

About the Contributors

Abtar Darshan Singh is from Malaysia. She obtained her PhD in E-Learning in 2001 from University Malaya. She has 36 years of teaching experience at all levels of the education sector. In 2014, Abtar was offered to lead the school of E-Education at Hamdan Bin Mohammed Smart University, Dubai, UAE. She has published widely since 1996 in instructional design, multimedia, online learning, blended learning, learning objects, MOOCs and smart learning. Abtar's current research interests are learning design, smart learning environments, next-generation digital learning environments and design thinking. Abtar is a recipient of the Fulbright Scholarship and she has consulted widely under the umbrella of many international organizations such as the Commonwealth of Learning, UNESCO, and the World Bank. She is a recipient of teaching and learning and technology-enhanced learning awards such as the Blackboard Excellence e-Learning Award, Innovative Excellence in Teaching, Learning and Technology Award and awards in research done in learning objects, all from the USA. She also received awards from UNESCO and Commonwealth of learning for her impactful work in instructional design and technology.

Shriram Raghunathan works on Natural Language Processing, Instructional Design and Gaming. He completed his PhD in Computer Science and Engineering in 2008 and did his Masters in Instructional Design (online) from Open University of Malaysia. His significant achievements include setting up India's first Centre of Excellence in Pervasive Computing in 2007 and completion of 4 funded projects (mobile Tamil interfaces, mobile keypad standardization and plagiarism checking) in Tamil Computing since 2004. Shriram has published widely in domains of cloud computing, natural language processing and instructional design and guided 4 Doctoral students for their PhD since 2014.

Edward Robeck has held a range of positions in education, giving him a unique and broad perspective. He has worked as a classroom teacher and as a university professor focusing on pre-service science teacher preparation, and teacher professional development. Dr. Robeck has taught classes in person and online for several institutions and for diverse student populations in settings on several continents. His experience in curriculum development is equally varied, including work in technology-based instruction, print, and visual media. His current projects include investigating the use of student-generated multi-media, especially in ways that promote civic engagement. In all these situations Dr. Robeck has worked to extend the horizons of education in ways that make learning more relevant and empowering.

Bibhya Sharma hails from Fiji and obtained his PhD in Applied Mathematics from the University of the South Pacific (USP). He started his career as a secondary school Mathematics teacher in 1994 and moved to tertiary teaching in 1997 as a tutor at USP. He has since taught at various capacities at

About the Contributors

USP and took up his current position as Associate Dean Learning and Teaching within the Faculty of Science, Technology and Environment in 2010 and moved up to the ranks of Associate Professor in Mathematics in 2012. He is a member of a number of professional mathematics societies and unions and has published more than 90 articles and book chapters in the fields of robotics, biologically inspired processes, mathematics education, and the TLPs of higher education. He is very passionate about research in motion planning and control of robots using the Lyapunov based Control Scheme and has made significant contributions to the research area. His current research is on concepts such as motion camouflage, landmarks, swarming, formation patterns and tunneling which all are integrated to the problem of motion planning and control. He has also been active in looking into newer mechanical systems and model them for the biologically inspired concepts and activities. Bibhya also has noteworthy contributions in area of Science, Technology, Engineering and Mathematics (STEM) education and new tools and technologies to enhance higher education in the Pacific region. He champions adaptive works and innovations in the areas of eLearning and mLearning for higher education. More information regarding his work and achievements can be found at <http://scims.usp.ac.fj/~bibhyasharma/>.

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Suad Abdul Aziz Al-Furaih is an Associate Professor of Instructional Technology at the Faculty of Education, Kuwait University in Kuwait. She received her M. Sc. in Education from University of Southern California and her Ph. D. from University of Oregon, USA. She was an Assistant Dean of Research, Consultation and Training for four years and a Director of Curriculum and Instructions Master program for three years at the Faculty of Education at Kuwait University. She has taught undergraduate and graduate courses at the Faculty of Education and Post Diploma Online Courses at Hamdan Bin Mohammad Smart University in Dubai, UAE. Her research interest and publications, in Arabic and English, are focused on emerging technologies in education, technology integration in teacher education, and professional development.

Sara Saleh Almarzooqi is a PhD student at Hamdan bin Mohammed Smart University in Educational Leadership, E-Learning. She holds a Master's degree in the Art of Communication and a Bachelor's degree in English Language & Literature from University of Sharjah. She is currently the Director of Sharjah Public Libraries at Sharjah Book Authority. She worked for the Ministry of Education as an English Language teacher for three years, and for Sharjah Ladies Club as a Collage Talent Center Manager for seven years.

Mohammad Ayish's academic experience includes 30 years of teaching and administration at universities in Jordan and the United Arab Emirates. Before joining AUS in Fall 2012, he had served as Dean of the College of Communication at the University of Sharjah and had worked as a consultant for the UAE National Media Council. His research interests include satellite broadcasting, digital communications, social media and media ethics. His most recent scholarly work has been co-authored with Noha Mellor: Reporting in the MENA Region: Cyber Engagement and Pan-Arab Social Media. (2015). New York: Rowman & Littlefield.

Akeshnil Bali is the Assistant Programmer at the University of the South Pacific. He looks after the Project Online Mathematics Diagnostic Tool. He holds a Master of Science in Information System. His area of interest is eLearning, Mobile Apps development and administration of servers.

Natalie Bursztyn was Assistant Professor (Geoscience Education) at California State University - Fullerton from 2015-2018, now faculty at Quest University, Canada. Research interests are primarily in geoscience education at the college level, including the integration of new technologies in the classroom to provide students with interactive learning experiences. Received bachelor's (2003) and master's (2005) degrees in geological engineering in mineral and energy exploration at Queen's University, Canada. Received the Geological Society of America's Biggs Earth Science Teaching Award in 2011. Earned Ph.D. in geology with a focus on geomorphology and geoscience education in 2015. Avid cyclist, knitter and player of roller derby.

Sohail Dahdal is a Professor of Media at the American University of Sharjah. He has taught media and journalism at the Australian Film, Television and Radio School and at the University of Technology, Sydney. Dr. Dahdal's areas of interests are social media, multiplatform storytelling and new media ecology in the Arab world. He is also an award winning filmmaker with 20 years experience in creating pioneering stories for some of the most innovative media organizations in Australia including Lonely Planet Publication, SBS and ABC Television Stations.

Mehmet Durnali has B.Sc. degree from faculty of education and M.A. degree in educational administration awarded by Boğaziçi University -2004- and Hacettepe University -2015- respectively. Now he has been writing Ph.D. dissertation in educational science at Hacettepe University. Apart from his education, professionally he has been working in state education sector for almost 13 years taking different roles. He had worked as ICT teacher for state schools for two years and as assistant principal for a primary school for two years. Then, he has been working as national-based educational project developer and manager at central bodies of Ministry of Turkish National Education since 2008. Now he is working at the Department of Open Education under General Directorate of Lifelong Learning as senior project developer and manager. His main area of expertise is in the field of organizational goals, educational supervision, lifelong learning, project management and use of ICT in education. He has not only contributed to seven international book chapters but also to eleven conference papers, several international and national articles. He is also a peer reviewer for Hacettepe University Journal of Education. He was involved in many international courses funded by the European Union, international camps, projects, and conferences. Also, he will soon be chairman of the board of directors for The Anatolian Science Association.

Aluwesi Volau Fonolahi is the Student Learning Specialist at The University of the South Pacific. She holds a Master of Science in Mathematics. She coordinates the projects Academic and Study Skills Workshop, At-Risk Students programme and the Online Mathematics Diagnostic Tools at the Faculty of Science, Technology and Environment.

About the Contributors

Elvira Galimullina graduated from Elabuga State Pedagogical University (Russia) in 2007 with a degree in computer science and mathematics. After graduation until 2013 she worked as an assistant of the Department of Informatics and discrete mathematics of the above-mentioned University, from 2013 to the present time as a senior lecturer of Elabuga Institute of Kazan Federal University of the Department of mathematics and applied Informatics. Elvira Galimullina started her scientific work by studying the possibilities of expert systems to improve the quality of education. The further development of her scientific interests was influenced by the conclusions that the quality of education is significantly influenced by the use of electronic learning tools. Elvira Galimullina conducts research in the field of e-learning, information security of children in an open information society, as well as the organization of smart education at the University. She is an expert in the implementation of e-learning with the transfer of classroom training in e-learning courses on the site of distance learning of the Kazan Federal University. Currently, special attention is paid to the study of new features of LMS, cloud technologies, mobile devices to create a smart space for training future teachers.

Lucia-Marie Ganendran is from Australia and obtained her PhD in Statistics from the University of New South Wales. She started her teaching career in 2005 with high school students and became interested in how students were being prepared for university. She moved into tertiary teaching in 2010 in Australia and took up her current position in Saudi Arabia in 2017. Teaching is a passion, and she is currently pursuing several lines of research into statistics education and instructional design for females and English Language Learners.

John D. Garofalakis is Professor and Director of the Software Division at the Department of Computer Engineering and Informatics, University of Patras, Greece, and Vice-President of the Computer Technology Institute and Press “Diophantus” (CTI). He has published more than 180 articles in refereed International Journals and Conferences. His research interests include: Performance Modeling, Distributed Computer Systems, Queuing Theory, Web and Mobile Technologies, Ubiquitous Computing, Educational Technologies.

Joseph Anthony Gutierrez graduated from California State University – Fullerton in 2017 with a Bachelor of Science in Geology. Undergraduate research focused on geoscience education and development of learning tools for introductory and upper-division geology courses. Other research interests include planetary geology and structural geology. Plans to attend graduate school to continue his research and pursue a career in geoscience. Dog enthusiast, video game connoisseur, hiker, cyclist and D&D Paladin.

Muhammad Hamid is Lecturer, Computer Science in the Department of Statistics and Computer Science, University of Veterinary & Animal Sciences, Lahore, Pakistan. He holds a degree in M.Sc. (Information Technology) and M. Phil. in Computer Science from the University of Lahore. He is doing Ph.D. in Computer Science. He has served as a visiting lecturer at several institutions. He has worked in IT Centre, UVAS for six years. He is supervising many Undergraduate Final Year Projects and an external examiner of multiple universities. He is also supervising many MSCS/M.Phil. Students. His current research interests are Software Engineering, Software Project Management, Developing Intelligent Business Applications, Programming Languages and Artificial intelligence.

Megan Hastie is a Doctor of Education and the STEM Teacher at Al Yasat Private School, Abu Dhabi (UAE). A graduate of the University of Tasmania and James Cook University, Megan has worked in leadership roles in e-learning and e-health, research and development, Indigenous education and teacher professional development. Megan is the recipient of multiple awards, both National and international for excellence in teaching and as an innovator in Technology Enhanced Learning (TEL). Her collaboration with Australasian and Pacific, Middle East and international academics, specifically in the use of the 'Blended Learning' mode of delivery and educational robotics, is documented in numerous e-learning publications, journals and presentations.

Lana Hiasat is the program coordinator and full-time faculty at the General Studies department in the Dubai Men's College, Higher Colleges of Technology in the United Arab Emirates. Drawing on her background of cultural diversity, trainings in emotional intelligence, creativity, and intercultural understanding, Dr. Hiasat offers unique insights into educational leadership, cultural inclusion, and integration of technology. The doctorate research was on blended learning approaches in integrating technology into higher education programs.

Joanna Huang is the Learning Technology Specialist for the Sciences at Harvard University's Cabot Science Library. She is passionate about investigating the relationship between digital technology, the pedagogical practices of educators, and how they impact learning and educational access. Joanna is very interested in learner-centered pedagogy and how learning spaces affect that. This involves investigating how innovative and cutting-edge multimedia digital technology can help enhance the pedagogical practices and positively impact active learning - both in face to face and distance settings. Previously, Joanna was a learning designer at the Teaching and Learning Lab of the Harvard Graduate School of Education where she designed blended learning experiences and supported learning technologies for the Harvard Teacher Fellows program. Joanna brings her experiences from the MIT Teaching Systems Lab, Harvard Kennedy School, ExtensionEngine, and Carnegie Foundation for the Advancement of Teaching to inform her work and thinking. Joanna holds a Masters degree in Technology, Innovation, and Education from the Harvard Graduate School of Education and a Bachelors degree in Cognitive Science, Human Computer Interaction specialization from the University of California, San Diego.

Saba Khalil Toor has more than 21 years of working experience, with 6 year in software development industry and 15 years in academia. In Software industry, she worked at leading software houses of the country such as CresSoft (Pvt.) and Vroom (Pvt). In academia, Dr Saba worked at Virtual university of Pakistan for more than 14 years as assistant professor and Head of Computer Science department. There she was also a co-director for Center of Education and Technology and conducted research on several educational tools/technologies. She has also been Director, Center for Learning Design and Software Development at Imperial College of Business studies, Lahore and worked to establish this center. Currently she is associated with Forman Christian College University, Lahore, Pakistan.. Research interests: Educational Technology, eLearning and Software Engineering. She has written several papers and presented them in Pakistan as well as abroad.

T. S. Pradeep Kumar received his PhD degree in Computer Engineering from Vellore Institute of Technology, Vellore in 2017. He did his masters in embedded systems in College of Engineering, Guindy, Chennai in 2005. He did his bachelors in Electrical Engineering in Madras University in the

About the Contributors

year 1998. He is a full associate professor in the School of Computing Science and Engineering of VIT Chennai. He has published more than 15 papers in peer reviewed international journals and conference proceedings, and two book chapters. His research interests are in the architecture of Internet of Things Systems, Wireless Networks, Sensors Networks and ELearning. He is also active in the area of energy-efficient sensors and actuators.

Elena Ljubimova graduated from Elabuga State Pedagogical Institute (Russia) in 1993 with a degree in mathematics and computer science. After graduation she worked until December 2000 as an assistant at the Department of Computational Mathematics of the above-mentioned institute. From 2000 to the present time she has been a senior lecturer of the Chair of Mathematics and Applied Informatics at the Elabuga Institute of the Kazan Federal University. Elena Ljubimova's field of scientific interests is quite broad and since 2000 has been oriented towards the use of information and communication technologies in education. The main research areas are e-learning, the use of electronic textbooks at school, the organization of smart training at the university. She is an expert on the introduction of e-learning with the transfer of classroom classes to e-courses at the distance learning site of the Kazan Federal University. Currently, she is exploring new capabilities of LMS, open online courses, cloud technologies, mobile devices to create a smart space for the training of future teachers.

Elena Merzon graduated from Elabuga State Pedagogical university (Russia) in 1993. Elena Merzon has more than 25 years of teaching experience. Presently Candidate of science in Pedagogy, Associate Professor Elena Merzon is the director of Elabuga Institute of Kazan Federal university. Elena Merzon has an honorary title "Honored Teacher of the Republic of Tatarstan". She is the author and scientific supervisor of the international forum "The Festival of school teachers in Elabuga", which has been held since 2010 with the support of the Ministry of Education and Science of the Republic of Tatarstan (Russia). For significant merits in the field of education and long-term conscientious work, Elena Merzon was awarded with the Certificate of Honor of the Ministry of Education and Science of the Russian Federation. The sphere of her scientific interests is broad and is connected with the introduction of innovative practices in the education of schoolchildren and students. Elena Merzon is the author of more than 60 scientific works, a number of educational and methodical works and electronic educational resources introduced into the educational process of the university and school. She is the initiator of conducting studies on the introduction of e-learning with the transfer of classroom lessons to e-courses at the distance learning site of the Kazan Federal University. At present, one of the areas developed by it is smart education. She is the author of the architecture of smart learning courses in higher education (Baku, 2016).

Saima Munawar is a faculty member in the Department of Computer Science, Virtual University of Pakistan, Lahore, Pakistan. She is a PhD scholar at National College of Business Administration and Economics (NCBA&E) Lahore. She has done MS-CS and MIT from Lahore College for Women University, Lahore. She has several publications on various technical subjects in international and local HEC recognized journals. Several internationally journals have appointed her as a reviewer and an editor board member. She is supervising MSCS/M. Phil thesis students and undergraduate Final Year Projects. Her current research interests are Software Engineering, Artificial intelligence and Education technology.

Joseph Wynn Mwangoka is currently a Senior Lecturer at the Nelson Mandela African Institution of Science and Technology, Arusha, Tanzania. He received his Ph.D. degree from Tsinghua University, Beijing, China in 2009. Until 2012 he was a Senior Research Engineer at the Institute of Telecommunications, Aveiro, Portugal.

Swasti Shubha Narayan (BSCGCed, PGD Sc) is an Executive Project Officer with the Faculty of Science, Technology & Environment at the University of The South Pacific (USP). She has more than three years' experience with cohort teaching projects and has keen interest in integration of ICT tools in Education and teacher education.

Catherine Akoth Ongoro is at present an Assistant lecturer at Jordan University College, Morogoro, Tanzania. She received her Masters in Information and Communication Science and Engineering, specializing in Information System Development and Management at Nelson Mandela African Institution of Science and Technology (NM-AIST), Arusha, Tanzania in 2014. Her research interest is on gamification in Education, smart learning, agriculture and machine learning.

Anthony John Pollitt, a clinical nutritionist and educator, has more than 30 years of teaching experience in a variety of contexts in the Middle East, Japan, and New Zealand. Several years' experience in health and wellness teaching and guidance, also many years of experience in editing, developing and writing training materials that reflect the above. He is currently teaching and leading the nutrition course at the Higher Colleges of Technology. Actively promotes personal development through nutritional and physical awareness. He has a strong student-focused concept in advising, teaching and learning along with a belief in empowering colleagues and students. He believes in positive management and providing colleagues with the environment to discover and encourage both themselves and their peers.

Maria Rigou holds a Diploma in Computer Engineering and Informatics (1997, University of Patras, School of Engineering), an MSc in Computer Science, a PhD in Computer Science (2005, dissertation: Effective Algorithms for Web Personalization based on Web Mining), as well as a Master in Arts "Graphic Arts-Multimedia" (2011, Hellenic Open University). Currently she is a lecturer (for laboratory courses) at the Computer Engineering and Informatics Department (University of Patras) and a tutor at the Hellenic Open University (Postgraduate Programme in Information Systems). The last 20 years she has participated in the design, development and technical management of national and international R&D IT projects and has published research articles in scientific journals, books and conference proceedings. Her research interests are in the fields of Web technologies, Personalization techniques, Web Mining, Modeling Web Apps, User modeling, Semantic Web technologies, Human Computer Interaction, Usability evaluation and Graphics design.

Sunil Kumar Sharma is Assistant Professor of Mathematics at college of Computer and information Sciences. Majmaah University, Saudi Arabia Since 2013. He received his PhD in Mathematics from Gautam Buddh Technical University, Lucknow India in 2012. He was Associate Professor at Kanpur Institute of Technology, India from the 2012 -2013 His areas of research interest are to deal with the mathematical modeling, numerical computation of biomechanics of diarthrodial joints, multicriterion decision model for production systems, Robot in the field of education. The current research involves mathematical modeling of physical and biological problems in general and mathematical analysis.

About the Contributors

Anu Vedantham joined Harvard Library in 2016 as the Director of Learning and Teaching Services for the FAS Libraries. She directed the Weigle Information Commons at the Penn Libraries for nine years. Her research on global warming at the Environmental Defense Fund has been recognized by the Intergovernmental Panel of Climate Change (IPCC) as a significant contribution to the 2007 Nobel Peace Prize. At Stockton University, she directed the Southern Regional Educational Technology Training Center (ETTC), and served as Interim Associate Provost and Director of Instructional Technology. She served as Director of Grants and Community Initiatives at Stafford Township School District, and as Grants Program Officer at the Telecommunications Opportunities Program at the U.S. Department of Commerce. She holds her doctorate in Higher Education Management from Penn's Graduate School of Education, her New Jersey Principal Certificate, her Masters in Public Affairs from the Woodrow Wilson School at Princeton University and her Bachelors and Masters in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (MIT).

Saravanan Venkataraman obtained his Bachelors degree in Mathematics from University of Madras during 1996 and Masters Degree in Computer Applications from Bharathiar University during 1999. He has completed his PhD in Computer Science in the Department of Computer Science and Engineering, Bharathiar University during 2004. He specialized on automated and unified data mining using intelligent agents. His research area includes data warehousing, data mining and software agents and cognitive systems. In his credit he has 40+ publications in international journals indexed with ISI, Scopus etc., He has presented many research papers in National, International conferences and Journals and also guiding many researchers leading to their PhD degree. He has totally 15+ years' experience in teaching including 3 years as researcher in Bharathiar University. As the credit toward funded projects, he is working with Majmaah University and King Abdulaziz City for Science and Technology, Kingdom of Saudi Arabia with the total project cost of USD \$41500. He is a Senior Member of IEEE, life member of Computer Society of India, Indian Society for Technical Education, and Indian Association of Research in Computing Sciences and International Association of Computer Science and Information Technology. He worked as Professor & Head of the Department of Computer Applications in Karunya University, Coimbatore from 1999-2009. He also served as Director-Computer Applications of Dr. NGP Institute of Technology, Coimbatore, Tamilnadu, India. At present, he is working as Associate Professor in the Department of Computer Science, College of Computing and Information Sciences, Majmaah University, Kingdom of Saudi Arabia.

Steve Carlise Warner has been working as a secondary school teacher and administrator for over thirty (30) years at San Juan Government Secondary School and Waterloo Secondary School. He has also been a part-time and guest lecturer at UWI ROYTEC, The University of the Southern Caribbean and UWI Open Campus; and a e-tutor at Open University Malaysia. Dr. Warner has acquired his academic credentials for B. Sc., Dip. Ed., M. Sc., and Ph.D. His areas of study and specialization have been in Mathematics and Computer Science Student Facilitation, Teacher Education and Distance Education. Having studied and researched in traditional education and distance education environments, he has acquired relevant skills and competencies to deal with formal face-to-face education and distance education systems. Dr. Warner has been in the field of education for over 32 years and dealt with various levels of educational systems from Primary to University level. Dr. Warner has attended conferences

and presented papers locally, the Caribbean, Australia, India, Nigeria, Malaysia and Pakistan. He has been published in different international journals. He is on the Editorial Board of Journal of Distance Education & Research (Pakistan) and the International Journal of E-Learning. Dr. Warner is interested in infusing 21st century skills simultaneously while content is being facilitated in any institution. He believes that this present century requires a different type of learner and facilitator and endeavours to be at the forefront of this educational revolution. Dr. Warner has recently been on a team responsible for infusing technology in the teaching and learning process for primary and secondary school teachers, organized by the Ministry of Education, Trinidad and Tobago.