About the Contributors

**Ning Gu** is a Senior Lecturer in the School of Architecture and Built Environment at the University of Newcastle, Australia. He researches in the broad areas of design computing. He is particularly interested in collaborative design, generative design, and virtual worlds. Ning is a pioneer of applying leading-edge Information Technologies in design and learning, and has established an international collaborative design studio using *Second Life*. He has also designed and implemented a wide variety of collaborative virtual environments and applied them in his teaching and research in numerous Australian and international tertiary design institutions including the University of Newcastle, the University of Sydney, MIT, and Columbia University. He has published extensively in the fields of design computing and design education.

**Xiangyu Wang** is Professor in the School of Built Environment at Curtin University. Dr. Wang is an internationally recognized leading researcher in the field of Virtual (VR) and Augmented Reality (AR) in Architecture, Engineering, and Construction (AEC), Education, and Training. He was awarded US National Science Foundation grant to investigate the skill development and transfer from virtual training systems. His current focus is on Building Information Modelling (BIM), AR, and VR integration for AEC and Education/Training. He is the Chair of Australian National Committee of International Society in Computing in Civil and Building Engineering (ISCCBE). He has been invited to give several keynote speeches in BIM research and industrial conferences in Asian area. His work has been published into over 170 refereed books, book chapters, technical journals, and conference papers.

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**Kirsty Beilharz** is Professor of Music, Sonification, and Interaction Design, conjointly in the Faculty of Arts & Social Sciences and the Faculty of Design, Architecture, & Building at the University of Technology, Sydney, and course director of the Bachelor of Sound and Music Design degree. Formerly, Beilharz directed graduate Digital Media at the University of Sydney Design Lab. Beilharz’s research integrates music and generative (algorithmic and Artificial Life) processes applied to sound, real time audio-visual interaction, and data sonification. Her design research includes gestural interaction using multimodality, multi-touch interaction, physical computing, wearable technologies, hyper-instruments, and aesthetics and interactivity in sonification, with a special interest in the representation of bio-data and eco-data. Beilharz is also an internationally recognized composer whose music has been performed by ensembles including Sydney Symphony Orchestra, Nouvel Ensemble Moderne Canada, and Ensemble Recherche Freiburg, and she is a practitioner of the Japanese shakuhachi.
**Barbara Berry** received her MA in Adult, Administrative, and Higher Education from the University of British Columbia, Vancouver Canada. She is currently an Education Consultant in the Teaching and Learning Centre at Simon Fraser University (SFU), Surrey, British Columbia. She provided consulting support services to the TechOne Program instructional teams between 2007 and 2010. She currently consults with the School of Interactive Arts and Technology (SIAT) and the Faculty of Health Sciences (FHS) at SFU. Her research interests include student learning, learning design in STEM-based and health sciences curricula, as well as teaching and learning requirements in spatial thinking and design. Barbara has professional experience in training and development in the software industry as well as health sector. She is a member of the Society for Teaching and Learning in Higher Education (STLHE).

**Dean Bruton** is an Australian artist/designer, author, and visual arts program coordinator who developed the Master’s in Digital Media Program at the School of Architecture, Landscape Architecture and Urban Design at The University of Adelaide from 2003-2011, and earlier, the New Media courses at the SA School of Art, University of South Australia. His specialist research interests include art, architecture, and design practice and its relation to digital media, particularly pedagogy, heritage, and aspects of interdisciplinary visual arts theory/production. Currently his book, “Digital Design: A critical introduction” is in production and will be launched by Bloomsbury Press, UK in April 2012. As Associate Dean International (Architecture) he gave public lecture presentations at Penn State University, USA and a number of Chinese universities including South China University of Technology, Guangzhou, China. He is currently leader of the Digital Arts program at Southern Cross University, Lismore, Australia.

**Carlos Calderón** is an academic at the School of Architecture, Planning, and Landscape at Newcastle University. Calderon is a qualified Civil Engineer and has a PhD in Applied Computing. He has taught widely in Architecture Schools and currently leads a MSc programme and postgraduate modules at Newcastle’s part 2 Architecture Programme. His research interests lie at the intersection of the built environment and computation around three main areas: Energy and carbon futures in cities; smart materials and environments; and intelligent systems and digital design. His work has been recognised in multiple publications and funded projects. He has been a visiting fellow to the Virtual System Laboratory, Gifu University, and Harvard University Graduate School of Design, USA.

**Gabriela Celani** holds a B.A. (1989) and an M.Sc. in Architecture and Urban Design (1997) from the University of São Paulo, and a Ph.D. in Design and Computation (2002) from the Massachusetts Institute of Technology, where she was advised by professors Terry Knight and William Mitchell. She has also developed post-doctoral research at the Technical University of Lisbon, with Prof. José Duarte. She is presently a Professor at the University of Campinas, where she founded LAPAC, the Laboratory for Automation and Prototyping in Architecture and Construction, in 2007. She is the author of *CAD Criativo*, an introduction to VBA programming for implementing generative design tools, and has translated Mitchell’s *The Logic of Architecture* and Moore, Mitchell, and Turnbull’s *The Poetics of Gardens* into Portuguese. Gabriela is also co-founder and co-editor of PARC, an online journal of research in architecture, and acts as a reviewer for many CAAD conferences and journals.

**Clark Cory** is an Associate Professor in the Department of Computer Graphics Technology at Purdue University. Clark’s primary professional responsibility is undergraduate instruction in architectural and construction graphic communication, and visualization utilizing Building Information Modeling. These
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include integrating courses for Computer Graphics majors and several service courses for engineering and liberal art students. He has been the major champion for developing a Construction Graphics Communication specialty area within the Computer Graphics Department at Purdue. He is also active as a member and academic advisor for student organizations at Purdue- National Home Builders Association and The Design Build student organization. Most recently, Clark has helped in the Design/Build component offering two graduate level courses for the Solar Decathlon House, an international competition sponsored by DOE. Clark has had over 40 years’ experience in the AEC industry with positions ranging from general laborer to project manager of 25 residential structures per year.

José Pinto Duarte is currently Full Professor at the Technical University of Lisbon Faculty of Architecture, researcher at the Instituto Superior Técnico, and a Visiting Scientist at MIT. He holds a B.Arch. (1987) in Architecture from the Technical University of Lisbon and an S.M.Arch.S. (1993), and a Ph.D. (2001) in Design and Computation from MIT. He was the founder of the ISTAR Labs - IST Architecture Research Laboratories (http://www.civil.ist.utl.pt/istar), co-author of “Collaborative Design and Learning” (with J. Bento, M. Heitor and W. J. Mitchell, Praeger 2004), and author of “Personalizar a Habitação em Série: Uma Gramática Discursiva para as Casas da Malagueira” (Fundação Calouste Gulbenkian, 2007). He was awarded the Santander/TU Lisbon Prize for Outstanding Research in Architecture by the Technical University of Lisbon in 2008. His main research interests are mass customization with a special focus on housing, and the application of new technologies to architecture and urban design in general.

Halil I. Erhan received his BArch degree from Middle East Technical University in Turkey. During his Master’s study at Clemson University, he investigated 3D model integration in representing building design and construction information. As a result of this study, he became interested in design computation. He pursued this interest in his PhD study at Carnegie Mellon University. He is currently a Professor of Design and Informatics at the School of Interactive Arts and Technology, Simon Fraser University. His research interests span from design of complex systems and design cognition to software design strategies and education. Particularly, he concentrates on generative aspects of complex systems developed for supporting wide spectrum of design activities and visual analytics of decision dependencies in design information space. He is a member of CAADRIA, ACADIA, and ACM [Sigchi and Sigsoft].

François Guéna is Professor at the National School of Architecture of Paris-la-Villette where he leads a Digital Design Program and manages the ARIAM-LAREA laboratory. After graduating from the Special School of Architecture (ESA) in 1980, he joined the Center of Informatics and Methodology in Architecture (CIMA) where he participated in the development of Computer Aided Architectural Design (CAAD) systems. He graduated from the University Paris VI with a Master and a PhD degree in Computer Sciences. He holds the French post-doctoral degree, allowing him to supervise PhD students (HDR). In 1998, he co-founded the ARIAM research team and became the director after merging with the LAREA laboratory in 2005. The main topic of his research is to integrate artificial intelligence into CAAD systems in order to improve human computer interactions and collaborative design.

Leman Figen Gül is an Associate Professor at the Architecture Program at the TOBB Economy and Technology University, Turkey. Dr. Gül’s work is featured with design studies and design education. Her research interests include investigating design cognition in virtual worlds, digital design and fabrication, design teaching, human-computer interactions, and computer-supported cooperative work. She
received her BArch (1993) and her MUCon (1996) in the Urban Conservation Program at the Mimar Sinan University in Istanbul and MDes (2003) in Digital Media and PhD (2007) in Architecture at the University of Sydney. She was a Lecturer and Tutor at the University of Sydney, a Research Fellow at the University of Newcastle (Australia), and an Associate Professor at the International University of Sarajevo before joining TOBB University of Economics and Technology in 2011.

Christiane M. Herr is an Architect, Researcher, and Teacher focusing on the areas of digitally supported design, conceptual design, structural design, design studio teaching, and traditional Chinese approaches to creative thinking. Christiane is a German National and has worked and studied in Australia, Hong Kong, China and Taiwan for more than 10 years. In her PhD work at The University of Hong Kong, Christiane explored cellular automata as a means to establish architectural design support, which led to her strong interest in diagrams and designerly ways of seeing. Christiane’s approach to education for creativity relies strongly on second-order cybernetics and radical constructivism. In her research work, Christiane focuses on the integration of designerly and scientific modes of inquiry through empirical, grounded, and action research approaches. Christiane is a member of conference organizing and review committees for the ASC and CAADRIA and member of review committees of various journals and conferences.

Yinghsiu Huang is currently an Assistant Professor and The director of Interactive, Cognition, and Product Design Laboratory (ICP Lab) at the Department of Industrial Design, Tung-Hai University, Taiwan. He obtained his Ph.D. degree in Graduate Institute of Architecture at National Chiao Tung University, Taiwan. Dr. Huang’s research interests are ranging from human cognitive studies in design media to design computing, including imagination of design process, interactive interface, physical computing, collaborative design in virtual reality and augmented reality environment, and digital archive technology. He has published papers into a wide range of highly recognized international journals and conferences (Design Studies, CAADRIA, eCAADe.) He has organised several conferences and workshops in Taiwan. He also has a digital archive project funded by National Science Council of Taiwan, ROC, to study the digitalization processes of sculptures and simulate these sculptures in VR and AR environments.

Taysheng Jeng received the B.S. degree in Architecture from National Cheng Kung University, Tainan, Taiwan, in 1986, the M.A. degree in Architecture from University of California at Los Angles, in 1993, and the Ph.D. degree in Architecture from Georgia Institute of Technology, Atlanta, Georgia in 1999. He is an Associate Professor and Chairman of the Department of Architecture of National Cheng Kung University in Taiwan. His research interests include interactive architecture, smart space, digital design, and computer-aided design.

Jeff WT Kan is the Deputy Dean of the School of Architecture, Building, and Design, Taylor’s University, Malaysia. He completed his PhD in Design Computing and Cognition at the University of Sydney. During his study, he was awarded an International Postgraduate Research Award by the Australian Department of Education to undertake his PhD. His study focused on developing and using quantitative methods to study the cognitive behaviour of designers. He formerly taught Design Studio and Computer-Aided Design at the Department of Architecture, Chinese University of Hong Kong. He has published papers on architectural visual Information System, online interactive teaching materials, architectural visual impact studies, protocol analysis of designers, and methods to study design activities.
Shih-Chung (Jessy) Kang, PhD graduate of Stanford University, currently works in Department of Civil Engineering at National Taiwan University as an Associate Professor. He focuses on the automation of crane for years, publishing more than 50 academic papers in the field. He obtained multiple grants from National Science Council of Taiwan, leading the research on developing cranes and robots for automatic construction. In the year of 2008 and 2009, he obtained the excellent teaching award and excellent service award respectively from National Taiwan University. In 2011, he published “Robot Development Using Microsoft Robotics Developer Studio,” a textbook for hands-on robotics courses.

Karen M. Kensek earned her SB from the Massachusetts Institute of Technology and her Master’s of Architecture from the University of California, Berkeley. Her teaching and research areas at USC focus heavily on Building Information Modeling (BIM), performance-based architecture, and sustainable design tools. She is a Past President of ACADIA (the Association of Computer Aided Design in Architecture), was the leader for the 2008 Revit BIM Experience Award from Autodesk and the AIA TAP 2010 BIM Award (honorable mention for coursework and curriculum development), and was host for five symposia at USC on BIM with a co-emphasis on sustainable design, construction, analytics, customization, and parametrics.

Mi Jeong Kim is an Assistant Professor of Housing and Interior Design at Kyung Hee University. She received her Ph.D (2007) in the Key Centre of Design Computing and Cognition at the University of Sydney. She worked as a postdoc fellow in the Department of Engineering Research Support Organization in UC Berkeley before joining Kyung Hee University. Her current research interest includes design and evaluation of new interaction techniques for 3D design, empirical studies and new technologies for computer-supported collaborative design, designing in and for virtual worlds, cognitive design studies, future housing studies such as smart home, and Information Technology in construction.

Terry Knight is a Professor of Design and Computation in the Department of Architecture, School of Architecture and Planning, at the Massachusetts Institute of Technology. She conducts research and teaches in the area of computational design, with an emphasis on the theory and application of shape grammars. Her book, *Transformations in Design*, is a well-known introduction to the field of shape grammars. Her recent research includes work on visual-physical grammars: rule-based, customizable building assembly systems that support cultural sustainability through the incorporation of vernacular patterns and local resources. She is also exploring the incorporation of sensory aspects of design, apart from the visual, into grammars. She holds a BFA from the Nova Scotia College of Art and Design, and an MA and PhD in Architecture from the University of California, Los Angeles.

Caroline Lecourtois is a DPLG architect and holds PhD in Urbanism and Space Management from the University of Nanterre (Paris X). She is a Professor of Architectural Design at the National School of Architecture of Paris-la-Villette. She is also a researcher at the laboratory of ARIAM-LAREA. Her field of research is Architecturology, and her scientific object is the cognitive activity in architectural design made with computers. With François Guéna, she deals with different research on collaborative design, digital architectural style, and parametric modeling in design. She also works with agencies of architecture to apply her results of research in design activities. She has written epistemological and scientific articles on architectural conception, architectural qualities, applied Architecturology, design education, and collaborative design (www.ariam-larea.archi.fr).
Robert Leicht is an Assistant Professor of Architectural Engineering at Penn State University. He is the leader of the Lean and Green Research Initiative and Director of the Partnership for Achieving Construction Excellence. His research interests focus on high performance collaboration, notably interdisciplinary collaborative efforts, within Architecture, Engineering, and Construction. Within collaboration, his interests revolve around how processes, technologies, and competencies evolve through different environments, organizations, and teams to develop high performance facility outcomes. In addition to his research efforts he has several years of construction industry experience, most notably with DPR Construction where he was hired to setup and lead the East Coast’s virtual building effort. In this capacity, he focused his efforts to integrate the design and construction teams on projects, using building information models and related virtual tools as enablers to more integrated efforts and lean processes.

Russell Lowe lectures in Architecture at the University of New South Wales. He coordinates the first year architectural design studio and teaches in the Master’s of Architecture graduation studio. Russell is a member of CAADRIA (Computer Aided Architectural Design Research in Asia) and has published on the use of computer gaming technology to engage with uses and concepts outside of the entertainment industry. Lowe has developed unique insights into opportunities for collaborative thinking that take advantage of the multiple perspectives that new media and computer game environments afford. His prize winning research on architectural space spans from clinical simulation to fine art films, which have been exhibited worldwide in film festivals as well as private and public art galleries and museums.

John Messner is the Director of the Computer Integrated Construction (CIC) Research Program at Penn State and an Associate Professor of Architectural Engineering. He specializes in virtual prototyping and BIM, along with globalization issues in construction. The CIC Research Group is currently performing the BIM Execution Planning project for the buildingSMART alliance. He has also received NSF grants for investigating the application of advanced visualization in construction engineering education and the AEC Industry. As a part of these grants, he led the development of the Immersive Construction Lab, an affordable, 3 screen immersive display system for design and construction visualization. Dr. Messner is also a principle investigator on two globalization projects for the Construction Industry Institute. He previously worked as a project manager on various construction projects for a large general contractor. He has taught courses in virtual prototyping, BIM, strategic management in construction, international construction, and project management at Penn State.

Michael J. Ostwald is Dean of Architecture at the University of Newcastle (Australia), a Visiting Professor at RMIT University (Melbourne), and past President of the Association of Architecture Schools of Australasia. He presently holds an Australian Research Council “Future Fellowship” and is Director of CIBER (Centre for Interdisciplinary Built Environment Research). He has a PhD in Architectural History and Theory and a higher Doctorate (DSc) in Design Computing and Mathematics. He has lectured in Asia, Europe, and North America and has written and published extensively on the relationship between architecture, philosophy, and geometry. Michael Ostwald is a member of the editorial boards of the Nexus Network Journal (Architecture and Mathematics), Architectural Theory Review, and Architectural Science Review and former foundation Editor of Architectural Design Research.
Rivka Oxman holds B.Sc., M.Sc., and D.Sc. degrees from the Technion Israel Institute of Technology where she is an Associate Professor in the Faculty of Architecture and Town Planning. She has been the Vice Dean of the Faculty of Architecture and Town Planning. Prof. Oxman is an Associate Editor of the international journal, *Design Studies*, and a member of editorial boards of other leading international scientific journals and conferences on design research, design theory, and digital design. In 2006 she was appointed as a Fellow of the Design Research Society (FDRS) for her contributions and established record of achievement in design research. Recently she has co-authored with Robert Oxman a book called “The New Structuralism: Design, Engineering and Architectural Technologies” (Architectural Design, 2010) published by Wiley. She has been a Visiting Professor at Stanford University; Delft University of Technology, and held research appointments at MIT, Berkeley, and Harvard University. She has been invited to deliver keynote lectures in leading conferences around the world: ACADIA 2000; CAAD Futures 1997, 2011; SIGRADI 2004; 2009; CAADRIA 2011.

Ekaterina Prasolova-Førland is an Associate Professor and project coordinator at the Program for learning with ICT, Norwegian University of Science and Technology (NTNU). She holds a M.Sc. in Technical Cybernetics and a PhD in Computer Science from the same university. Her research interests include educational and social aspects of 3D Collaborative Virtual Environments and augmented environments as well as virtual universities, mobile learning, and educational games. She is author and co-author of more than 50 publications on the topic. She is currently involved in two EU-financed projects focusing on creativity and serious games in 3D virtual worlds. Recently, she started working for the Norwegian Armed Forces, developing educational simulations for training cultural awareness in military operations.

Regiane Pupo holds a Diploma of Architecture and Urban Design from Pontifícia Universidade Católica in Campinas (PUCCAMP), a Master’s Degree from the Federal University of Santa Catarina (UFSC), and a PhD from the State University of Campinas (UNICAMP), all in Brazil. In 2007 she lived in Lisbon, Portugal and established the ISTAR Labs at Instituto Superior Técnico (IST). She has run the Laboratory for Automation and Prototyping for Architecture and Construction (LAPAC) at UNICAMP as a post-doc researcher and a Professor in the fields of Computational Design, Rapid Prototyping, and Digital Fabrication for Architecture from 2009 to 2011. Currently, she is a Professor at the Federal University of Santa Catarina, where she teaches at the Industrial Design course.

Lawrence (Larry) Sass is an architectural researcher exploring an emerging field known as digital design and fabrication. He believes that all buildings will be printed with machines run by computers and that the age of hand crafted, hand operated construction will be a thing of the past. This includes prefabricated construction, which is a century old tradition of handcrafted construction indoors. He believes that people will be replaced by machines and that components for each building will be fabricated worldwide immediately after the building is designed. Cost savings will come from assembly only construction sites; both manual and robotic. The challenge for architectures schools will be researching and teaching creative digital design and fabrication across scales from furniture and skyscrapers. This transformation also includes teaching computational methods that support design production, from artificial intelligence to high level computer programming, and last, new methods of production with computer controlled machines, assembly and finishing robots, and material invention. Larry is an
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Associate Professor in the Department of Architecture at MIT teaching courses specifically in digital fabrication and design computing since 2002 after earning a PhD ‘00 and SMArchS ’94 also at MIT. He has a BArch from Pratt Institute in NYC, has published and has exhibited his work at the Modern of Museum Art in New York City.

Shanna Schmelter - Morrett is a graduate from Purdue University where she received her Master’s degree in Computer Graphics Technology in May 2008. While at Purdue, she studied Construction Graphics and focused her research on creating a Building Information Modeling (BIM) curriculum for future students. Currently she works for a general contractor, Holder Construction Co. in Atlanta, GA, where her current efforts are focused on BIM management, modeling, coordination, and customer service for multiple projects. Also, she plays a lead role in development and delivery of the company’s BIM Training program, is a frequent presenter at customer and partner training events, and continues to support BIM curriculum development with university partners.

Marc Aurel Schnabel is an Architect and Professor at the School of Architecture, The Chinese University of Hong Kong. He is leading research and education in the field of Computational Architecture and Design. As Immediate Past-President of CAADRIA, the international Association for Computer Aided Architectural Design Research in Asia, he is affiliated with various professional and scientific committees. He established the Digital Architecture Research Alliance, DARA, which brings together researchers who push the boundaries of current digital spatial design. He taught and worked in Germany, Australia, and Hong Kong for over fifteen years, and since then, has become highly recognized for his work in the areas of virtual environments and parametric design learning. He publishes extensively in international journals about novel perspectives in computational architecture and the communication of three-dimensional space using innovative design methods. He recently curated two Digital Architectural exhibitions, Disparallel Spaces at the Tin Sheds Gallery and 8448 cubed at Gaffa Gallery and hosted an international conference on computational architecture.

Dennis R. Shelden is Associate Professor of the Practice of Design and Computation in the Department of Architecture, School of Architecture and Planning, at the Massachusetts Institute of Technology, and Chief Technology Officer of Gehry Technologies, a building industry technology company formed in 2002 by the research and development team of Frank Gehry Partners. He joined Gehry Partners in 1997 and was Director of Research and Director of Computing before co-founding Gehry Technologies. Prior to joining Gehry Partners, he performed structural engineering, energy systems, and technology development work at firms including Arup, Consultants’ Computation Bureau and Cyra Systems. Professor Shelden lectures and conducts research in building industry process advancement and in design computation and cognition. He holds a BS in Architectural Design, an MS in Civil and Environmental Engineering, and a PhD in Computation and Architectural Design from MIT.

Jerry Jen-Hung Tsai is a researcher in design computing. He was awarded his PhD in Design Computing and Cognition at the University of Sydney. His research focuses on representation, energy integrations and interactions in buildings, collaborative design, interactions between human, machine, and environment, ambient intelligence, and smart environment. He is an author or editor of two books and a number of papers, international journals, and book chapters. He is also an architect, interior designer,
and industrial designer. Formerly he was an honorary Lecturer at Architecture, Design, and Planning, University of Sydney and an Assistant Professor in Department of Art Creativity & Development at Yuan Ze University in Taiwan. He has been a visiting scholar in universities in Italy, Malaysia, and Taiwan. He is now based in Sydney and working collaboratively on research projects and book publication with researchers in Australia, Malaysia, and Taiwan.

Anthony Williams is currently the Head of School of Architecture and Built Environment at the University of Newcastle, Australia. He researches across of broad range of areas relating to Design Cognition and Education with considerable work in the area of collaborative design, both face to face and virtual domains, his specific interest is in studying the collaborative activity in a real world context. He is currently working on projects relating to spatial abilities and their implication on novice designers as well as a project on design creativity and strategies to assess them. He is widely published in the area of design education.

Theodor Wyeld is the Director of Studies, Digital Media Studies in the Department of Screen and Media, School of Humanities, at Flinders University, Adelaide, Australia. He researches in the field of 3D Information Visualisation and teaches Interaction Design and 3D Design. He has published widely in these fields and chairs the annual European Information Visualisation Society Conference. He recently established a spinout company, thereitis.com, based on his invention for a large 3D information array. He holds degrees in Architecture, and Master’s in Planning and in Design, and is currently completing his PhD in Cognitive Psychology at the Swinburne University of Technology, Melbourne, Australia.

Belgacem Ben Youssef received his PhD from the Cullen College of Engineering at the University of Houston (Houston, Texas, USA). He is currently an Associate Professor of Computer Engineering in the College of Computer & Information Sciences at King Saud University in Riyadh, Saudi Arabia. Prior to that, he was an Assistant Professor in both the TechOne Program and the School of Interactive Arts & Technology at Simon Fraser University (Vancouver, British Columbia, Canada). His research interests include parallel computing, computational tissue engineering, visualization, digital signal processing, and spatial thinking in learning and design. Dr. Ben Youssef has also two years of industrial experience in software development and technical project management in the telecommunications and business sectors. He is a member of both the IEEE Computer Society and the ACM.

Xingquan Zhu received his PhD degree in Computer Science from Fudan University, Shanghai China, in 2001. He is a recipient of the Australia ARC Future Fellowship and a Professor of the Centre for Quantum Computation & Intelligent Systems, Faculty of Engineering and Information Technology, University of Technology, Sydney (UTS), Australia. Dr. Zhu’s research mainly focuses on data mining, machine learning, and multimedia systems. Since 2000, he has published more than 110 referred journal and conference proceedings papers in these areas. Dr. Zhu is an Associate Editor of the IEEE Transactions on Knowledge and Data Engineering (2009-), and a Program Committee Co-Chair for the 23rd IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2011) and the 9th International Conference on Machine Learning and Applications (ICMLA 2010).