About the Authors

John Krogstie has a PhD (1995) and an MSc (1991) in Information Systems, both from the Norwegian University of Science and Technology (NTNU). He is currently a senior research scientist at SINTEF. He is also a part-time professor at NTNU and was employed as a manager at Accenture (1991-2000). Dr. Krogstie is the Norwegian representative for IFIP TC8 and a member of IFIP WG 8.1 on Information Systems Design and Evaluation, where he is the initiator and leader of the task group for Mobile Information Systems. He has published approximately 50 refereed papers in journals, books, and archival proceedings since 1991.

Terry Halpin is a distinguished professor and vice president (Conceptual Modeling) at Northface University (USA). He holds BSc, DipEd, BA, MLitStud, and PhD degrees; his doctoral thesis formalized Object-Role Modeling (ORM/NIAM). After leaving academia to work on data modeling technology at Asymetrix Corporation, InfoModelers Inc., Visio Corporation, and Microsoft Corporation, he returned to academia, specializing in software development using a business rules approach to informatics. With a research focus on conceptual modeling and conceptual query technology, he has authored more than 100 technical publications and five books, including Information Modeling and Relational Databases and Database Modeling with Microsoft Visio for Enterprise Architects. He is a member of IFIP WG 8.1 (Information Systems) and is editor/reviewer for several academic journals.

Keng Siau is an associate professor of Management Information Systems (MIS) at the University of Nebraska, Lincoln (UNL). He is also editor-in-chief of the Journal of Database Management and series editor for the book, Advanced Topics in Database Research. He received his PhD from the
University of British Columbia (UBC), where he majored in Management Information Systems and minored in Cognitive Psychology. His master’s and bachelor’s degrees are in Computer and Information Sciences. Dr. Siau’s more than 150 publications have included 60-plus refereed journal articles; these articles have appeared in journals such as MIS Quarterly, Communications of the ACM, IEEE Computer, Information Systems, ACM’s Data Base, IEEE Transactions on Systems, Man, and Cybernetics, IEEE Transactions on Information Technology in Biomedicine, Journal of Database Management, Journal of Information Technology, International Journal of Human-Computer Studies, IEICE Transactions on Information and Systems, Quarterly Journal of Electronic Commerce, and others. In addition, he has published more than 70 refereed conference papers, edited/co-edited nine books, and written more than 15 book chapters. He served as the organizing and program chairs for the International Workshop on Evaluation of Modeling Methods in Systems Analysis and Design (EMMSAD) (1996-2003). For more information, please visit http://www.ait.unl.edu/siau/.

*   *   *

**Sofie de Flon Arnesen** has an MSc (2002) in Information Systems from the Norwegian University of Science and Technology (NTNU) in Trondheim, Norway. She is currently employed at Odfjell Drilling where she is working with project planning and project control of offshore maintenance and modification projects.

**Mira Balabaan** holds a PhD in Computer Science from the Weizmann Institute of Science, and a music degree from the Rubin Academy of Music in Tel-Aviv. She is now affiliated with the Department of Information Systems Engineering at Ben-Gurion University, Israel. Her research is in the areas of knowledge representation, conceptual modeling, database semantics, programming languages, and computer music.

**Mohamed Ben Ayed** received his master’s degree in Computer Science from the University of Paris 1 - Sorbonne (France) in 2001. In October of the same year, he joined the research group of Professor Colette Rolland. He is currently preparing a PhD on the topic of method engineering and he is developing an approach for evolution-driven method engineering, which is applied to the Lyee Methodology improvement. His research interests also include requirement engineering, information modeling, and database theory.

**Nicky Boertien** earned her master’s degree in Building Engineering from the Eindhoven University of Technology; the main subject of her final thesis was Information Science. The interest for software architecture was born in her first
job, where she had to combine two applications into one. From this point on, she studied in-depth software architecture. At the Telematics Institute, multichannel architecture in combination with component-based development was her central theme, resulting in several publications. Ms. Boertien now works as a software architect at the headquarters of one of the major banks in The Netherlands (Rabobank). Her knowledge is used and enriched in projects where component-based development is applied in practice.

**Dave Cuyler** has worked as an IT professional for nearly 20 years. He holds a Bachelor’s of Science in Natural Resources and a Master’s of Business Administration/Management Information Systems. For the past 16 years, he has worked at Sandia National Laboratories in Albuquerque, New Mexico, USA. His work there has spanned network management, system administration, software development, database administration, database performance analysis, information modeling, and database design. Mr. Cuyler currently works as chief architect within Sandia’s CIO organization.

**Ajantha Dahanayake** is an associate professor in the Department of Information and Communication Technology at the Faculty of Technology, Policy, and Management, Delft University of Technology, The Netherlands. She previously served as an associate professor in the Department of Information Systems and Algorithms at the Faculty of Information Technology and Systems. She received her BSc and MSc in Computer Science from the University of Leiden, and a PhD in Information Systems from Delft University of Technology. She has served in a number of Dutch research and academic institutions. Her research interests are distributed Web-enabled systems, CASE, methodology engineering, component-based development, and m-business. She is the research director of the research program, Building Blocks for Telematic Applications Development and Evaluation (BETADE).

**Revital Danoch** is a doctoral student in the Department of Industrial Engineering & Management at Ben-Gurion University (Israel), specializing in Information Systems. She earned her BSc and MSc in Information Systems from that department. Her research interests include system analysis & design and data modeling.

**Islay Davies** was awarded a Master’s of Information Technology (2002) from Queensland University of Technology (QUT) (Australia), with a focus on Information Systems. She is currently undertaking a PhD at QUT in the area of ontology and conceptual modeling, specifically business process modeling. The proposed title of her PhD topic is, “Ontological Evaluation of ARIS and UML.” To date, she has co-published papers with Dr. Michael Rosemann and Dr. Peter
Green on the topic of ontology comparison using meta-models, and on results of an empirical study on the actual practice of modeling in Australia. Ms. Davies also teaches at QUT as a tutor and guest lecturer in Business Systems Analysis and Design.

**Asbjørn Følstad** is currently a researcher at SINTEF Telecom and Informatics (Norway), which is part of Scandinavia’s largest research institute. He has a master’s in Psychology with specialization in cognitive psychology and man-machine interaction. His main research areas are user-centered design processes, methods for user requirements specification, and usability evaluation—in particular within the area of mobile applications and services.

**Reidar Gjersvik** is research director of the Department of Knowledge and Strategy in SINTEF Industrial Management (Norway), which is part of Scandinavia’s largest research institute. He earned a master’s degree and a PhD in Organizational Science from Norwegian University of Science and Technology (NTNU). His main research areas are knowledge management and organizational development.

**Peter Green** is program director for the Electronic Commerce program at the University of Queensland (Australia). He is also an associate professor in the UQ Business School at the University of Queensland. He has qualifications in Computer Science, Accounting, and a PhD in Commerce (Information Systems) from the University of Queensland. Dr. Green is a chartered accountant and a member of the Australian Computer Society. He has worked during his career as the technical systems manager at the South-East Queensland Electricity Board (SEQEB), for a chartered accountancy firm, and for a Queensland government department. Dr. Green has researched, presented, and published widely on systems analysis and design, conceptual modeling, information systems auditing, and e-commerce. His publications have appeared in such internationally refereed journals as *Information Systems* and the *Australian Journal of Information Systems*.

**Bart-Jan Hommes** is lecturer and researcher in the Information Systems Department of the Technical University of Delft, The Netherlands. His research focuses on the application and evaluation of tools and techniques for business process modeling. In his PhD research, he is evaluating state-of-the-art modeling techniques by means of a formal description language and evaluation framework. The research has resulted in several publications and presentations on a number of international conferences. Furthermore, he is interested in the development of process modeling tools. He has served as external advisor in several tool development and selection projects.
Lars Ilebrekke is a research scientist at the Norwegian Defense Research Establishment. He holds a master’s degree in Computer Science from the Norwegian University of Science and Technology. His research interests include conceptual modeling, multi-agent systems, and distributed simulation systems.

Henk Jonkers received his MSc in Computer Science from the University of Twente (1990), and his PhD from the Delft University of Technology (1995). Since then he has been a member of the scientific staff at the Telematica Instituut, Enschede, The Netherlands. His current research interests include enterprise architecture and modeling, quantitative modeling and analysis of organizations and systems, and application service providing.

Judith Kabeli is a doctoral student in the Department of Information Systems Engineering at Ben-Gurion University, Israel. She earned her BSc and MSc in Mathematics and Computer Science (1994) from Ben-Gurion University. Prior to her PhD studies, Dr. Kabeli held professional and managerial positions at the Israel Aircraft Industries. Her research interests include data modeling, information systems analysis and design, and intelligent Web-based user interfaces. Her doctoral dissertation is concerned with the development and testing of the FOOM methodology that is described in this book—supervised by Professor Shoval.

Erik Kamsties is senior research assistant at the Institute for Computer Science and Business Information Systems (ICB) at the University of Duisburg-Essen (Germany) since 2002. Prior to that he was leader of the requirements engineering competence team at the Fraunhofer Institute for Experimental Software Engineering (IESE) in Kaiserslautern. He received a PhD in Computer Science from the University of Kaiserslautern (2001) and an MS (Diploma) in Computer Science from the Technical University of Berlin (1993), Germany. His research interests include requirements engineering, in particular natural language requirements, object-oriented analysis, software product family engineering, requirements-based testing, and empirical software engineering. Dr. Kamsties is program co-chair of the REFSQ (Requirements Engineering: Foundation of Software Quality) workshop series.

Evangelia Kavakli is an informatics lecturer in the Department of Cultural Technology and Communication of the University of the Aegean (Greece). She has a BSc in Computer Science from the University of Crete, and an MSc by Research and PhD in Computation from the University of Manchester, Institute of Science and Technology (UMIST). Her research interests lie in the areas of cultural information systems analysis and design, goal-driven requirements
engineering, and enterprise knowledge modeling. Her research work has been financially supported by the UK Engineering and Physical Sciences and Research Council, as well as the European Commission. She has published several papers in international conferences and journals.

**Pericles Loucopoulos** holds the chair of Information Systems Engineering at the University of Manchester Institute of Science and Technology (UK). He is co-editor-in-chief of the *Journal of Requirements Engineering* and is a member of the editorial board of four other international journals. He is the co-author of five books, the co-editor of one book, the editor of two volumes of conference proceedings, the co-editor of one volume of conference proceedings, and the author and co-author of more than 100 journal, invited, and peer-reviewed conference papers. His research aim is advancement of both *theory* and *methodology* for the design, development, and management of industrial-scale systems in the context of complex organizational environments.

**Sergio Luján-Mora** is a lecturer at the Computer Science School of the University of Alicante (Spain). He received a BS (1997) and a master’s in Computer Science (1998) from the University of Alicante. Currently he is a doctoral student in the Department of Language and Information Systems being advised by Dr. Juan Trujillo. His research spans the fields of multidimensional databases, data warehouses, OLAP techniques, database conceptual modeling and object-oriented design and methodologies, Web engineering, and Web programming. He is the author of several national journal papers and papers presented at international conferences such as ER, UML, and EDBT workshops. He can be contacted at: Sergio.lujan@ua.es.

**Raimundas Matulevičius** received his Master’s of Science in Computer Science from Vytautas Magnus University (VMU), Lithuania (2000). Currently he is a doctoral student at the Norwegian University of Science and Technology (NTNU). His research interests include requirements engineering, requirements engineering tools, process improvement in information systems, evaluation of CASE tools, conceptual models of information, and information processes.

**Simon Milton** received his PhD from the University of Tasmania in the area of ontological analysis of data modeling languages (2000). In his thesis, Dr. Milton undertook the first comprehensive ontological analysis of data modeling languages using a common-sense ontology (Chisholm’s ontology). His primary focus remains studying the ontological foundations of data modeling languages. More recently, he has been studying the role of theories of agency in information systems design methodologies and associated ontological commitments. He has been in the Department of Information Systems at the University of Melbourne (Australia) since 2000.

Copyright © 2005. Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.
Jan Philipps received his Diploma degree in Computer Science from the Technical University of München (1993) (Germany). From 1994 to 1996, he was a research assistant in the Computer Science Department of the Tokyo Institute of Technology. From 1996 to 2001, he was research assistant in the Faculty of Computer Science at TU München. He co-founded and is now working for Validas AG, München, a consulting company in the field of embedded systems. His research interests include development processes for embedded systems, from requirements engineering and design to quality assurance and mathematical analysis techniques.

Jolita Ralytė is currently associated lecturer and researcher in the Department of Information Systems at the University of Geneva (Switzerland). She obtained her PhD in Computer Science in January 2001 from the University of Paris 1 - Sorbonne, France. In her PhD thesis, she proposes an assembly based approach for situational method engineering. Her research areas include method engineering, process modeling, meta-modeling, and requirement engineering. She has participated in diverse European research projects and Franco-Tunisian research projects. Her work had been published in various international conferences, including CAISE, ER, ICSP, IFIP WG8.1, and the Requirement Engineering Journal.

Colette Rolland is currently a professor of Computer Science in the Department of Mathematics and Informatics at the University of Paris 1 - Sorbonne (France). Her research interests lie in the areas of information modeling, databases, temporal data modeling, object-oriented analysis, design and design methodologies, and move to topics such as requirements engineering, method engineering and CASE & CAME tools, business process modeling, and change handling. She is the director of the Centre de Recherche en Informatique, and supervises a team of 12 full-time assistant professors and 20 research students active in these areas. She has supervised 80 PhD theses and has extensive experience in leading European research projects and conducting cooperative projects within the industry in Europe and internationally as well. She has published more than 300 refereed papers in international conferences and journals, and she is on the board of 12 international journals in her field of interest.

Michael Rosemann received his MBA (1992) and his PhD from the University of Münster, Germany. He is the director of the Centre for Information Technology Innovation at Queensland University of Technology (Australia) and an associate professor at QUT’s School of Information System. He also is chief investigator of a number of research projects funded by the Australian Research Council and SAP Corporate Research. Dr. Rosemann has researched, presented, and published widely on enterprise systems, process modeling, workflow
management, and operations management. He is the author of two books and also the editor of two books. His publications have appeared in such internationally refereed journals as *Information Systems, Information Systems Frontiers*, and the *Australian Journal of Information Systems.*

**Bernhard Schätz** works as senior researcher for the chair of Professor Broy for Software and Systems Engineering, Technical University of München (Germany), where he also received his PhD in Computer Science. Currently, he is leading the Competence Center for Model-Based Development, focusing on the practical application of formal techniques in the engineering process. His work targets the construction of CASE tools for a model-based software engineering process for embedded systems, with emphasis on the automotive sector. Results of his research are incorporated in the development of AutoFocus. Besides his academic activities, Mr. Schätz also works as a consultant for industrial partners.

**Peretz Shoval** is a professor of Information Systems and head of the Department of Information Systems Engineering at Ben-Gurion University, Israel. He earned his BSc in Economics (1970) and MSc in Information Systems (1975) from Tel-Aviv University, and his PhD in Information Systems (1981) from the University of Pittsburgh, where he specialized in expert systems for information retrieval. In 1984, he joined Ben-Gurion University, where he started the Information Systems Program in the Department of Industrial Engineering & Management. Prior to moving to academia, he held professional and managerial positions in computer companies and in the IDF. Dr. Shoval’s research interests include information systems analysis and design methods, data modeling and database design, and information retrieval and filtering. He has published numerous papers in journals and presented his research at various conferences. He has further developed various methodologies and tools for systems analysis and design, and for conceptual and logical database design.

**Henk Sol** is the dean of the Faculty of Technology, Policy, and Management, Delft University of Technology, The Netherlands, and also chair of the Systems Engineering Department. He previously served as chairman of the Department of Information Systems of the Faculty of Information Technology and Systems. He is the founder of the Faculty of Technology, Policy, and Management, and of the Delft Institute for Service Engineering (DITSE). He is a pioneer in simulation and decision support research.

**Il-Yeol Song** is a professor at Drexel University, Philadelphia (USA). He earned his PhD in Computer Science from Louisiana State University in 1988. His research interests include conceptual modeling, data warehouses, OLAP,
Web-based systems, and object-oriented analysis and design with UML. He has published more than 90 refereed papers in conferences and journals, and served as a program committee member of over 65 conferences and workshops. He served as a program co-chair for DOLAP98, CIKM99, DOLAP99, and ER2003. He is an associate editor of the Journal of Database Management. Dr. Song received three teaching awards from Drexel University, including the Exemplary Teaching Award (1992), the Teaching Excellence Award (2000), and the most prestigious Lindback Distinguished Teaching Award (2001). He can be contacted at: songiy@drexel.edu.

Maarten W.A. Steen has been working on various topics related to e-business engineering, both in knowledge-building research projects and in applied projects with industry, since he joined Telematica Instituut (The Netherlands) in 1999. His main research interests are modeling techniques, methods, and architectures for e-business applications. He has lectured on these topics at industry seminars and at universities. Before joining Telematica Instituut, Dr. Maarten worked at the University of Kent at Canterbury on the application of formal methods in the area of Open Distributed Processing. More specifically, he worked on techniques for partial specification, such as consistency checking and composition, and on enterprise modeling and policy specification. He holds a PhD from the University of Kent at Canterbury and an MSc from Twente University.

Zoran Stojanovic is currently a researcher of the Faculty of Technology, Policy, and Management, Delft University of Technology, The Netherlands. His research interests are in the areas of component-based development, Web services, enterprise and system modeling, geographic information systems (GIS), and location-based services. He received his Graduate Engineering Degree and Master’s of Philosophy in Computer Science and GIS from the Faculty of Electronic Engineering, University of Nis (Yugoslavia) (1993 and 1998, respectively). He has been working since 1993 as a researcher and teaching assistant in the fields of Computer Science, Software, and System Engineering, first with the University of Nis (Yugoslavia), and after February 2000 with the Delft University of Technology (The Netherlands). During this period he has authored a number of publications.

Xiaomeng Su received her master’s degree in Computer Science from Renmin University of China (2000). She is currently a PhD student at the Norwegian University of Science and Technology (NTNU). Her research interests include concept modeling, information systems engineering, and system interoperability.

Juan Trujillo is a professor at the Computer Science School of the University of Alicante, Spain. He earned his PhD in Computer Science from the University
of Alicante (2001). His research interests include database modeling, conceptual design of data warehouses, multidimensional databases, OLAP, and object-oriented analysis and design with UML. He has published papers in international conferences and journals such as ER, UML, ADBIS, WAIM, and IEEE Computer. He is a program committee member of several workshops and conferences, including ER, DOLAP, and SCI. He can be contacted at: jtrujillo@dlsi.ua.es.

Antje von Knethen received her Diploma degree in Computer Science from the University of Bremen (1996). Thereafter, she was a member of the research group for Software Engineering in the Department of Computer Science at the University of Kaiserslautern, where she received a PhD in Computer Science (2001). In the same year, she started working on the requirements engineering competence team at the Fraunhofer Institute for Experimental Software Engineering (IESE) in Kaiserslautern. In 2002, she took over the leadership of this team. One year later, she decided to continue her career in an industrial environment. Now, she works at T-Mobile Germany in the Department of Process and Portfolio Management. Her research interests include requirements engineering, in particular requirements management, object-oriented analysis, and empirical software engineering.

Kurt Yano is an auxiliary professor at Jefferson Community College. He received a Master’s of Science in Information Systems from Drexel University, Philadelphia (2002), and earned a Bachelor’s of Science from West Liberty State College, West Virginia, in Business Administration with a specialization in Computer Information Systems. His technology interests include human-computer interaction evaluation techniques and user-centered design techniques. He is also a member of such groups as the Association of Information Technology Professionals and the National Business Administration Honor Society. He can be contacted at: drexmsis@cs.com.