

Preface

Smart University is an emerging and rapidly growing area that represents a creative integration of smart technologies, smart features, smart software and hardware systems, smart pedagogy, smart curricula, smart learning and academic analytics, and various branches of computer science and computer engineering.

This is the main reason that in June of 2013, a group of enthusiastic and visionary scholars from all over the world arrived with the idea to organise a new professional event and community that would provide an excellent opportunity for faculty, scholars, Ph.D. students, administrators and practitioners to propose and evaluate innovative ideas and approaches, collaborate on design and development of new systems and technologies, and discuss findings and outcomes of research, development, case studies and best practices in Smart Education, Smart e-Learning, Smart University and related areas.

The research, design and development topics of our interest in those areas include but are not limited to (1) conceptual modelling of Smart Education, Smart e-Learning, Smart Universities, Smart Campuses, Smart Analytics; (2) infrastructure, main characteristics, functions and features of Smart Universities, Smart Campuses and Smart Classrooms; (3) Smart University-wide software, hardware, security, safety, communication, collaboration and management systems; (4) Smart Education and Smart e-Learning strategies, approaches and environments; (5) Smart Pedagogy; (6) Smart Learning Analytics and Smart Academic Analytics; (7) modelling of Smart Student/Learner and Smart Faculty; (8) assessment and quality assurance in Smart Education and Smart e-Learning; (9) professional development in Smart Education and Smart e-Learning; (10) social, cultural and ethical dimensions and challenges of Smart Education; and (11) educational applications of various innovative smart technologies such as Internet of Things, cloud computing, ambient intelligence, smart agents, sensors, wireless sensor networks and context awareness technology, and numerous other topics.

Since that initial meeting in 2013, the following books were published as the logical outcomes of a mutually beneficial collaboration between experts in Smart Education, Smart e-Learning, Smart University areas and the KES International professional association, including (1) Neves-Silva, R., Tshirintzis, G., Uskov, V.,

Howlett, R., Lakhmi, J. (Eds). Smart Digital Futures, IOS Press, Amsterdam, The Netherlands (2014); (2) Uskov, V.L., Howlett, R.J., Jain, L.C. (Eds). Smart Education and Smart e-Learning, Springer, Heidelberg, Germany (2015); (3) Uskov, V.L., Howlett, R.J., Jain, L.C. (Eds). Smart Education and e-Learning 2016, Springer, Heidelberg, Germany (2016); and (4) Uskov, V.L., Howlett, R.J., Jain, L.C. (Eds). Smart Education and e-Learning 2017, Springer, Heidelberg, Germany (in print). Those publications contain top quality contributions by individual researchers and research teams in Smart Education, Smart e-Learning, and Smart University areas.

This book serves as one more excellent example of fruitful collaboration within organised professional community of specialists in the Smart University area. It contains peer-reviewed contributions from researchers from nine countries including USA, UK, Australia, Japan, Russia, China, Norway, Romania and Denmark. Those contributions cover various topics such as conceptual modelling of Smart Universities, software systems and technologies for Smart Universities, software systems for students with disabilities at Smart Universities, best practices of building smarter college/university and Smart Campus, innovative approaches to and best practices of Smart Education, Smart Learning, long-life learning and professional development.

It is our sincere hope that this book will serve as a useful source of valuable data and information about current research and developments, and provide a solid foundation for further progress in Smart University, Smart Education, Smart e-Learning and related areas.

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Smart Universities

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