

About the Contributors

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Jesus G. Boticario is Professor of several courses at UNED concerning Artificial Intelligence subjects at the Computer Science School. He has been invited speaker at national and international conferences, forums and institutions. He has published over 200 research articles. He has participated in 19 R&D funded projects (Spain, USA, EU). He is head of aDeNu research group, and Scientific Coordinator in European and National funded projects in the areas of e-learning and e-inclusion. Jesus is Program Committee member at National and International Conferences. He has co-chaired International Workshops in the areas of user modeling and accessibility. He is reviewer of research projects and international journals. He has held several positions at UNED in the ICT area.

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Cristina Bender received her Master in Computer Science at the Universidad de la República, Uruguay. She obtained her degree on Electronic Engineering at the Universidad Nacional de Rosario, Argentina. She is Professor and Researcher at the Department of Systems and Informatics of the Facultad de Ciencias Exactas, Ingeniería y Agrimensura of the Universidad Nacional de Rosario, and at the Facultad de Química e Ingeniería Rosario of the Universidad Católica Argentina. She participates in international and national research projects related to her research interests. Also, she is coauthor of many articles in international and national journals and conference proceedings, and is reviewer of some papers and journals. She participates as a researcher at the Research Group of Databases at the Facultad de Ciencias Exactas, Ingeniería y Agrimensura, Universidad Nacional de Rosario. Her research interests include databases technologies and information retrieval.

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Constanta-Nicoleta Bodea is Professor at the Academy of Economic Study Bucharest (ASE), Faculty of Cybernetics, Statistics and Economic Informatics, Economic Informatics Department. Currently, she teaches Artificial Intelligence, Data Mining, and Project Management. She coordinates numerous research projects at national level and achieved a high expertise in managing projects with multiple consortia. She was involved in research projects addressing topics related to competence management systems, technology enhanced learning, collaborative systems. She is author of 11 books and more than 50 papers on project management, Information Systems, and Artificial Intelligence, being honored by IPMA with the Outstanding Research Contributions in 2007. Her research interests include knowledge management, e-learning systems, ontology, recommender systems, and educational data mining.

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Daniel Burgos works as Head of User Experience Lab in the Research & Innovation Department of Atos Origin, Spain, since 2007. In addition, he is an Associate Professor in Technology-Enhanced Learning and ICT at the International University of La Rioja. His interests are mainly focused on adaptive elearning, elearning specifications, learning & social networks, and educational egames, and he is, or has been involved in the research projects Stellar, Gala, Go-MyLife, Grapple, Telma, GameTEL, Pauta, Unfold, Learning Network for Learning Design, ProLearn, TenCompetence, EU4ALL, NiHao, Kaleidoscope, Suma, Sister, ComeIn, et cetera. He holds degrees in Communication (PhD), Computer Science (Dr. Ing), Education, and Business Administration.

Ana Casali received her PhD and her Master's degrees in Information Technologies at the University of Girona, Spain and she obtained her degree in Mathematics at the Universidad Nacional de Rosario (UNR), Argentina. She is Head of the Computer Science Department since 2007 and Professor at the Facultad de Ciencias Exactas, Ingeniería y Agrimensura, UNR since 1991. Also, she is Researcher in the Centro Internacional Franco Argentino de Ciencias de la Información y de Sistemas (CIFASIS). She has worked in several international cooperation research projects and her research interest includes agent architectures, knowledge representation, approximate reasoning, and recommender systems and their applications to education. She has participated as a member of the conference program committee

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in many scientific events, and she has been reviewer of different publications and journals. She also is author of many research articles, mainly in the field of Artificial Intelligence and its applications.

Evandro Costa received his Doctorate in Electrical Engineering at the Federal University of Paraiba, Brazil. He is currently an Associate Professor of the Computing Institute at the Federal University of Alagoas, Brazil and Director of the same Institute. He is also a collaborator Professor in the graduate program at Federal University of Campina Grande (UFCG), Paraiba, Brazil. His research interests include multiagent systems, knowledge representation and reasoning, ontology and semantic Web, e-learning systems, information retrieval, and recommender systems. He has published over 100 peer-reviewed papers. He has served on the program committees for many international and national conferences, and as a reviewer for some journals. He teaches several issues, such as, Artificial Intelligence, multiagent systems, data mining, and so on.

Maria-Iuliana Dascălu has a Master Degree in Project Management from the Academy of Economic Studies, Bucharest, Romania (2008) and a Bachelor Degree in Computer Science from the Alexandru-Ioan Cuza University, Iasi, Romania (2006). She is a PhD student in Economic Informatics at the Academy of Economic Studies, combining her work experience as a programmer with numerous research activities. Her research relates to computer-assisted testing with applications in e-learning environments for project management, competences development systems, and their benefits to adult education. Maria Dascălu is a Certified Project Management Associate (2008). She also conducted a research stage at the University of Gothenburg, Sweden, from October 2009 to May 2010.

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Alicia Diaz is a Professor at La Plata Nacional University (UNLP) since 1992 and she has also been working for LIFIA since 1988. Nowadays, she is a member of its Board of Directors. She graduated as Licentiate in Computer Science in 1992 and obtained a PhD in Computer Science at Université Henry Poincaré-Nancy I (France) in 2005. She is the author of more than 50 research articles mainly in the area of hypermedia, object oriented programming, databases, and knowledge management. At the moment, she is leading a research group which is working in the field of CSCW and Semantic Web. Furthermore, she actively participates in scientific events as a member of the conference program committee, workshops, and as a reviewer of some journals.

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Lucas Drumond is a PhD student at the Information Systems and Machine Learning Lab (ISMLL) at the University of Hildesheim, Germany, under the supervision of Prof. Dr. Lars Schmidt-Thieme and Dr. Tomas Horvath and is a scholarship holder of CNPq, an institution of the Brazilian government for the scientific development. He received a Bachelor degree in Computer Science and a Master's degree in Electrical Engineering from the Federal University of Maranhao, Brazil. He has been part of the Program Committee of Semantic Web and Applications track of the ACM Symposium on Applied Computing in 2010 and 2011. Currently his main research interests are in the field of machine learning, specifically factorization models, multi-relational learning, recommender systems, and statistical relational learning.

James M. Foster is pursuing a Ph.D. in Computer Science and Cognitive Science at the University of Colorado at Boulder. He completed a B.S. in Computer Science Engineering at the University of Florida in 2009 before joining CU-Boulder. Since then he has worked as a Research Assistant in the Computational Language and Education Research Lab (CLEAR). His research interests include cognitive modeling, lexical semantics, and educational technology. His current research projects include topics related to concept map creation in automatic tutoring systems, teacher knowledge and practice change with use of educational technology, cognitive modeling of analogical reasoning, and metaphorical extension of word senses.

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Thieme Hennis is a PhD researcher in the Systems Engineering Group of the Faculty of Technology, Policy, and Management of Delft University of Technology. Before joining the university, he was involved in the design of social software applications and environments to support professionals in their day-to-day tasks at Peers.me. In his research, he focuses on reputation as a social currency in online professional communities. More specifically, he researches the influence of reputation on interaction and contributions in communities, and focuses on building reputation standards that support the exchange and creation of knowledge in learning communities, improve relevancy of recommendations, and sustain self-organization.

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Olavo Holanda is undergraduate student at Federal University of Alagoas in Computer Science. He is project researcher of the Group of Optimization of the Web - GrOW, Computing Institute, Federal University of Alagoas, Brazil. His research interests include recommender systems, social crawlers, Semantic Web, and multi-agent systems. Olavo is conducting a research project involving the development of a virtual learning environment based on Semantic Web services and intelligent agents. The environment adopts a component-based software architecture which modularizes the system functionalities and infrastructure control. His project uses Java programming language and Agent frameworks, such as JADE. Olavo Holanda should receive his B.Sc. degree in 2011.

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Juha Leino is a part-time Teacher and Researcher at the School of Information Sciences (SIS) at the University of Tampere, Finland. He has an MSc in Interactive Technology from the University of Tampere, and he has lectured a course on user-centered design at the University of Tampere since 2006. His research interests center on human factors, in particular supporting human cognition, in complex

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Rafael-Ferreira Leite de Mello is Master's candidate at Federal University of Pernambuco. He is external member of GrOW - Group of Optimization of the Web and member of OBIE - Ontology-Based Information Extraction. He has participated in projects involving interactive tools like video conferencing and virtual communities, but the main theme was explored Web 2.0 tools focused on blogs. Rafael also worked on the digital and social inclusion by given computer classes to children from public schools in Brazil. These classes had the objective to increase interest in computing and help children participate in the Brazilian Informatics Olympiad. His research interests include artificial intelligence, software engineering, and Semantic Web, all applied to Web 2.0 tools.

Adina Lipai has a Bachelor Degree in Informatics from the Academy of Economic Studies, Bucharest, Romania. She started as a junior researcher in a research institute in sports medicine, involved in several research projects. She also worked as Teaching Assistant at the artificial intelligence course. Adina Lipai earned a PhD in Economic Cybernetics and Statistics at the Academy of Economic Studies. Her doctoral research related to Web search clustering. She is working as a software developer in Holland, developing knowledge management systems. She is experienced in working in multinational projects. Her research interests include knowledge management, recommender systems, and innovative approaches for increasing the search performance.

Chengzhi Liu has been a postdoctoral fellow at the department of Computer and Information Science, Norwegian University of Science and Technology since December 2009. He received his Bachelor and Master's degrees in Computer Science from Shandong University, China in 2001 and 2005, respectively. He was awarded a PhD degree in Computer Science by Renmin University of China in 2009. During his PhD studies, he participated in two international projects of developing Ubiquitous Doctors Assistance System and Doctor Workstation System. He is currently involved in a NFR VERDIKT project for mobile collaborative learning in Trondheim, Norway. He focuses on facilitating collaboration among learners with context awareness and recommendation technology. His research interests include computer supported collaborative work, mobile learning, mobile commerce, context-aware computing, recommender system, and intelligent agent technology.

Stephan Lukosch is Associate Professor at the Delft University of Technology. His current research interests include collaborative design and engineering, collaborative storytelling for knowledge elicitation and decision-making, intelligent and context-adaptive collaboration support, and design patterns for computer-mediated interaction. In 2007, he published a foundational book on patterns for computer mediated-interaction. In 2003, he received a Dr. Rer. Nat. in Computer Science with distinction for his doctoral thesis on transparent and flexible data management for collaborative applications. His articles appeared in various journals including the *International Journal of Cooperative Information Systems*, *International Journal of Human Computer Studies*, and *Journal of Universal Computer Science*. Currently, he is a steering committee member of the special interest group on Computer-Supported Cooperative Work (CSCW) of the German computer science society and CRIWG conference on Collaboration

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Keith Maull is pursuing a PhD in Computer Science at the University of Colorado at Boulder. He also holds an MS in Computer Science from the University of Colorado at Boulder and a BA in Computer Science from Indiana University at Bloomington. He has over 10 years of broad industry software development experience. He has worked for Fortune 100 companies such as Hewlett-Packard and IBM as well as start-up and non-profit companies. His research interests are in data mining, educational informatics, technology-enhanced pedagogy, and computational approaches to educational decision making, with particular focus on examining behavioral patterns in e-learning environments. His current research is in examining computational tools for examining and understanding teachers' behavioral patterns in curriculum planning environments and their impact on pedagogy.

Christos G. Mettouris is a graduate of the Computer Engineering & Informatics Department in the University of Patras. He holds a Master's degree of the same department. He has published his diploma thesis work in the 1st Hellenic Scientific Student Computing Conference, obtaining an award for presenting one of the 3 top papers. He has been a member of the e-Learning sector of the Research Academic Computer Technology Institute (RACTI). He is currently a member of the Software Engineering and Internet Technologies (SEIT) Lab of the Computer Science Dept. at the University of Cyprus. He was involved with the idSpace project and now is a member of the research team involved in CVN and Asterics projects while also pursuing a PhD degree at the University of Cyprus. His research interests include wireless technologies, mobile networks, ubiquitous computing, and context aware recommender systems.

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George A. Papadopoulos (Ph.D.) holds the (tenured) rank of Professor in the Department of Computer Science. His research interests include software engineering, mobile and ubiquitous computing, multimedia systems, open and distance learning, distributed and high performance computing, e-business, e-health, internet technologies, and service oriented computing. He has published over 100 papers as book chapters or in internationally refereed journals and conferences, he serves in the Editorial Board of 5 international journals and has served as a Chair or Program Committee member in more than 100 international conferences. Professor Papadopoulos is a recipient of an 1995 ERCIM-HCM scholarship award. He has been involved or is currently participating, as coordinator or partner, in over 100 internationally and nationally funded projects (total budget for his participation around 7 MEURO). He is the Director of the Software Engineering and Internet Technologies Laboratory.

Abelardo Pardo received the M.Sc. degree in Computer Science from the Polytechnic University of Catalonia, Spain, in 1992, and the Ph.D. degree in Computer Science from the University of Colorado at Boulder in 1997. He is an Associate Professor of Telematics Engineering at the Carlos III University of Madrid. He has participated in numerous research projects both at international (Genius, E-LANE, iCOPER) and national (SIEMPRE, MOSAIC, Learn3) levels. He also has more than three years experience working for the computer industry in companies such as Mentor Graphics Inc. and AT&T Bell Labs. His research projects included topics related to technology enhanced learning, intelligent tutors, computer supported collaborative learning, and virtual learning environments. His current interests are in the area of computer-supported collaborative learning, adaptive hypermedia, and technology enhanced learning.

Thiago Ribeiro is an undergraduate student at the Institute of Computing (IC), Federal University of Alagoas (UFAL) - Brazil, and a member of the Cognitive Systems Engineering Research Group. He is a Junior Researcher in a project that aims to architect dependable software systems. His research interests include software engineering and graphical web development. Thiago is conducting a research project

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involving a specialist system for supporting the architectural design of robust software systems, based on trade-off analysis of quality attributes. His project uses Java programming language and the Adobe Flex technology. Thiago should receive his B.Sc. degree in 2011.

Edelweis Rohrer holds a MSc. in Computer Engineering from University of the Republic, Uruguay (2010). She obtained her degree on Computing Engineer Systems at the University of the Republic, Uruguay (2002). Furthermore, she has been part of the research project “Web Site Quality in the Health Area” (SALUS) of the Latin American Program of Science and Technology for Development (CYTED). She currently is a PhD student at the University of the Republic, Uruguay. Her research area is design of ontology networks and Semantic Web reasoning. Recently she has been awarded by Google with a fellowship to attend to the 20th International World Wide Web Conference, which took place in Hyderabad, India, from 28th March to 1st April, 2011. She also is part of the research project “Quality Health Information Retrieval” of the Latin American and Caribbean Collaborative ICT Research (LACCIR). Furthermore, she works as a Systems Analyst in the Ministry of Economy and Finance, Uruguay.

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Tamara Sumner is Executive Director of Digital Learning Sciences, a collaborative R&D center between the University of Colorado and the University Corporation for Atmospheric Research. Research there examines how cognitive tools, computational algorithms, and interactive media can improve learning outcomes and learner engagement. The aim is to invent successful technologies, processes, and know-how that can be replicated on a wider scale. Sumner is also an Associate Professor at the University of Colorado, with a joint appointment in Cognitive Science and Computer Science. She has extensive research publications in human-computer interaction, educational technology, digital libraries, and intelligent systems. Her teaching focuses on user-centered design and cognitive science research methods.

Libertad Tansini graduated as a Computer Engineer from University of the Republic, Uruguay in 1999 and obtained her Masters Degree in 2001. She pursued her PhD studies in Chalmers University of Technology in Gothenburg, Sweden, and graduated in 2008. She teaches at the Institute of Computer Science, Faculty of Engineering of the University of the Republic, Uruguay. She has been working in the field of data mining to improve users search experience for more than 5 years, including algorithms for collaborative filtering in recommendation systems as well as classification and detection of user intent to improve search engines.

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Jody S. Underwood has spent over 20 years doing research and development of intelligent tutoring systems, digital learning environments, assessment design, and effective feedback. She received a Ph.D. in Science and Technology Education from the Technion-Israel Institute of Technology in 1998 and a M.S. in computer science from Rutgers University with a focus on artificial intelligence in 1987. Between her two advanced degrees, she did research and development of intelligent tutoring systems at Carnegie Mellon University and of AI applications at NASA Ames Research Center. Since earning her doctorate, Dr. Underwood has done R&D at Vanderbilt University's Learning Technology Center,

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the Math Forum (a renowned online mathematics education portal, now based at Drexel University), Educational Testing Service, and Pragmatic Solutions. At Intelligent Automation, she works on simulations and games for learning.

Wim Veen is full Professor of Education & Technology in the Systems Engineering Department of the Faculty of Technology, Policy and Management of Delft University of Technology. He has been involved in institutional strategies for educational innovations at his university. He researches the development of new concepts and models for ICT enabled learning in both the private and public sector. He introduced the concept of Homo Zappiens, a generation of learners with new learning strategies demanding flexible and participative education. Together with a multidisciplinary team of researchers he contributes to e-learning developments in organizations where new learning cultures are emerging for a knowledge intensive and creative economy. Key ideas in his view are: Game developers are excellent educationalists; learning and working are intimate lovers; knowledge is communication about meaning.

Yabo Xu is an Assistant Professor at School of Software, Sun Yat-sen University (P. R. China). His research focuses on large-scale data mining applications, web search, cloud computing, and information privacy. He is an expert on advanced analysis techniques and their applications in various domains, e.g. education, biology, and e-commerce. He has published widely on top data mining conferences and journals. Despite his proliferation in academia, he also has a keen interest in turning research ideas into successful products. He holds a patent for a summary-based search engine and co-founded a search engine startup. He is currently supervising the development of a general-purpose data analysis platform with a focus on large-scale data logging, collection, analysis, and real-time feedback.

Mingming Zhou is an Assistant Professor at Psychological Studies, National Institute of Education, Nanyang Technological University (Singapore). Her research interests include motivation, meta-cognition, pedagogy and educational technology. She has been working intensively and productively in researching how to use computer technology to improve teaching and learning effectiveness and efficiency. One of her major contributions to this field is the development of computer tracing methods to capture learning processes on the fly. She has been involved in many international projects, published in a series of books on intelligent learning systems and computer-based learning and presented in top conferences in e-learning. She is currently supervising the development of a computer tracking tool on web search in academic contexts.