

About the Contributors

Dr. A B M Shawkat Ali has been involved over the past 12 years with research and teaching in Australia and overseas universities at undergraduate and postgraduate levels. He holds a PhD in Information Technology from Monash University, Australia on Statistical Learning Theory: Support Vector Machine. He is a author of a Data Mining text book published by Thomson and have published over 55 book chapters, journals and conferences paper in the area of Data Mining, Bioinformatics, Telecommunications and Sensor Networking.

Dr. Yang Xiang is currently with School of Management and Information Systems, Central Queensland University, Australia. His research interests include network security and distributed systems. In particular, he is currently working in a research group developing active defense systems against large-scale network attacks and new Internet security countermeasures. He has published 80 journal and conference papers in network security, such as IEEE Transactions on Parallel and Distributed Systems. He has served as Program/General Chair for the 11th IEEE International Conference on High Performance Computing and Communications (HPCC 2009), the 3rd International Conference on Network and System Security (NSS 2009), the 6th IFIP International Conference on Network and Parallel Computing (NPC 2009) and the 14th IEEE International Conference on Parallel and Distributed Systems (ICPADS 2008). He has been PC member for many international conferences such as IEEE ICC, IEEE GLOBECOM and IEEE ICPADS. He has served as guest editor for ACM Transactions on Autonomous and Adaptive Systems, Computer Communications, Journal of Network and Computer Applications, and Future Generation Computer Systems. He is on the editorial board of Journal of Network and Computer Applications.

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Dr. Ameer Ali has born in Dhaka, Bangladesh in 1977. He completed his B. Sc. in Computer Science and Engineering in 2001 from Bangladesh University of Engineering and Technology, Dhaka and PhD in IT in 2006 from Monash University, Australia. Currently, he is working as an Assistant Professor in the Department of Electronics and Communication Engineering, East West University, Dhaka, Bangladesh. He has more than 20 published articles in both reputed international journals and conferences. His research interests are image processing, segmentation, fuzzy clustering, telemedicine, vendor selection using fuzzy techniques, and networking.

Cristian Bogdan is a researcher at the Royal Institute of Technology, Stockholm, Sweden. He approached the topic of Spread of Activation from the field of Computer Supported Collaborative Work,

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where he became interested in large semantic networks of interrelated objects. Cristian is also interested in a number of related fields such as end-user programming and interface modeling, and also drives two open source software projects developing applications in these fields. He is a computer engineer by training and vocation, and received his PhD in 2003 with a thesis on IT Design for Amateur Communities, written in a multidisciplinary, socio-technical tradition.

Dr. Dmitri Botvich is a principal investigator at Telecommunications Software & Systems Group of Waterford Institute of Technology, Ireland. His research interests include mathematical modeling, mathematical and computational algorithms, bio-inspired methods, network resource management, queuing theory, system modeling, optimization methods.

Sunil Choenni (1964) holds a PhD in database technology from the University of Twente and a MSc in theoretical computer science from Delft University of Technology. Currently, he is heading the department of Statistical Information Management and Policy Analysis of the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice. His research interests include data mining, databases, information retrieval, and human centered design. He published several papers in these fields.

Prof. Dr. Matjaz Gams (<http://dis.ijs.si/Mezi/>) is professor of computer science and informatics at the Ljubljana University and senior researcher at the Jozef Stefan Institute, Ljubljana, Slovenia. He teaches several courses in computer sciences at graduate and postgraduate level at Faculties of Computer science and informatics, Economics, etc. His research interests include artificial intelligence, intelligent systems, intelligent agents, machine learning, cognitive sciences, and information society. His publication list includes 500 items, 70 of them in scientific journals. He is an executive contact editor of the Informatica journal and editor of several international journals. He is heading the Department of intelligent systems, was member of the governmental board of the JS Institute, president of several societies, cofounder of the Engineering Academy of Slovenia and the Artificial Intelligence Society and Cognitive sciences in Slovenia; currently president of ACM Slovenia. He headed several major applications in Slovenia including the major national employment agent on the Internet, the expert system controlling quality of practically all national steel production, and the Slovenian text-to-speech system donated to several thousand users.

Raymond Greenlaw received a BA in Mathematics from Pomona College in 1983, and an MS and a PhD in Computer Science from the University of Washington in 1986 and 1988, respectively. Ray is a professor of Computer Science at Armstrong Atlantic State University; he is the Distinguished Professor of Computer Science at Chiang Mai University in Thailand. Ray holds a visiting professorship at the University of Management and Science in Kuala Lumpur, Malaysia. He has won three Senior Fulbright Fellowships (Spain, Iceland, and Thailand), a Humboldt Fellowship (Germany), a Sasakawa Fellowship, and fellowships from Italy, Japan, and Spain. He has published fifteen books in the areas of complexity theory, graph theory, the Internet, parallel computation, networking, operating systems, theoretical Computer Science, the Web, and wireless. He is one of the world's leading experts on P-completeness theory. His books have been used in over 120 Computer Science and Information Technology programs in the US, as well as internationally, and have been translated into several languages. Ray has lectured throughout the world presenting over 185 invited talks. He serves as a Computing Accreditation Commissioner (CAC) for ABET and was elected to the CAC Executive Committee in 2008. His research

papers have appeared in over 60 journals and conference proceedings. His research has been supported by the governments of Germany, Hong Kong, Iceland, Italy, Japan, Malaysia, Spain, Taiwan, Thailand, and the US.

Dr. Xiangjian He is the director of Computer Vision & Recognition Laboratory at the University of Technology, Sydney. He holds PhD degree in Computer Science. His main research interests include computer vision and networking.

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John Judge is a researcher in the IBM Dublin Software Lab working as part of the LanguageWare team. He previously worked in the National Centre for Language Technology in Dublin City University, where he received his Ph.D. in 2006 for a thesis entitled “Adapting and Developing Linguistic Resources for Question Answering Systems.” He joined IBM in 2006 as part of the LanguageWare Team. He carried out research and development work for IBM’s participation in a 3 year integrated EU project called NEPOMUK, where the IBM team is developed tools for semantic analysis of text. These tools allow for semi-automatic production of semantic meta-information needed for content management. He is currently working to productise natural language processing and semantic web technologies and as a consultant in developing bespoke text analytics solutions.

Sanpawat Kantabutra received a BA in Accounting from Chiang Mai University in Thailand in 1991, an MS in Computer Engineering from Syracuse University in the US in 1996, and a PhD in Computer Science from Tufts University in the US in 2001. He is currently an assistant professor of Computer Science in the Theory of Computation Group in Chiang Mai University and a Royal Golden Jubilee scholar of the Thailand Research Fund. His areas of research are design and analysis of algorithms, algorithm complexity and intractability, parallel algorithms and architectures, graph theory and algorithms, and combinatorics. He has published his research regularly in leading international conferences and journals and has served as a program committee member for several international conferences. He has also regularly refereed papers for leading journals such as IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Signal Processing Letters, and IEEE Transactions on Systems, Man, and Cybernetics. In addition, he has also been invited to teach and give research talks nationally and internationally.

Savo Kordic was born in 1962. He is a Ph.D. candidate and a sessional lecturer at Edith Cowan University (ECU), Western Australia. His research interests include data mining and programming.

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Eugene Levner is Professor of Computer Science at Holon Institute of Technology and Bar-Ilan University, Israel. His main scientific interests are design of computer algorithms, optimization theory, and clustering and classification of digital content. He is author/co-author of seven books and more than 100 articles in refereed journals. His Citation Index is 410, and h-index is 15. He is the full member of the International Academy of Information Sciences, a member of editorial boards of four international journals.

Huaizhong Li was born in 1964. He received the PhD degree in Electrical and Computer Engineering from The University of Newcastle, Australia in 1996. He is a chair professor at Wenzhou University, Wenzhou, Zhejiang, China. His research interests include data mining, software engineering, artificial intelligence, automatic control, and computer applications.

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W.K. Li is a Chair Professor, Department of Statistics and Actuarial Science, The University of Hong Kong. His research interests include time series analysis, stochastic analysis, financial and insurance risk management and environmental statistics. He is an Elected Fellow of the American Statistical Association and the Institute of Mathematical Statistics. He has papers published in top journals including *Biometrika*, *Journal of the Royal Statistical Society Series B*, *Journal of the American Statistical Association*, *Annals of Statistics*, etc. He served as the Board of Directors of International Chinese Statistical Association from 2006 to 2007 and the President of the Hong Kong Statistical Society from 2000 to 2003.

Shyamala G. Nadathur. The career commenced in with post-graduate qualifications Biomedical Sciences and experiences encompassing hospital and research laboratories, pharmaceutical industry and public health projects. Additionally have completed a master's in health management and worked for over a decade in project and program management roles in the health sector. Through the various roles having experienced the importance of good and timely information for planning, operations and quality has developed a keen interest in health informatics (HI). There have been opportunities to undertake a number of IT courses including post-graduate qualification in IS. The HI doctorate project sets out to obtain value out of administrative datasets and see if they are able to inform about the current clinical presentation, process and outcome of care. Over the years there has also been some involvement in tertiary level teaching including IT/IS. Professional affiliations include membership of the Public Health Association of Australia and Associate Fellow of the Australian College of Health Service Executives. There is also continued involvement in the Health Informatics Society of Australia, including in the capacity of Executive Member of the Victorian branch.

Kwok Pan Pang obtained the PhD from Information Technology faculty of Monash University in Australia, Master degree in Information Technology from Queensland University of Technology in Australia, and Honor degree in Statistics from Dalhousie University in Canada. He has more than 15 years of practical experience in applying statistical and time series analysis/prediction in manufacturing

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GM Shafiullah currently is a PhD student at CQUniversity working on wireless sensor networking and machine learning technology. He is graduated in Electrical and Electronics Engineering from Chittagong University of Engineering & Technology (CUET). He obtained Masters of Engineering from CQUniversity, Australia on “Application of Wireless Sensor Networking for Train Health Monitoring”. He has published 10 book chapters, journals and conferences paper in the area of Data Mining, Railway Technology, Telecommunications and Sensor Networking. Mr. Shafiullah has more than eight years of professional experience in the field of Information and Communication Technology (ICT).

Dr. Thompson Graduated from Latrobe University in Melbourne Australia with first class honors degrees in both Electronics Engineering and Physical Science in 2000 and the Andrew Downing award for the highest grade point average in physics. Adam also gained a scholarship to complete his honors in physics at LaTrobe University. After graduation he worked for a Clyrcom Communications in Australia where he was a design engineer then in 2001 Adam commenced a PhD candidature at RMIT University in Melbourne Australia, with a focus on Digital Signal Processing. In 2004 Adam graduated with several international journals and many more conference publications. From 2004 – 2006 Adam was the senior hardware engineer at MTData in Melbourne Australia. Dr Thompson is currently an academic at Central Queensland University in Australia where he conducts research into communications, automated flight and rural farm management all with a focus on Digital Signal Processing. Currently he is a regular reviewer for Elsevier Digital Signal Processing Journal.

Dr. Tich Phuoc Tran received his Bachelor of Software Engineering (2005) and Bachelor of Information Technology with a First class honours (2006) from the University of Technology, Sydney (UTS). He was awarded with a University Medal for his excellent academic achievement. He also holds a PhD degree in computing sciences. His research interests include data mining, theoretical development of ANN models and network security.

Dr. Alexander Trousov is chief scientist in IBM Ireland Centre for Advanced Studies (CAS) and chief scientist of IBM LanguageWare group. He has published more than 30 peer reviewed journal and conference papers and has 5 patents. In 2000 he joined IBM as the Architect of IBM Dictionary and Linguistic tools group, known now as IBM LanguageWare group. As CAS Chief Scientist, Dr. Alexander Trousov leads IBM Ireland's participation in the 3 year integrated 6th framework EU project NEPOMUK, and is one of the creators of IBM LanguageWare Miner for Multidimensional Socio-Semantic Networks, which is a unified API that helps in creating solutions for social computing, semantic processing, and activity-centered computing for networks of people, documents, tasks, etc.

Dr. Pohsiang Tsai received his Bachelor of Science degree with first class honours and a PhD degree in information technology (2005) from the University of Technology, Sydney (UTS). His research interests include biometrics, computer vision, data mining, and machine learning.

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Joris L. van Velsen (1977) holds a PhD in theoretical physics from Leiden University and a MSc in applied physics from the University of Twente. He authored several papers on quantum physics and solid state physics. Currently, he is a researcher at the department of Statistical Information Management and Policy Analysis of the Research and Documentation Centre (WODC) of the Dutch Ministry of Justice. His research interests include model selection and time series analysis.

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Edmond H.C. Wu received a B.Sc. degree in applied mathematics and computer science from South China University of Technology, China in 2002 and an MPhil. degree in mathematics in 2004 and a Ph.D. degree in Statistics in 2007 from The University of Hong Kong. He is now a postdoctoral fellow at School of Hotel and Tourism Management, The Hong Kong Polytechnic University. His research interests include data mining, time series modeling and financial risk management.

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Philip L.H. Yu is an associate professor, department of statistics and actuarial science, the University of Hong Kong. He has published more than 50 research papers in statistical modeling, financial data mining and financial risk management. Currently, he serves as an associate editor of *Computational Statistics and Data Analysis*. He is the developer of portimizer, a software for portfolio optimization and asset allocation, which won the best web services applications for smart client in 2005. He has more than 10 years of consulting experience for financial institutions in areas such as investor risk profiling, optimal asset allocation and capital adequacy in risk management.

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