

About the Contributors

Qun Jin is a professor of networked information systems in the Department of Human Informatics and Cognitive Sciences, Faculty of Human Sciences, Waseda University (Japan). He has been engaged extensively in research works on computer science, information systems, and social and human informatics. His recent research interests include e-learning, human-computer interaction, human-centric ubiquitous services computing, information retrieval and recommendation, and computing for well-being. He seeks to exploit the rich interdependence between theory and practice in his works with interdisciplinary and integrated approaches. For additional information about Dr. Jin visit www.f.waseda.jp/jin/.

* * *

Sotirios Botsios was born in 1981. BSc and Master. Aristotle University of Thessaloniki (AUTH), Greece. Polytechnics School, Chemical Engineering Department. PhD cand. Democritus University of Thrace (DUTH), Polytechnics School, Computer and Electrical Engineering Department. Professor Assistant as PhD cand (2007-2008) on Statistics and Differential Equations. In his first steps of his academic career he participated with full and short papers in international scientific conferences and published articles in Chemical Engineering and E-Learning scientific journals. Research interests: 1. Adaptive Hypermedia, 2. Standards of Learning Objects Metadata, 3. Adaptive retrieval of Learning Objects, 4. Learning Style diagnosis, 5. virtual-co-learner agents.

Te-Jeng Chang is currently a Ph.D. candidate in the Department of Industry Education at the National Taiwan Normal University (NTNU) in Taiwan. His research interests include dynamic assessment technology, cognitive load, learning diagnostic techniques, adaptive e-learning, organizational learning and innovation. He received the Master of Science degree in mechanical engineering from the University of Michigan, USA. Since 1990, he has been worked in mechanical manufacturing industry more than 18 years. Prior to entering NTNU as a Ph.D. student, he has been the executive operation officer for several global enterprises. The practical experiences in both applying e-learning for human resources training and constructing organizational learning environment and system enlighten him on attending Ph.D. program in industry education and devoting effort in related researching. His recent researches were focus on dynamic quantitative assessment techniques, learning progressive diagnosis, and intrinsic motivation in innovation.

Wen-Chih Chang received the B.S.B., M.S., and Ph.D. degrees from the Department of Computer Science and Information Engineering of Tamkang University in 1999, 2001 and 2005. From 2001 to 2005, he focused on SCORM and e-learning at MINELAB. His research interests include mobile agent, distance learning, cooperative learning, petri net, web technology and e-learning specifications (ADL SCORM, IMS SS and IMS QTI). He is an assistant professor in Department of Information Management, Taiwan.

Louis R. Chao received B.S. and M.S. degrees from National Taiwan University, Taiwan in 1965 and 1968, respectively, and the Ph.D. degree from Duke University, U.S.A., in 1971, all in electrical engineering. Since 1972, he had served as Head of Computer Science, Dean of Engineering, Vice President, President, and Chair Professor of Tamkang University, Taiwan. He is also the founding member of e-Learning Society of Taiwan and the International Journal of Information and Management Sciences. His interests include system science, computer-aided learning and digital communication systems.

Pei-Chun Che received her BA in English from National Chengchi University, Taiwan, MA in Linguistics from Indiana University, Bloomington, U.S.A., and Ph.D. in Rhetoric & Linguistics from Indiana University of Pennsylvania, U.S.A. She served as the Executive Secretary of Committee of Research and International Cooperation, the Director of Language Center, President's Special Assistant of National Chengchi University. Currently, she is an associate professor in Language Center, National Chengchi University, the Chair of Department of Applied English, Kainan University, the Editor in Chief of Taoyuan Journal of Applied English, and has been on the IADIS Mobile Learning international conference committee since 2006. Dr. Che's research areas include curriculum design, cross-cultural communication, ESP/EAP, and mobile learning.

Sheng-Chang Chen was born in 1979. He received the B.S. and M.S. degrees in information engineering from Feng Chia University, Taiwan, in 2001 and 2002, respectively. He is currently a candidate for the Ph.D. degree in the Department of Information Engineering and Computer Science, Feng Chia University, Taiwan. His research interests include mobile computing, ad-hoc wireless networks, and fault tolerance techniques.

Huey-Wen Chou is currently a professor of the Department of Information Management at National Central University in Taiwan. Her articles can be found in such professional journals as *Computers & Education*, *Computers in Human Behavior*, *International Journal of Information Management* among others.

Chien-Chih Chou is a Principal Engineer in Advanced Control & Systems Inc., Taiwan. He received his B.S. degree in Electrical Engineering from National Chinyi Institute of Technology, and a M.S. degree in Information Management from Chung Yuan Christian University. His current research interests include process control, software engineering, and grid Computing.

Hui-Chun Chu is a PhD candidate of the Department of Information and Learning Technology at National University of Tainan in Taiwan, Republic of China. She received her Master degree in Information Management Department from National Chi-Nan University, Taiwan. Her research interests

About the Contributors

include e-learning, information technology-applied instructions, Computer-assisted diagnosis of learning problems and knowledge engineering.

Gennaro Costagliola received the laurea degree in computer science from the Università degli Studi di Salerno, Fisciano, Italy, in 1987. Following four years postgraduate studies, starting in 1999, at the University of Pittsburgh, he joined the Faculty of Science, Università degli Studi di Salerno, where in 2001, he reached the position of professor of computer science in the Dipartimento di Matematica ed Informatica. His research interests include Web systems and e-learning and the theory, implementation, and applications of visual languages. He is a member of the IEEE, the IEEE Computer Society, and the ACM.

Stefan Dietze has studied Business Information Systems at the University of Cooperative Education, Heidenheim (Germany) and received his Diploma Degree as well as a BA (hons) in 2001. Afterwards he did a Dr. rer. nat. (PhD) in Computer Science at the Potsdam University, what was finished in 2004. Whereas studying, he already worked for several IT service providers and took a fulltime position as research associate at the Fraunhofer Institute for Software and Systems Engineering (Berlin, Germany) while doing his PhD research from 2001 till 2004. Currently he is a research fellow at the Knowledge Media Institute of the Open University (Milton Keynes, UK) in the area of Semantic Web Services.

Shuliang Ding is professor of computer science and technology and a member of the Centre of Statistical Measurement for Education and Psychology at the Jiangxi Normal University. His major is mathematical statistics. His specialization is Item Response Theory and its applications, in particular the test equating, test construction, parameter estimation and computerized adaptive testing. Professor Ding's current research is focused on cognitive diagnosis, including Q matrix theory, construction test for cognitive diagnosis, development of the new methods for cognitive diagnosis, and combination of computerized adaptive testing with cognitive diagnosis. He is a member of National Council on Measurement in Education of China. His research is funded by the National Natural Science foundation of China.

John Domingue is the Deputy Director of the Knowledge Media Institute at The Open University, UK. He has published over 100 refereed articles in the areas of Semantic Web Services, Semantic Web, Ontologies and Human Computer Interaction. Up until last year he was the Scientific Director of DIP an EU Integrated Project (IP) on Semantic Web Services which involved 17 partners and had a budget of 16M Euros. Also last year he chaired the European Semantic Web Conference. Currently he is the Scientific Director of SUPER, another EU IP which unites Semantic Web Services and Business Process Modeling. Dr Domingue also currently sits on the Steering Committee for the European Semantic Conference Series, is a co-Chair of the WSMO working group and a co-Chair of the OASIS Semantic Execution Environment Technical committee.

Chyi-Ren Dow was born in 1962. He received the B.S. and M.S. degrees in information engineering from National Chiao Tung University, Taiwan, in 1984 and 1988, respectively, and the M.S. and Ph.D. degrees in computer science from the University of Pittsburgh, USA, in 1992 and 1994, respectively. Currently, he is a Professor in the Department of Information Engineering and Computer Science, Feng

Chia University, Taiwan. His research interests include mobile computing, ad-hoc wireless networks, agent techniques, fault tolerance, and learning technology.

Vittorio Fuccella received the laurea (cum laude) and PhD degrees in computer science from the University of Salerno, Fisciano, Italy, in 2003 and 2007, respectively. He is currently a research fellow in computer science in the Dipartimento di Matematica ed Informatica, Università degli Studi di Salerno. He won the Best Paper Award at ICWL '07. His research interests include Web engineering, Web technologies, data mining, and e-learning.

K. Gierłowski Received his M.Sc. degree in electronics and telecommunications from the Faculty of Electronics, Gdańsk University of Technology (GUT), Poland, in 2002. The faculty is also his current place of employ as a researcher and instructor. He is author or co-author of more than 30 scientific papers and designer of many production-grade network systems. He has received best paper award for article "Analysis of Network Infrastructure and QoS Requirements for Modern Remote Learning Systems" (XVth International Conference on Systems Science, 2004). His scientific and research interests include e-learning systems, wireless local and metropolitan area networks, complex wireless network architectures, network/application security and distributed computing.

Dimitrios Georgiou was born in 1948. BSc. AUTH Mathematics Department, PhD. DUTH Postdoc, UC Berkeley. Visiting Scholar at UC, Davis (1980-1982). Visiting Professor URI (1989-92). Associate Professor, School of Engineering DUTH since 1991. Instructor of several undergraduate and postgraduate courses he also teaches vocational courses to Hellenic Power Corporation, Center for Productivity and Development, Training School for High School Teachers, Hellenic Air Force e.a. He published six text books. Research interests: 1) Qualitative behaviour of solutions of ODE, Difference Equations, and PDEs, 4) Numerical Methods for Boundary Value Problems, 5) Intelligent Tutoring Systems. 6) Computer Networks. Research Papers published in Several Scientific Journals and conference. Member of IEEE Computer Society, AACE, AMS, ECMI e.a. Referee for the Journal of Mathematical Analysis and its Applications and other journals in mathematics and educational technology.

Alessio Gugliotta has studied Computer Science at the University of Udine (Italy) and received his Master's Degree in March 2002, cum laude, followed by a Ph.D. in Computer Science at the University of Udine, in March 2006. Since January 2006, he has a position of Research Fellow in the topic of Semantic Web Services at the Knowledge Media Institute of the Open University (Milton Keynes, UK). His current research is focused on Service Oriented Computing, Knowledge Representation and Semantic Web Services, and their application within multiple domains such as e-Government and e-Learning.

Aiguo He received the M.E. and Ph.D degrees from Nagoya University, Japan in 1985 and 1988, respectively. Now he is an assistant professor at the Department of Computer Software, University of Aizu, Japan. He currently is working on distant education, computer science education, software engineering, computer vision, software visualization and computer network. He is a member of IEEE, IEICE, IEEJ and IPSJ.

About the Contributors

Jung-Lung Hsu is currently a doctoral candidate of the Department of Information Management at National Central University in Taiwan. His research interests include e-learning, cyber psychology, behavior science in information technology, and virtual group dynamics. His articles have published in such professional journals as *Computers & Education*, *Journal of Educational Technology and Society*, *Journal of Educational Computing Research* among others.

Fu-Wei Hsu received the B. S. and M. S. degrees in information engineering and computer science from Feng Chia University, Taiwan, in 1998 and 2003, respectively. His research interests include personal communications, mobile computing, learning technologies, and network agents. He is currently a software engineer on 2G/3G mobile phone solution in Sunplus mMobile Inc.

Jason C. Hung is an Assistant Professor of Department of Information Technology, the Overseas Chinese Institute of Technology, Taiwan, R.O.C. His research interests include Multimedia Computing and Networking, Distance Learning, E-Commerce, and Agent Technology. Dr. Hung received his BS and MS degrees in Computer Science and Information Engineering from Tamkang University, in 1996 and 1998, respectively. He also received his Ph.D. in Computer Science and Information Engineering from Tamkang University in 2001. Dr. Hung participated in many international academic activities, including the organization of many international conferences. He is the founder and Workshop chair of International Workshop on Mobile Systems, E-commerce, and Agent Technology. He is also the Associate Editor of the *International Journal of Distance Education Technologies*, published by Idea Group Publishing, USA.

Gwo-Jen Hwang is currently a professor of the Department of Information and Learning Technology, as well as Dean of the College of Science and Engineering, at National University of Tainan in Taiwan, Republic of China. Dr. Hwang received his PhD degree from the Department of Computer Science and Information Engineering at National Chiao Tung University in Taiwan. His research interests include e-learning, computer-assisted testing, expert systems and mobile computing. Dr. Hwang has published 250 papers, including more than 80 papers in professional journals. Owing to the good reputation in academic research, Dr Hwang has received the 2007 outstanding research award from the National Science Council of Taiwan.

Pi-Shan Hsu is currently an associate professor of human resource development at Ching Kuo Institute of Management and Health in Taiwan. Her research interests include dynamic assessment technology, learning diagnostic techniques, adaptive e-learning, and Creativity. She received Ph.D. in the Department of Industry Education at the National Taiwan Normal University (NTNU) and the Master of Art degree in teacher education from the Eastern Michigan State University, USA. She has been a teacher more than 17 years. Her practical teaching experiences enhance her research work both in profundity and widely broad scope. In the period of her research, she has led several research teams of the national projects from National Science Council which focuses on creativity scales and assessment, mental operation process of technological creativity, innovation, curriculum development for adaptive e-learning and learning diagnostic technique development. She received the best achievement of vocational education from Taiwan government because of her significant contribution in vocational education in past decades.

Howard Leung is currently an Assistant Professor in the Department of Computer Science at City University of Hong Kong. He received the B.Eng. degree in Electrical Engineering from McGill University, Canada, in 1998, the M.Sc. degree and the Ph.D. degree in Electrical and Computer Engineering from Carnegie Mellon University in 1999 and 2003 respectively. Howard's current research projects include 3D Human Motion Analysis, Intelligent Tools for Chinese Handwriting Education, Chinese Calligraphic Image Analysis and Automatic Content Adaptation for PDA Viewing of E-Comics. Howard has also been actively involved in various professional activities. He is currently a member of the Multimedia Systems & Applications Technical Committee (MSATC) which is a subsidiary organization of the IEEE Circuits and Systems (IEEE-CAS) Society. He is also a member of the IEEE Signal Processing Society. He is the Treasurer of the Hong Kong Web Society and the Treasurer of the ACM Hong Kong Chapter.

Qing Li received the BEng from the Hunan University, Changsha, China, and his MSc and PhD degrees from the University of Southern California, Los Angeles, USA, all from Computer Science. He is concurrently a Chair Professor of the Zhejiang Normal University and a Professor at the Dept of Computer Science, City University of Hong Kong. Meanwhile, he is also a Guest Professor of the University of Science and Technology of China (USTC), an Adjunct Professor of the Hunan University (Changsha, China), and a Guest Professor (Software Technology) of the Zhejiang University (Hangzhou, China). Prof. Li's research areas range from data modeling, multimedia indexing and retrieval, workflow and Web services, to data warehousing/mining and e-learning; he has published over 260 papers in these areas on refereed international journals. He is actively involved in the research community by serving as an associate or guest editor for several technical journals, and as an organizer/co-organizer of numerous international conferences.

Cheng-Min Lin was born in 1964. He received the B.S. and M.S. degrees in electronic engineering from National Taiwan University of Science and Technology, Taipei, Taiwan, in 1989 and 1991, respectively, and the Ph.D. degree in Department of Information Engineering and Computer Science, Feng-Chia University, Taichung, Taiwan. Currently, he is an Associate Professor in the Department of Computer and Communication Engineering and Graduate Institute of Electrical Engineering and Computer Science, Nan Kai University of Technology. His research interests include mobile computing, distributed systems, and embedded systems. Dr. Lin is a member of the IEICE and the IEEE Computer Society.

Hung-Chin Jang received his BS in Applied Mathematics from National Chengchi University, Taiwan, in 1984, MS in Mathematics, Statistics, & Computer Science, and Ph.D. in Electrical Engineering & Computer Science from University of Illinois at Chicago, U.S.A., in 1988 and 1992, respectively. He was an associate professor in Applied Mathematics, the Chair of Department of Computer Science, National Chengchi University. Currently, he is an associate professor in Computer Science, and the Chair of Mater Program in Computer Science for Professional Education, the Director of Mobile Computing and Communication Lab., National Chengchi University, His current research interests include WLAN, Vehicular Ad Hoc Network (VANET), WiMAX, mobile communication systems, and mobile learning.

Kamen Kanev received the M.S. degree in mathematics and the Ph.D. degree in computer science, both from Sofia University, Sofia, Bulgaria in 1984 and 1989, respectively. He is a Professor with the Research Institute of Electronics, Graduate School of Informatics, and Graduate School of Science

About the Contributors

and Technology, Shizuoka University, Hamamatsu, Japan, where he teaches and supervises students majoring in computer and information science. His main research interests are in interactive computer graphics, user interfaces and surface based interactions, and in vision information processing. On this and related topics he has authored and coauthored more than 80 scientific journal and conference papers and patents. Dr. Kanev is a member of the IEEE, the Association of Computing Machinery (ACM), and the Asia-Pacific Society for Computers in Education (APSCE).

Shogo Kato is a lecturer in Department of Communication, Tokyo Woman's Christian University in Japan and a part-time instructor in the Faculty of Economics, Dokkyo University in Japan. He earned a Ph.D. from Tokyo Institute of Technology in 2005. His general research interests include educational technology; the application of behavior science, psychology, and information and communication technology (ICT) to educational scenes. Dr. Kato is particularly interested in the emotional aspects in virtual community, such as net bullying.

Ioannis Kazanidis received his MS degree in computing from the University of Coventry in 2003 and he is a PhD candidate at the Department of Applied Informatics, University of Macedonia. Currently, he is working as lab cooperater at the Technological Institute of Kavala. His research interests include adaptive educational systems, knowledge representation and computer-human interaction. He has published two papers in proceedings of conferences.

Shigeo Kimura received the M.S. and the Ph.D. degrees in Mechanical Engineering, both from University of Colorado, Boulder, Colorado, USA in 1980 and 1983, respectively. He is a Professor with Institute of Nature and Environmental Technology, and the Department of Mechanical Systems Engineering, Kanazawa University, Kanazawa, Japan, where he teaches fluid mechanics and heat transfer. His main research interests are in transport processes due to environmental fluid motions. On this and related topics he has authored and coauthored more than 100 scientific journal and conference papers and patents. Dr. Kimura is a member of the Japan Society of Mechanical Engineers (JSME) and the American Society of Mechanical Engineers (ASME).

Rynson W.H. Lau received a first class honors B.Sc. degree in Computer Systems Engineering from the University of Kent and a Ph.D. degree in Computer Science from the University of Cambridge. He has been on the faculty of University of Durham, City University of Hong Kong, and The Hong Kong Polytechnic University. He is currently with City University of Hong Kong. Rynson Lau serves on the Editorial Board of *Computer Animation and Virtual Worlds*. He has served as the Guest Editor of a number of journal special issues, including *ACM Trans. on Internet Technology*, *IEEE Trans. on Multimedia*, *IEEE Trans. on Visualization and Computer Graphics*, *Presence*, and *IEEE Computer Graphics & Applications*. He has also served in the conference committee of a number of conferences, including Program Co-chair of *ACM VRST 2004*, *ICAT 2006*, *ICEC 2007*, and Conference Co-chair of *ACM VRST 2005*, *CASA 2005*, *ICWL 2007*, *IDET 2008*.

Li-Tze Lee is an Assistant Professor in the Department of Accounting Information at the Overseas Chinese Institute of Technology at Taiwan, R.O.C. She received her Ed. D. in Human Resource Training and Development from Idaho State University (ISU) in 2005. Dr. Lee is an active licensed Certified

Public Accountant (CPA) of Idaho State Board of Accountancy. She is also a member of Institute of Internal Auditors (IIA)-Taiwan Chapter since 2007. In 2008, she received a grant from Taiwan Bureau of the Employment and Vocational Training as a principal executive to conduct an accounting and information learning project. Her research interests include accounting education, teaching strategies and corporate governance.

Frederick Li received both a BA (Hons.) degree and an MPhil. degree from The Hong Kong Polytechnic University, and a Ph.D. degree from the City University of Hong Kong. He is currently a Lecturer (Assistant Professor) at the University of Durham. Prior to the current appointment, he taught at The Hong Kong Polytechnic University. Before that, he was the project manager of a Hong Kong Government Innovation and Technology Fund. Frederick also serves as an Associate Editor of International Journal of Distance Education Technologies on Communications Technologies (Distributed and Collaborative Learning). He has served as the Guest Editor of two journal special issues of International Journal of Distance Education Technologies. In addition, he has served in the committee of ACM VRST 2004-2008, CASA 2005, and ICWL 2005, 2007-2008, and as a Program Co-chair of ICWL 2007-2008 and IDET 2008.

Yi-Hsung Li was born in 1979. He received the B. S. and M. S. degrees in information engineering and computer science from Feng Chia University, Taiwan, in 2001 and 2003, respectively. He is currently a candidate for the Ph.D. degree in the Department of Information Engineering and Computer Science, Feng Chia University, Taiwan. His research interests include personal communications, mobile computing, learning technologies, and network agents.

Ching-Jung Liao is an Assistant Professor in Department of Information Management at Chung Yuan Christian University, Taiwan. He received his B.S. and M.S. degrees in Computer Science and Biomedical Engineering from Chung Yuan Christian University, respectively, and a Ph.D. of Information Engineering and Computer Science from Feng Chia University. He has been a guest scientist in the Institute of Informatics of Technical University of Munich, Germany. His current research interests include grid computing, Rich Internet Applications, and E-Learning.

Yao-Nan Lien has been a professor of the Department of Computer Science at the National Chengchi University since 1995. He was the Chairman of the department from 1996 to 1999 and the Dean of the College of Science from 2000-2003. He received his BS from National Cheng Kung University in 1979, and his MS and PhD degrees from Purdue University in 1981 and 1986, all in Electrical Engineering. He was an assistant professor of Computer and Information Science at the Ohio State University from 1986 to 1989 and a Member of Technical Staff at AT&T Bell Laboratories from 1989 to 1993. From 1993 to 1995, he joined the Computer and Communication Research Laboratories, Industrial Technology Research Institute being the Deputy Director of the Computer Software Technology Division. His research interests include mobile computing, communication networks, and database systems. He can be reached via email at lien@cs.nccu.edu.tw.

Han-Yi Lin has worked for Foreign Language Center of National Chengchi University since 1990, serving as the coordinator of Mandarin Studies Program, the coordinator of Teaching and Research Section of Language Center, and as a co-editor of the 2nd National Conference on College English. She

About the Contributors

received her BA in English from National Chengchi University, Taiwan, and MA in Media Technology for TEFL from University of Newcastle upon Tyne, Newcastle, U.K. Currently, she is an Instructor in Foreign Language Center of National Chengchi University and has been the coordinator of Extension Program of the Center since 2008. Her interests and research areas include materials/curriculum design, self-access learning, ESP/EAP, and CALL (Computer-assisted Language Learning).

Shoji Nishimura is a professor at Waseda University, Tokyo, Japan. His current research interests include educational technology, especially education and the Internet. He received his bachelor's degree in mathematics from Waseda University and MSc in applied physics from Waseda University. In 1991, he joined the Advance Research Center, INES Corporation as a senior researcher. Then, he joined the School of Human Sciences, Waseda University, as an assistant professor in 1997. Currently, he is a professor in Faculty of Human Sciences, Waseda University. He is a member of Japan Society for Educational Technology, Japanese Society for Information and Systems in Education, and Information Processing Society of Japan.

K. Nowicki received his M.Sc. and Ph.D. degrees in electronics and telecommunications from the Faculty of Electronics, Gdańsk University of Technology (GUT), Poland, in 1979 and 1988, respectively. Ph.D. Krzysztof Nowicki is author or co-author of more than 100 scientific papers and author and co-author of four books, e.g. "LAN, MAN, WAN – Computer Networks and Communication Protocols" (- 1st ed. 1998 - 2nd - ed. 2000), "Wired and Wireless LANs", issued in 2002 (both books were awarded the Ministry of National Education Prize, in 1999 and 2003; respectively), "Protocol IPv6" (2002) and "Ethernet-Networks (2006). His scientific and research interests include network architectures, analysis of communication systems, analysis of e-learning systems.

Maya Satratzemi received the BS degree in math from the Aristotle University of Thessaloniki in 1980, and the PhD degree in informatics -algorithmic graph theory from the University of Macedonia in 1991. She is a professor at the Department of Applied Informatics, University of Macedonia. Her main research interests lie in the area of algorithms, programming languages, algorithmic graph theory, educational software, and didactics of informatics. She has published over than 25 papers in journals and 60 papers in proceedings of conference.

Douglass Scott is a professor at Waseda University, School of Human Sciences, Human Informatics and Cognitive Sciences Department. Dr. Scott's research interests include gender and intercultural differences in the use of communication technologies, especially concerning mobile telephone email. His current research projects include emotional transfer in Japanese young people's text messages and the comparative study of Japanese, Chinese and American young people's use of communication technologies.

Timothy K. Shih is a professor of the Department of Computer Science at National Taipei University of Education, Taiwan. He is a Fellow of the Institution of Engineering and Technology, UK. As a senior member of IEEE and ACM, Dr. Shih joined the Educational Activities Board of the Computer Society. His current research interests include Multimedia Computing and Distance Learning. Dr. Shih is an associate editor of the ACM Transactions on Internet Technology and the IEEE Transactions on Learning Technologies. He was also an associate editor of the IEEE Transactions on Multimedia.

Gary K.L. Tam received a first-class honors B.Eng. degree in Computer Science from the Hong Kong University of Science and Technology in 2002. In the same year, he was selected as one of the 23 Youth Telecom Ambassadors in the Event of “ITU Telecom Asia 2002 Youth Forum” in Hong Kong. In 2004, He received an MPhil degree from City University of Hong Kong. After graduation, he worked as an instructor in the Department of Computer Science of the same university for about two years. He is currently a PhD student at the University of Durham, England. His research mainly focuses on computer graphics and geometry processing.

Pei-Jin Tsai is a Ph.D. student of the Department of Computer Science and Information Engineering at National Chiao Tung University in Taiwan. Her research interests include e-learning and information technology-applied instructions.

Tzu-Chieh Tsai received his BS and MS degrees both in Electrical Engineering from National Taiwan University in 1988, and from University of Southern California in 1991, respectively. He got his PhD degree in Computer Science at UCLA in 1996. During 2005/08~2008/07, he was the Chair of Department of Computer Science at National Chengchi University, Taipei, Taiwan. He is currently an associate professor and is leading a “Mobile Computing and Network Communications Lab”. His current research interests include WLAN & QoS, IEEE 802.11e, 802.11s (Wireless Mesh Network), 802.16(WiMAX), Intelligent Transport System, Vehicular Ad hoc Network, Location-Based Service, Mobile Learning, Digital Smart Home, P2P Steaming, and Wireless Sensor Network.

Shuqun Yang is associate professor of computer science and technology at Fujian Normal University. She received the B.S. degree (June, 1991) and M.S. degree (June, 2003) from Jiangxi Normal University in china, and PhD degree (May, 2009) in Nanjing university of Aeronautics and Astronautics in China. Her major is computer application technology. Her specialization is formal concept analysis and item response theory, in particular cognitive diagnosis and computerized adaptive testing. Professor Yang’s current research is focused on Q matrix theory, and combination of computerized adaptive testing with cognitive diagnosis. Her research is funded by national natural science foundation of china.

Tzu-Chi Yang is a graduate student of the Department of Information Management at National Chi-Nan University in Taiwan. His research interests include information technology-applied instructions, mobile learning, ubiquitous learning and computer assisted learning.

Jin Tan David Yang is a Professor in Teaching Mandarin as Second language (TMSL) at Ming Chuan University, Taipei Taiwan. He received his B.S. at National Chung Hsiung University in Taiwan and M.S. degrees in Computer Science at State University of New York at Buffalo, USA and a Ph.D. of Computer in Education at University of Oregon in 1993. He was Co-Chair of ICALT 2005 (5th IEEE *International Conference on Advanced Learning Technologies*) held in Kaohsiung, Taiwan. His current research interests include e-Learning and ontological engineering.

Hsuan-Che Yang received B.S., M.S. and Ph.D. degree from Department of Computer Science and Information Engineering (CSIE) at Tamkang University, Taiwan in 1996, 2005 and 2008. He is currently an adjunct assistant professor in the Department of Educational Technology at Tamkang University. His

About the Contributors

research interests include Distance Learning, Computerize Assessment, Intelligent Tutoring System and ubiquitous computing.

Jianmin Zhao is a PhD supervisor and full Professor of the Zhejiang Normal University where he concurrently serves as the Dean of the College of Mathematics, Physics and Information Engineering. He is the Principal Investigator for numerous research and applied research projects, many of which have been awarded by the Provincial government and State government. His research interests include pattern recognition and image processing, agent-oriented requirements engineering, business intelligence and data mining, sensor networks and e-learning.

Xinzhong Zhu received the BSc from the Beijing University of Science and Technology, and his MSc degree from the National Defense University of Technology, China, both from Computer Science. He is currently an Associate Professor of the Zhejiang Normal University where he joined as a faculty member since 1998. He has served in numerous capacities and actively participated in over 40 (applied) research projects. His research interests include pattern recognition and image processing, business intelligence and data mining, multimedia indexing and management, personalized e-learning and user modeling.