About the Authors

Gautam Biswas is an Associate Professor of Computer Science, Computer Engineering, and Management of Technology at Vanderbilt University. He received a B.Tech. degree in Electrical Engineering from the Indian Institute of Technology, Bombay, India, in 1977, and M.S. and Ph.D. degrees in Computer Science from Michigan State University, East Lansing, in 1979 and 1983, respectively. Dr. Biswas conducts research in Artificial Intelligence, Knowledge Based Systems, and Cognitive Modeling, and their applications to the development, analysis, and evaluation of Intelligent Systems. He has primary interests in hybrid modeling and analysis, and their applications to analysis, control, diagnosis, and design of complex embedded systems. He has applied hybrid modeling and combined qualitative-quantitative reasoning techniques to design fault monitoring and isolation systems for fast breeder reactors and automobile engine systems. Another area of interest is the design and implementation of Intelligent Learning Environments. Working as part of a Cognition and Technology group at the Learning Technology Center in Vanderbilt University, he has developed multi-media systems and simulation-based intelligent learning environments for middle school math and science education. In ONR-funded projects he has developed methods for assessing expertise in troubleshooting of Alternating Current circuits and systems. Dr. Biswas has published in a number of journals and contributed book chapters. He is an associate editor of the International Journal of Approximate Reasoning and the Journal of Applied Intelligence, and has served on the Program Committee of a number of conferences. He was co-chair of the 1996 Principles of Diagnosis Workshop, and a senior program committee member for AAAI 97 and 98. He is a Senior member of the IEEE Computer Society, ACM, AAAI, and the Sigma Xi Research Society.

David N. Chin is an Associate Professor of Information and Computer Sciences at the University of Hawaii at Manoa. He received his B.S. in Physics and B.S. in Computer Science/Engineering from M.I.T. in 1980 and his Ph.D. in Computer Science from the University of California at Berkeley in 1987. While at Berkeley, he lead the design and implementation of UC, the UNIX Consultant, a natural language consultation program for the UNIX operating system. His doctoral dissertation concerned treating UC as an intelligent agent which has its own goals, plans, and model of the user. By detecting the right goals in appropriate situations, UC can take the initiative in its dialog with the user in order to volunteer information, correct user misconceptions, and reject unethical requests. UC's user model, KNOME (KNOwledge Model of Expertise), analyzed user queries and inferred the user's level of UNIX expertise based on what kinds of facts the user does or does not know. Dr. Chin has served on the editorial board of the international journal *User Modeling and User-Adapted Interaction* since its inception and has twice chaired the International Conference on User Modeling. Professor Chin's current interests include cognitive science, software engineering, geographic information systems, and artificial intelligence, particularly intelligent agents, natural language processing, user modeling, and intelligent interfaces.

Stephen J. Hegner received the Ph.D. degree in Computer and Information Science from the University of Massachusetts at Amherst in 1977. Currently, he is a senior lecturer in the Department of Computing Science at Umeå University, Sweden. His areas of professional interest focus on algorithmic aspects of knowledge representation and inference in database and knowledgebase systems.

Jenny Jerrams-Smith is a Principal Lecturer in Information Systems at the University of Portsmouth, UK, and director of the Advanced Interface research centre. She was formerly a Principal Researcher in Artificial Intelligence at Philips Research Laboratories, UK. She completed her PhD in Computer Science in 1986 at the University of Birmingham and her Master's degree in Computer Science in 1982. She has a Post Graduate Certificate in Education (1968) and a Bachelor's degree in Zoology (1967), both from the University of London. Her primary research interest is in intelligent/adaptive user interfaces, in which she has many refereed publications. She

has recently completed funded research projects on an adaptive interface for a telecare system and on adaptive navigational guidance for the WWW.

John Jones was born in 1956 in England and died in 1994. He achieved a BSc First Class degree in Mathematics from the University of Nottingham in 1980. He completed his Ph.D. in Mathematical Logic at the Department of Mathematics, University of Nottingham. He was a Research Fellow in Artificial Intelligence at the University of Edinburgh from October 1983 until September 1986. He joined the Department of Computer Science at the University of Hull as a Lecturer in October 1986 and remained there until he died.

James Martin is an Associate Professor in the Department of Computer Science and the Institute of Cognitive Science at the University of Colorado at Boulder. He received his Ph.D. in Computer Science from the University of California at Berkeley in 1988. He earned his B.S. degree in Computer Science from Columbia University in New York in 1981. His current research interests are in Natural Language Processing, Information Retrieval and Machine Learning.

Manton Matthews is Associate Professor and Director of Graduate Studies in the Department of Computer Science at the University of South Carolina. He received his Ph.D. in Mathematics (graph theory) while simultaneously obtaining a MS in Computer Science in 1980. He has served as program chairman for the 1990 International Conference on Industrial and Engineering Applications of AI and Expert Systems in 1990 and then again as

co-chairman in 1997. He has served on the editorial board of the Journal of Applied Intelligence. His research interests include intelligent user interfaces, natural language processing (NLP), user-modelling, graph theory, and forensic computing.

James Mayfield is a Senior Computer Scientist at the Johns Hopkins University Applied Physics Laboratory. Prior to joining Johns Hopkins, he was an associate professor of computer science at the University of Maryland, Baltimore County. Dr. Mayfield received an A.B. in 1979 from Harvard College, and a Ph.D. in 1989 from the University of California at Berkeley. Since the time of the reported plan recognition work, he has carried out research in hypertext, information extraction, distributed inference, and agent communication languages. His current projects include work in information retrieval, computer forensics, and simulation.

Paul Mc Kevitt is 36 and from Dún Na nGall (Donegal), Ireland. He is Associate Professor (Senior Lecturer) in the School of Computer Science at The Queen's University of Belfast, Northern Ireland. Previously, he has been Visiting Professor of Intelligent MultiMedia Computing in the Institute of Electronic Systems at Aalborg University, Denmark and a British EPSRC (Engineering and Physical Sciences Research Council) Advanced Fellow in the Department of Computer Science at the University of Sheffield, England. The Fellowship, commenced in 1994, and released him from his Associate Professorship (tenured Lecturership) for 5 years to conduct full-time research on the integration of natural language, speech and vision pro-

cessing. He completed a Master's degree in Education (M.Ed.) at the University of Sheffield in 1999. He completed his Ph.D. in Computer Science at the University of Exeter, England in 1991. His Master's degree in Computer Science (M.S.) was obtained from New Mexico State University, New Mexico, USA in 1988 and his Bachelor's degree in Computer Science (B.Sc., Hons.) from University College Dublin (UCD), Ireland in 1985. His primary research interests are in Natural Language Processing (NLP) including the processing of pragmatics, beliefs and intentions in dialogue. He is also interested in Philosophy, MultiMedia and the general area of Artificial Intelligence.

Mark Millington is 39 and from Chester, England. He is a consultant specialising in finance and telecommunications applications, working in the Chicago area. He completed his Ph.D. in Computer Science in 1985 at the University of Edinburgh, Scotland, and his Bachelor's degree in Computer Science and Mathematics in 1980 at the University of Essex, England.

Harish Neelakandan, 34, completed his Master's degree in Computer Science from the University of South Carolina in 1987 and worked at Cognitive Systems in New Haven, Connecticut, from 1988 to 1992. While at Cognitive, which was founded by Roger Schank, then at Yale, to commercialize his group's Natural Language research, Harish worked on the development of a Natural Language system for processing financial funds transfer telex messages. This system was deployed at some of the major money center banks in the USA and Europe. Subsequently, he worked on a Finan-

cial Portfolio Evaluation system for use by Portfolio Managers and then on a Case-Based Reasoning system to detect suspicious trading activity at a major North American stock exchange. He left Cognitive in 1992 to get a graduate degree in Management at MIT's Sloan School of Management in Boston, and upon graduation from Sloan in 1994, joined Merrill Lynch in New York where he is currently a Foreign Exchange Options trader.

Peter Norvig received a B.S. in Applied Mathematics from Brown University and a Ph.D. in Computer Science from the University of California at Berkeley. He has been a Professor at the University of Southern California and a Research Faculty Member at Berkeley. He has over forty publications in various areas of Computer Science, concentrating on Artificial Intelligence, Natural Language Processing and Software Engineering. He has also served as a Senior or Chief Scientist at Sun Microsystems Labs, Harlequin Inc. and Junglee Corp., and is currently Chief of the Computational Sciences Division at NASA Ames Research Center.

Walter Pharr is an Assistant Professor of Computer Science at the College of Charleston, in Charleston, South Carolina, USA. He is currently completing his Doctoral degree at the University of South Carolina. His primary research interests are natural language processing, formal semantics for natural and artificial languages, and functional programming.

Maria Virvou is 34, from Athens, Greece. She has been a lecturer in the Department of Computer Science at

the University of Piraeus, Greece since 1994. She completed her Ph.D. in Artificial Intelligence and Computer Science at the University of Sussex, England in 1992. She received her M.Sc. degree in Computer Science from University College London in 1987. Her first degree in Mathematics was obtained from the University of Athens, Greece in 1986. Her current research interests are in user modelling, Artificial Intelligence in Education, distance learning and adaptive user interfaces.

Robert Wilensky received his B.A. and his Ph.D. from Yale University. In 1978, he joined the faculty of the University of California at Berkeley, where he is now Professor in the Division of Computer Science, and in the School of Information Management and Systems. He has served as Chair of the Computer Science Division, the director of BAIR, the Berkeley Artificial Intelligence Research Project, and the director of Berkeley Cognitive Science Program. Professor Wilensky has published numerous articles and books in the area of artificial intelligence, planning, knowledge representation, natural language processing, and digital information systems. He is currently Principal Investigator of UC Berkeley's Digital Library Project.

Dekai Wu is an Associate Professor of Computer Science at the Hong Kong University of Science and Technology (HKUST). He received his PhD in Computer Science from the University of California at Berkeley, and was a postdoctoral fellow at the University of Toronto (Ontario, Canada) prior to joining HKUST in 1992. He received his BS in Computer Engineering from the University of California at San Diego

(Revelle College) in 1984. He was also a visiting researcher at the Technische Universität München (Munich, Germany) during 1986–87. He currently serves on the Editorial Boards of Computational Linguistics, Machine Translation, Computational Linguistics and Chinese Language Processing, and Communications of COLIPS and on the Executive Committee of the Association for Computational Linguistics (ALC). His research interests include statistical

and corpus-based natural language processing, machine translation, language modeling, speech recognition, Chinese computing, machine learning, language acquisition, dialog systems, and Internet information processing. Since 1992 he has led the SILC Machine Translation Learning Project, and helped found the Human Language Technology Center (HLTC) at HKUST. He is also active as a Principal Investigator in the Cyberspace Center of HKUST.