About the Contributors

Andy M. Connor is a Senior Lecturer at Colab, the “collaboratory” at Auckland University of Technology in New Zealand. His undergraduate training is in mechanical engineering and he holds a PhD in mechatronics. He has worked at the Engineering Design Centres at both the University of Bath and the University of Cambridge in the UK. Following a number of years of commercial experience as a software engineer and a systems engineering consultant, Andy migrated to New Zealand and took up a number of roles in software engineering and computer science at Auckland University of Technology prior to joining Colab in 2012. Andy has a broad range of research interests that include automated design, computational creativity, education, evolutionary computation, machine learning and software engineering.

Stefan Marks is a Senior Lecturer at Colab, the “collaboratory” at Auckland University of Technology in New Zealand. He has several years of industry experience as a hardware and software developer, a diploma in microinformatics, a master’s degree in human-computer interaction, and a PhD from the University of Auckland for his research on virtual reality medical teamwork simulation. His research interests include virtual and interactive environments, 3D data visualization, human-computer interaction, simulation of physical processes, serious games, robotics and electronics, and computer science education. In his spare time, he enjoys photography, preferably while exploring beautiful New Zealand’s outdoors.

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Vince Briffa is a multimedia artist and researcher. He produces gallery and site-specific artwork, objects and installations which integrate drawing, painting, text, photography, sculpture and the moving image. He is also a curator of contemporary art exhibitions, writes for various local and international publications and organizes discussions, exhibitions and art residencies. Having studied drawing and painting as well as digital media, he investigates the integration of digital media and traditional artistic practices to establish a vehicle that seamlessly communicates the artistic concept. Apart from notions that draw from contemporary artistic and aesthetic concerns, his trans-media work often integrates approaches and concerns from the areas of sociology, advertising, film studies, literature and philosophy. Over the past thirty five years, Briffa’s work has been exhibited in some of the world’s most prestigious museums and galleries. He has also been chosen to represent Malta in many international exhibitions, including the Venice Biennale (1999) amongst others, and his work forms part of many local and international private and public collections. As an academic, he is the head of the Department of Digital Arts, an Associate of the Electronic and Digital Arts Unit (EDAU) of the University of Central Lancashire, and a visiting academic at Contemporary Art Practice, Leeds University. He is also external examiner for the Bradford Bradford Film School in the UK.
Maggie Buxton is a transdisciplinary community practitioner, creative producer, tertiary educator and writer. She specialises in connecting people to places and opening minds to other realities and ways of knowing. She has worked internationally in a diverse range of settings from grass-roots communities to large corporates and political institutions. She has just completed a PhD on her creative work with technology in her own community.

Samuel Canning is originally from the United Kingdom, where he trained as a hand French Polisher with one of the UK’s oldest furniture manufacturers. On moving to Australia, Sam studied Industrial Design as a means of accessing state of the art technology to enhance his Furniture Making. Since this time Sam has worked as an Industrial Designer and is now a lecturer into the Industrial Design and 3D Design courses at the Gold Coast Campus of Griffith University in Queensland, Australia.

Natalie Corbett received her BSc in Computer Animation with first class honours from the University of Portsmouth in 2013. Following this she has been working as a research assistant on the Innovate UK funded RITA (Responsive InTeractive Advocate) project, with a particular focus on research in Virtual Humans, and in facial animation techniques.

Alexiei Dingli is an Associate Professor of Artificial Intelligence within the Faculty of ICT at the University of Malta. He was also a founder member of the ACM student chapter in Malta, the Web Science Research group, the International Game Developers Association (IGDA) Malta and of the Gaming group at the same University. He also heads the Gaming in Education group and represents the University of Malta on the BeSmartOnline initiative. He pursued his Ph.D. on the future of the Internet at the University of Sheffield in the UK under the supervision of Professor Yorick Wilks. His work was rated World Class by a panel of international experts whose chair was Professor James Handler (one of the creators of the Semantic Web) and was used as a core component of the application that won the first Semantic Web challenge (2003). His research in Mobile Technology and Smart Cities (2011) was also awarded a first prize by the European Space Agency and an e-Excellence Gold Seal at the prestigious CeBit Conference in Germany. He has published several posters, papers, book chapters and books in the area. He also pursued an MBA with the Grenoble Business School in France specialising on Technology Management.

Daniel J. Dunne is currently a PhD Candidate at the Swinburne University of Technology. His work focuses mainly upon the combination of both narrative and gameplay elements to create a sense of story and place. Previously Daniel has presented and written on the intersection of narrative within paratext, multimodality, Brechtian alienation theory and ergodic literature.

Anthony Fleury received an Engineer (Computer Science) and a M.Sc. (Signal Processing) degree in 2005 in Grenoble and a PhD degree in Signal Processing from the University Joseph Fourier of Grenoble in 2008 for his work on Health Smart Homes and activity recognition. He joined then the LMAM team at Swiss Federal Institute of Technology and is now, since sept. 2009, Assistant Professor at Ecole des Mines de Douai. His research interests include the modelling of human behaviours and activities, machine learning and pattern recognition with applications to biomedical engineering and smart environments.
Jacques Footit received his Bachelor of Creative Technologies in 2014 and is currently working towards his Masters of Creative Technologies. His current research is investigating the application of haptic feedback and motion capture glove systems in sensory rehabilitation.

Ali Ghaffarianhoseini is an academician (Auckland University of Technology, Auckland, New Zealand) and a professional architect (NZIA Academic Member) holds PhD and MSc degrees in Architectural Studies and a BSc in Architecture Engineering. He has achieved well-recognized international innovation awards in addition to publication of various international level patent, journal articles, books, conference papers, etc. He has been an active member of scientific/technical committees for international academic conferences in Australia, Canada, China, Croatia, Czech Republic, Egypt, Finland, France, Germany, Greece, Hong Kong, Iran, Italy, Japan, Kuwait, New Zealand, Portugal, Romania, Singapore, Slovenia, South Korea, Switzerland, Sri Lanka, Thailand, Turkey, United Arab Emirates (UAE), United Kingdom (UK) and the United States of America (USA).

Amirhosein Ghaffarianhoseini is a senior lecturer in the field of building science, energy efficient design, urban greening and environmental modelling at University of Malaya (UM), Malaysia. He is holding Ph.D in Architectural Studies, MArch and BArch. He has secured several national and international funding for interdisciplinary research projects related to the environmental optimization of built environments. In addition to his academic work, he has practiced as architect, urban designer and project manager. He currently serves as editorial board member, scientific/technical committee member and reviewer for various international journals and conferences.

Mahdiar Ghaffarianhoseini sincerely believes that architecture is not only the art of designing innovative aesthetic forms or reproduction of contemporary idol shapes, but architecture means designing suitable and purposeful platforms for humans’ life, emotions, feelings, moments and inspirations to get shaped.” He is studying for a PhD in Environmental Design at the University of Calgary and has numerous awards and honours including; Royal Architectural Institute of Canada Honour Roll Certificate (2013), Top Admission Entrance Scholarship Award, University of Toronto, John H Daniels (2012), University of Calgary’s Admission Entrance Scholarship Murray W. Waterman Architectural Scholarship and Award (2011) Many scientific, academic and design publications including the most recent article “Paskan Tower-City”, previously published in Globe and Mail paper, in Evolo skyscrapers book 2014 Participated and recognized for many competitions, such as Evolo Skyscrapers book 2014, “The Flexchair” Battery Park bench design and “The Ambient Exchange” Helsinki Central Library Competition. He has several years of experience in computational design, digital architecture, digital fabrication and conceptual design, his areas of interest and specialty are Parametric and Generative Design, Agility, flexibility and responsiveness in architecture and his area of research is Alive Architecture; Designing buildings as live forms based on architecture of change and the concept of biomimicry.

Stefan Greuter is the Foundation Director of the Centre for Game Design Research (CGDR) in the School of Media and Communication at RMIT University. He holds a Doctorate of Philosophy in Visual Communication and his postgraduate studies were supported by two prestigious scholarships from the German Academic Exchange program (DAAD) and the Australian International Postgraduate Research
Scholarship (IPRS). Stefan Greuter’s research is interested in solving existing problems using innovative game design experiences that bring together research from multiple disciplines including Business, Construction, Occupational Health and Safety, Art, Design and Information Technology. Stefan has a track record of working with experts from other fields and specialises in solutions involving the latest game technology. He has over ten years of teaching experience and is teaching Experimental Game Design in the Bachelor of Design (Games) program. He supervises several PhD candidates whose work seeks to solve existing problems through the use of gaming technology.

**Ann Marie Gribble** is a graduate from the Bachelor of Creative Technologies. Through a variety of projects undertaken within this course at Auckland University of Technology as well as hands on experience externally, she is well trained in Transmedia Storytelling, Digital Fabrication and Creative Interactivity for Marketing and eBusiness.

**Tracy Harwood** is Senior Research Fellow at the Institute of Creative Technologies and also manages the facility’s Usability Lab. Her research focuses on consumer behaviour/usability, technology/usability in emerging contexts (marketing, retail), virtual/online commerce, e-communities/tribes, marketing, machinima/digital arts and e-commerce interface.

**Ry Healy** is a Griffith University graduate, who completed his Master’s Degree in Digital Design majoring in Fabrication (3D Printing). Starting out with a hands on approach as an apprentice carpenter, through to the final viva of his academic pursuit, he has learnt a great deal of discipline and found his strength in practicality.

**Nathan Hulsey** completed his doctoral studies at the Communication, Rhetoric and Digital Media program at North Carolina State University. He is active in the fields of Game Studies and Media Studies and has been previously published in Surveillance and Society. His current research concerns a genealogy of gamification.

**Anna Jackson** is a creative producer and lecturer at Colab working in the areas of transmedia production and documentary innovation. Anna’s professional experience spans a range of creative industries including theatre, film, documentary, and transmedia production. She is the co-director of Transmedia NZ, one of the executive producers of online documentary initiative “Loading Docs”, a blogger for “The Big Idea” and an ambassador for arts crowdfunding platform “Boosted”. In 2014 she completed a joint PhD at The University of Melbourne and the University of Auckland, “Innovation and Change in New Zealand’s documentary production ecology (2010-2013).

**Sangeeta Karmokar** has worked in the education industry across business and design disciplines. This provided her opportunity to bring all her past teaching experience and education in business, design and information technology together. Her research study covered user centred design in interface design process, bringing innovation using design methods for developing business strategies, developing design methodologies for innovation, designing new digital business models. Her experience includes teaching across various disciplines such as communication Design, Business Design, Creative Technology and entrepreneurship.
Sarah Kenderdine researches at the forefront of interactive and immersive experiences for museums and galleries. In widely exhibited installation works, she has amalgamated cultural heritage with new media art practice, especially in the realms of interactive cinema, augmented reality and embodied narrative. She is considered a pioneer in the field digital heritage / humanities and is a regular keynote speaker at related forums internationally. Sarah concurrently holds the position of Professor and Deputy Director of the National Institute for Experimental Arts (NIEA), University of New South Wales | Art & Design (2013–) where she directs the Lab for Innovation in Galleries, Libraries, Archives and Museums (iGLAM) and an Associate Director, iCinema Research Centre. She continues a life-long position as head of Special Projects for Museum Victoria, Australia (2003–) and is Director of Research at the Applied Laboratory for Interactive Visualization and Embodiment (ALiVE), City University of Hong Kong. Prof. Kenderdine has conceived and created interactive installations on UNESCO world heritage sites including Angkor, Cambodia; The Monuments at Hampi, India; Olympia, Greece and at numerous sites throughout Turkey. Between 2012-2015 she directed Pure Land: Inside the Mogao Grottoes at Dunhuang, Pure Land Augmented Reality Edition, Pure Land Hengqin and Pure Land UnWired in collaboration with the Dunhuang Academy. In 2012, ECloud WWI for Europeana. She conceived and curated Kaladham | PLACE-Hampi as a permanent museum located at Vijayanagar, Karnataka, inaugurated in November 2012, and co-directed two new installations based on ‘Pacifying of the South China Sea Pirates’ scroll which recently premiered at Maritime Museum, Hong Kong (2013). In 2004, she completed Museum Victoria’s data browser for 100,000 objects, in a 360-degree 3D interactive installation in the galleries. Formerly, Kenderdine was Creative Director of Special Projects at the Powerhouse Museum, Sydney (1998-2003). She is a maritime archaeologist, former curator at the Western Australian Maritime Museum (1994-1997) and has written a number of authoritative books on shipwrecks. In 1994-1995, she designed and built one of the world’s earliest museum websites (for the Maritime Museum) and subsequently award-winning cultural networks/websites for: Australian Museums Online (AMOL), the ten South East Asian Nations (ASEAN) and, Intel Corporation’s Olympic Games Olympia projects, Sydney 2000.

Jan Kruse is a Lecturer in Visual Effects in the Digital Design Department at Auckland University of Technology. He started his career in Video and Audio Editing, spent more than 15 years in the Visual Effects Industry, and worked as a Supervisor, Producer and Compositor in various companies across New Zealand, Canada and Europe. His portfolio includes work on high profile projects such as Lord of the Rings, King Kong, X-Men and Rise of the Planet of the Apes. He recently left his position at Weta Digital in Wellington, New Zealand, to pursue an academic career. An interest in Industrial and Hobby Robotics led him to explore a few projects outside of his area of expertise, including the introduction of the first autonomous UAV (Quadrotor) in New Zealand in 2007, and several other electronics and automation ventures.

Jennifer Loy is Program Leader of Industrial Design at Griffith University and Deputy Director of the Griffith Centre for Creative Arts Research. Loy has a PhD in Industrial Design and a background in manufacturing. Her research and teaching focus on design for process, with a particular interest in digital fabrication, sustainable design and creative practice.
**Bruce J. MacLennan** has a BS in mathematics (with honours, 1972) from Florida State University, and an MS (1974) and PhD (1975) in computer science from Purdue University. He was a Senior Software Engineer with Intel Corp. (1975–9), after which he joined the Computer Science faculty of the Naval Postgraduate School (Monterey, CA) as Assistant Professor (1979–83), Associate Professor (1983–7), and Acting Chair (1984–5). Since 1987, he has been an Associate Professor in the Dept. of Electrical Engineering and Computer Science of the University of Tennessee, Knoxville. Since the mid-1980s, his research has focused on new approaches to artificial intelligence based on neuroscience and informed by phenomenological philosophy, embodied cognitive science, and psychology. His research focus is basic science: What can AI reveal about natural intelligence and the relation of mind and matter? Prof. MacLennan has more than 80 refereed journal articles and book chapters and has published two books. He has made more than 70 invited or refereed presentations. MacLennan was also founding Editor-in-Chief of the International Journal of Nanotechnology and Molecular Computation.

**Nicola Naismith** is a Senior Lecturer in the School of Engineering at Auckland University of Technology.

**Hossein Omran** received his Bachelor of Architecture Engineering from Islamic Azad University of Shiraz – Iran in 2010. He followed with his master studies in Universiti Teknologi Malaysia (UTM) - Malaysia in the field of Construction Management, and graduated in 2014.

**Vaughan Powell** has a degree in Biology, a Master’s degree in Archaeology, and a PhD in Creative Technologies. His primary research interest is in the interface between humans and computers, and the way in which the design of interactive technology and virtual reality systems mediates the behaviour and perception of the users. He is a regular speaker at conferences and workshops, and also teaches interaction design. He also has a particular interest in research ethics, and is chair of the Creative and Cultural Industries faculty ethics committee at the University of Portsmouth.

**Wendy Powell** has degrees in Computer Science and in Chiropractic, and was awarded a PhD in Creative Technologies from the University of Portsmouth in 2012. She is currently a Reader in Virtual Reality, with a particular interest in the use of advanced interactive technologies for health and well-being. She has been the recipient of a number of research grants, and has led the development of a human-like avatar to support elderly people. She lectures and publishes in the area of human interaction with virtual reality, and is a regular speaker on the use of creative technology for healthcare and rehabilitation.

**Dylan Seychell** is lecturer and the Head of the Department of Computer Information Systems at the St. Martin’s Institute of Higher Education, a University of London Affiliate Centre. He is also a visiting lecturer at the University of Malta in the Faculty of Media and Knowledge Sciences. He teaches topics in Mobile Technology and Interaction Design of various levels. Mr Seychell is a co-author of various international peer-reviewed publications and a book chapter. After graduating with honours in IT from the University of Malta, he completed a Master of Science degree in the field of Intelligent Computer Systems in Mobile Technology and is currently reading for a PhD in Computer and Communication...
Engineering. Mr Seychell is a co-creator of the award winning project “DINOS for Smart Cities”. With this idea, Mr Seychell won two prestigious international awards; European Satellite Navigation Competition 2010 – First Place in Media and CeBIT 2011 Gold Seal of e-Excellence. He also worked in various software houses and with large scale telecommunication companies.

**Jeffrey Shaw** has been a leading figure in new media art since its emergence from the performance, expanded cinema and installation paradigms of the 1960s to its present day technology-informed and virtualized forms. In a prolific career of widely exhibited and critically acclaimed work he has pioneered the creative use of digital media technologies in the fields of virtual and augmented reality, immersive visualization environments, navigable cinematic systems and interactive narrative. Professor Shaw was co-founder of the Eventstructure Research Group in Amsterdam (1969-1979), and founding director of the ZKM Institute for Visual Media Karlsruhe (1991-2002). At the ZKM he conceived and ran a seminal artistic research program that included the ArtIntAct series of digital publications, the Multi-Mediale series of international media art exhibitions, over one hundred artist-in-residence projects, and the invention of new creative platforms such as the EVE Extended Virtual Environment (1993) PLACE (1995) and the Panoramic Navigator (1997). In 1995 Shaw was appointed Professor of Media Art at the State University of Design, Media and Arts (HfG), Karlsruhe, Germany. Professor Shaw’s landmark art works include The Legible City (1989), The Virtual Museum (1991), The Golden Calf (1994), Place-A Users Manual (1995), conFiguring the CAVE (1997) and the Web of Life (2002). He co-curated the seminal FUTURE CINEMA exhibition at the ZKM Karlsruhe, the catalogue of which was published by MIT Press. Shaw’s career is further distinguished by his collaborations with fellow artists including Peter Gabriel, David Pledger, Agnes Hegedues, The Wooster Group, William Forsyth, Harry de Wit, Theo Botschuijter, Dennis Del Favero, Peter Weibel, Bernd Lintermann, Dirk Goeneveld, Leslie Stuck, Paul Doornbusch, Jean Michel Bruyere, Saburo Teshigawara, Ulf Langheinrich and Sarah Kenderdine. Shaw has been the recipient of numerous awards including Ars Electronica, Linz, Austria, L’Immagine Elettronica, Ferrara, Italy, the Oribe Prize, Gifu, Japan and an IDEA Gold Medal in 2009. In 2003 Professor Shaw was awarded the prestigious Australian Research Council Federation Fellowship and returned to Australia to co-found and direct the UNSW iCinema Centre for Interactive Cinema Research in Sydney from 2003-2009. At iCinema he led a theoretical, aesthetic and technological research program in immersive interactive post-narrative systems, which produced pioneering artistic and research works such as Place-Hampi and T_Visionarium, the latter shown at the Biennale of Seville in 2008. In September 2009 Shaw joined City University in Hong Kong as Chair Professor of Media Art and Dean of the School of Creative Media (SCM). Professor Shaw has a position at UNSW as co-director of the iCinema Centre for the purposes of academic and research co-operation with CityU. He established a SCM research facility at the Hong Kong Science Park in 2010.

**Ricardo Sosa** is a researcher and lecturer at Colab. He combines a creative background as an industrial designer with a passion for the systematic study of computational systems.

**Peter Tatham** retired as a Commodore (1*) after 35 years as logistician in the (UK) Royal Navy and moved into academia in 2004. He joined the faculty of Griffith University’s Business School in July 2010 where he teaches and researches in humanitarian supply chain management. He is the Asian and Australasian Editor of the Journal of Humanitarian Logistics and Supply Chain Management, and a member of the Editorial Board of the International Journal of Physical Distribution and Logistics Management.
About the Contributors

**Cassie Tapper** is a Griffith University graduate who has been working as a Research Assistant. She completed her Bachelor in Digital Design majoring in 3D Design. Tapper’s work is focused on design responsibility and creating positive change, both socially and environmentally.

**John Tookey** is the head of the Department of Built Environment Engineering at Auckland University of Technology, having previously worked at the University of Auckland, Glasgow Caledonian University (UK) and Bradford University (UK). He has published widely across a range of discipline areas including supply chain management, logistics, procurement and latterly sustainability.

**J. T. Velikovsky** is a Story / Screenplay / Movie / Transmedia / Culture Researcher & Evolutionary Systems Theorist, see: [http://aftrs.academia.edu/JTVelikovsky](http://aftrs.academia.edu/JTVelikovsky) and also a produced feature film screenwriter and million-selling transmedia writer-director-producer. He has been a professional story analyst for major movie studios, film funding organizations, and for the national writer’s guild. He is also a member of the Digital Humanities Research Group. For more see: [http://on-writering.blogspot.com/](http://on-writering.blogspot.com/).

**Judson Wright** makes Behavioural Art, programming computers in order to study cognition. His software experiments/artwork, papers, music and performances have been featured extensively around the world since 1996 (circus tents in Europe, the Smithsonian International Art Gallery, the Brooklyn Museum of Art with the Brooklyn Philharmonic, the 809 International Art District in China, the Journal of Science and Technology of the Arts, ...). He graduated from Brown University and has an MA from the Interactive Telecommunications Program at New York University.