image processing. In 1998 he was made as Assistant Professor in dept. of EIE and in 2004 Associate Professor in dept. of EIE, SIR C R Reddy College of Engineering, Eluru, A.P, India.

**B.Sathish** is a student of Department of Bio-Medical Engineering, PSG College of Technology, Coimbatore, India. His areas of interest are Biomedical Instrumentation and Robotics.

**D.Selvathi** received her Bachelor degree in Electronics and Communication Engineering from Madurai Kamaraj University, India in 1988 and her Master degree in Electronics and Control from Birla Institute of Technology, Pilani, India in 1994. She obtained her Doctoral degree from Manonmaniam University, India in the area of medical image processing in the year 2008. Currently, she is working as Professor in the Department of ECE of Mepco Schlenk Engg. College, India. Her areas of interests include soft computing and image processing.

**S.Thamarai Selvi** received her B.E. degree in Mechanical Engineering and M.E. degree in Computer Science and Engg. Engineering and a Ph.D degree in Computer Science and Engineering, India. Presently she is working as Professor and Head. Presently she is working as Professor and Head, Department of Information Technology, MIT campus, Anna University, India. She has twenty five years of teaching and research experience. Her research interests are Image Processing, Neural Networks and Grid Computing. She is undertaking research projects from various funding agencies like DIT, DRDL, CDAC and DRDO. She had more than 80 publications to her credit.

**C.Vimal** is a student of Department of Bio-Medical Engineering, PSG College of Technology, Coimbatore, India. His areas of interest are Biomedical signal processing and Medical imaging.

**Jean E. Wallace** is a Professor of Sociology and an Adjunct Professor in the Departments of Medicine and Psychology at the University of Calgary. She has studied professionals’ work attitudes, experiences and organizational settings for over 20 years, with a recent shift in focus from the legal profession to the medical profession and health care providers. Her current research interests include wellness, work-life balance, professionalism, job stress and coping strategies and how factors such as parenthood, gender and generation are related to these topics.

**Deborah E. White** is an Associate professor and the Associate Dean of Research in the Faculty of Nursing at the University of Calgary. She has been involved in nursing education for more than 20 years. Her program of research has focused on factors that influence patient safety and quality of care where she has explored the interrelationship between the structural characteristics of care, the care processes, the context in which care occurs and their relationship to provider, patient and system outcomes.