Gianluca Mura is a transdisciplinary media researcher, architect, digital artist and designer. Researcher at the Politecnico di Milano University and Universidade Católica Portuguesa, Porto. He holds a PhD in Industrial Design and Multimedia Communication from the Politecnico di Milano University. His research area is within interrelations among Design, Architecture, Art, Science, Technology. Founder and Editor of the International Scientific Journal of Art, Culture and Design Technologies (IJACDT), IGI Global. He is a member of several International Scientific Committees: CAE Computational Aesthetics, ARTECH, CYBERWORLDS, WEBSTUDIES, IEEE Italian Committee, MIMOS (Italian Movement on Modeling and Simulation). He organized the International Workshop "Virtuality in Arts and Design" between Politecnico di Milano and Ecole du Louvre, Paris with the High Patronage of Italian Ministry of Foreign Affairs, Rome, Italy. His recent digital artwork "The Metaplastic Constructor" has been exhibited on the Museum of Modern Art of Toluca, Mexico and into the Rhizome Artbase digital art collection.

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Elif Ayiter, aka Alpha Auer is an artist, designer and researcher specializing in the development and implementation of hybrid educational methodologies between art & design and computer science, teaching full time at Sabanci University, Istanbul, Turkey. She has presented creative as well as research output at conferences including Siggraph, Consciousness Reframed, Creativity and Cognition, ISEA, ICALT, Computational Aesthetics (Eurographics) and Cyberworlds. She is also the chief editor of the forthcoming journal Metaverse Creativity with Intellect Journals, UK and is currently studying for a doctoral degree at the Planetary Collegium, CAiiA hub, at the University of Plymouth with Roy Ascott.

Paul Catanese is a hybrid media artist, an Associate Professor in the Department of Interdisciplinary Arts at Columbia College Chicago and the President of the New Media Caucus, a College Art Association Affiliate Society. His artwork has been exhibited widely including at the Whitney Museum of American Art, the New Museum of Contemporary Art, SFMOMA Artist's Gallery, La Villette-Numerique and Stuttgarter Filmwinter among others. Paul is the recipient of numerous grants and awards, including commissions for the creation of new artwork from Turbulence.org as well as Rhizome.org.

Ina Conradi, Assist.Prof, received M.F.A. in art in 1989 from University of California at Los Angeles. She is a member of Singapore-China Association for Advancement of Science and Technology (SCAASST), Union of Slovene Fine Art Arts Association (ZDSLU), and is Japan Foundation fellow. She has been teaching in the School of Art Design and Media at Nanyang Technological University Singapore
About the Contributors

since 2007. Her research explores experimental and immersive abstract computer animation, responsive and reactive painted surfaces with imagery integrating experimental 3d animation, oversized image creation using algorithmic paint strokes, high-resolution computer rendering technique, advanced print prototyping and finishing technique.

Denise Doyle is a Researcher, Artist Curator, and Senior Lecturer in Digital Media at the University of Wolverhampton. With a background in Fine Art Painting (BA Hons) from Winchester School of Art, and Design and Digital Media (MA), she is completing her PhD research at SMARTlab Digital Media Institute, University of East London, under the directorship of Professor Lizbeth Goodman. Denise's research investigates the Artist's experience of the Imaginary in Virtual Worlds, and she is developing a framework for a new theory of the Imagination that incorporates experiences of mediated spaces created through interdisciplinary practice in Art and Technology.

Adel S. Elmaghraby is Professor and Chair of the Computer Engineering and Computer Science Department at the University of Louisville. He has also held appointments at the Software Engineering Institute - Carnegie-Mellon University, and the University of Wisconsin-Madison. He advised approximately 60 master's graduates and 20 doctoral graduates. His research contributions and consulting spans the areas of Intelligent Multimedia Systems, Networks, HPC, Visualization, and Simulation. He is a well-published author (over 200 publications), a public speaker, member of editorial boards, and technical reviewer. He has been recognized for his achievements by several professional organizations including a Golden Core Membership Award by the IEEE Computer Society. He is a senior member of the IEEE, a member of ACM and ISCA. He served a term as an elected ISCA Board member and currently is a Senior Member and an Associate editor for ISCA Journal.

Paula Andrea Escandón is industrial designer from Universidad Autónoma de Manizales, in Colombia. She is finishing her Master of Interactive Design and Creation at Universidad de Caldas, in Manizales, Colombia. She is adjunct professor in assisted design at Universidad Nacional de Colombia at Manizales. She is also research assistant in the research group DICOVI - Design and cognition in visual and virtual environments and her research interests are interaction design issues.

Victor Fernández Cervantes is Computer Engineer from the University Center of the Cienega (CUCI) at the University of Guadalajara in Mexico. He received his Master in Sciences degree in 2009 from the Center for Research and Advanced Studies of National Polytechnic Institute (CINVESTAV of I.P.N.) in Guadalajara, Mexico. He is a PhD Student at the CINVESTAV of I.P.N. in Guadalajara, Mexico. His research interests include Virtual Reality, Human Behavior Simulation, Human-Computer Interaction Systems, Multi-Agent Systems, Distributed Systems and Computer Vision.

J. Octavio Gutierrez-Garcia received his PhD in Electrical Engineering and Computer Science from both CINVESTAV, Mexico and Grenoble Institute of Technology, France, in 2009. Since then, he has been a computer science lecturer and technical editor of several computer science related journals, as well as a program committee member of various international conferences. His research interests focus on multi-agent systems.
Diane Gromala is the Canada Research Chair at Simon Fraser University's School of Interactive Art & Technology. Her work has been at the forefront of emerging forms of technology, from the earliest multimedia application to one of the very first instances of Virtual Reality. Gromala heads the Transforming Pain Research Group, whose research focuses on innovative uses of technologies for managing chronic pain. Gromala is co-author of MITPress’ Windows and Mirrors: Electronic Art, Design, and the Myth of Transparency, with Jay David Bolter.

Dew Harrison is a researcher and practitioner in virtual and computer-mediated art currently working as Associate Dean in the School of Art & Design at the University of Wolverhampton. With a BA in Fine Art, an MSc in Computer Science and a PhD from the Planetary Collegium, CAiiA, in Interactive Art, her practice undertakes a critical exploration of Conceptual Art, semantic media and intuitive interfaces where she often work’s collaboratively and considers virtual curation an art practice. She continues to show internationally and has over 40 publications to date spanning digital art, consciousness studies, interactive games, art history and museology.

Michael Johansson, Artist, Lecturer, Researcher. Born 1962, Gothenburg, Sweden. Educated at the Royal College of Fine Arts in Copenhagen 1984 -1990. Worked with digital media as part of my work practice for over 25 years. Done about 50 exhibitions both in Sweden and abroad since 1999. Been involved in research, first at the interactive institute, space and virtuality studio, and between 1998-2007 at Malmo University arts and communication. planned and taught, design, animation, architectural visualization, interaction design, pervasive gaming and digital prototyping on the master level. In 2005 one of the founders of the research network PRAMNET.

Jocelyne Kiss is currently Associate Professor at University Paris East (France) in Numerical Art and Multimedia, her research focuses on exploitation of connectionism methods within artistic immersive-interactive interfaces. Her research interests lie in developing concepts and computer games in the area of synaesthetic sensations. Author of five interactive installations, especially “sing with me, avatar singer”. She published “composition and cognitive sciences”, about thirty papers about art & technology.


Felipe César Londoño is an architect and PhD in Multimedia Engineering from the Universitat Politécnica de Catalunya, in Spain. He is professor in visual design and experimental research in art, design and new media, and director of the PhD in Design at Universidad de Caldas in Manizales, Colombia, where he co-founded the Department of Visual Design. He is also participant professor of the PhD in Multimedia Engineering at Universitat Politécnica de Catalunya. He is head of the research group DICOVI - Design and cognition in visual and virtual environments and director of the International Image Festival.
**About the Contributors**

**Diane J. Love** is a systems engineer staff in Lockheed Martin's Information Systems and Global Services, specializing in usability. She graduated from the University of Edinburgh with a Bachelor of Sciences in Physics, and Imperial College, University of London, with a PhD in Physics. Her professional interests include human-computer interaction, virtual worlds and collaboration, and she is a Certified Human Factors Engineering Professional (CHFEP). During her career in Lockheed Martin, Diane has worked on air traffic control systems in the UK and USA. She previously worked for Logica UK on a variety of systems for UK government.

**Germán Mauricio Mejía** is industrial designer from Universidad Autónoma de Manizales, in Colombia. With a Fulbright grant, he is finishing his Master of Design at University of Cincinnati, in United States. He is assistant professor in digital design at Universidad de Caldas, in Manizales, Colombia. He is also research fellow of the group DICOVI - Design and cognition in visual and virtual environments and his research interests are visual design for social empowerment and the role of human differences in the interaction with visual information.

**Jeffrey M. Morris** is an Instructional Assistant Professor in computer music and coordinator of technology facilities for the Department of Performance Studies at Texas A&M University. Dr. Morris gives improvised performances with interactive electronics in addition to composing for traditional instruments and electronic media. His creative works have been performed internationally and include intermedia works and collaborations with dance artists. His scholarly writings explore mediation by technology in live performance and its implications for the human experience.

**Carola Moujan** Designer & Artist. Lives and works in Paris at the Université Paris 1 – Panthéon-Sorbonne. She was born in 1969 in Montevideo (Uruguay). As an architecture and fine arts student, she was awarded in 1991 with a study and travel grant from the University of Minnesota, where she took part in early virtual reality and 3D-modeling research. In 1995 she moved to Paris and begun a career as a graphic designer & art director for magazines and design studios. From 1997 on, her work shifted to the emerging field of interaction design. She started her own design studio in 2000, focusing on global brand design with a strong emphasis on interactive media, while carrying on personal work around the notion of virtual and hybrid environments. Her interactive installation project “Jour d’angoisse” was awarded with the SCAM New Media Grant (Bourse d'aide à l'art numérique) in 2008. From 2006 on, she pursues theoretical and practice-based research on ubiquitous computing.

**Catherine Nyeki**, Pluridisciplinary artist, developed her research for several years around the concept of virtual biology in the field of digital arts, music and song. She has taken part in many individual and collective exhibits in France and abroad and has received several awards. 2010 “Plastika” Cité des Sciences de La Villette, 2009 Espace d’Art Contemporain Camille Lambert, Videoformes, 2008 eArts Shanghai, 2007 Ars Electronica Linz, Kiev, Talents video, Slick, 2006 Galerie Fraich'attitude, 2005 Galerie Hors Sol, 2004 ICHIM Berlin, Art-Metz, Festival Nemo, 2003 WRO International Media Art Biennale, 2000 @rt Outsiders, ISEA 10ème symposium international arts électroniques, Paris, 1998, Galerie Donguy.

**Héctor Rafael Orozco Aguirre** is Computer Engineer from the University Center for Science and Engineering (CUCEI) at the University of Guadalajara in Mexico. He is Professor of Computer Sciences
at the CUCEI at the University of Guadalajara in Mexico. He received his Master in Sciences degree in 2006 from the Center for Research and Advanced Studies of National Polytechnic Institute (CINVESTAV of I.P.N.) in Guadalajara, Mexico. He is a PhD Student at the CINVESTAV of I.P.N. in Guadalajara, Mexico. His research interests include Virtual Reality, Human Behavior Simulation, Human-Computer Interaction Systems, Multi-Agent Systems, Distributed Systems, Robotics and Computer Vision.

Félix Francisco Ramos Corchado, received his PhD in Computer Sciences from Technology University Of Compiègne France in 1997, a MSc. In Computer Science from the Centre of Advanced Researches of IPN in Mexico, a MSc. in Distributed Systems from the CNAM in Paris in 1994. Since 1997 he works as full time Professor in the Computer and Electric Engineering Department of the Centre of Advanced Researches in Guadalajara CINVESTAV. He has been working on projects on Distributed Virtual Reality, Multi-agent Systems, Distributed Systems and Self-organization. His main research topics are Multi-agent systems, co-operative work and Networks.

Everardo Reyes-García received his doctorate in Information and Communication Sciences at the University of Paris VIII, France. Since 2003 is researcher member of the CiTu group at Paragraphe Lab. From 2007 is program director of the BA in Animation and Digital Art at Monterrey Tech, Toluca, Mexico. He teaches, lectures, and publishes extensively on design, production, usages, sociality and epistemology of hypermedia, media art, and digital media. He was distinguished as member of the National System of Researchers, Conacyt, Mexico, in 2008.

Chris Shaw is an Associate Professor in the School of Interactive Arts & Technology at Simon Fraser University in Surrey, British Columbia, Canada. His research interests are in Virtual Environments and Visual Analytics. Prior to joining SFU in 2005, Shaw held a faculty position at the College of Computing at the Georgia Institute of Technology. Shaw Received his PhD in Computing Science from the University of Alberta in 1997.

Vadim Slavin is a senior software engineer, a principal investigator, and the head of Human-Systems Interaction group within Modeling Simulation and Information Sciences Department at Lockheed Martin Space Systems' Advanced Technology Center. He graduated from Brown University with a BS in Math-Physics, a BA in Computer Science, and a MS in Computer Science. Having joined Lockheed Martin, Vadim has worked on a number of modeling and simulation projects for space industry customers as well as premier government research organizations. His research interests include human-computer interaction, immersive collaborative visualization environments, and semantic technologies for reasoning under uncertainty. Vadim serves on the board of several internal Lockheed Martin-wide working groups and has participated in NASA proposal reviews as a lead reviewer.

Meehae Song is currently a PhD student at Simon Fraser University's School of Interactive Art & Technology. She has a BSc in Computer Science from Ewha Womans University, South Korea and a M.Eng. in Virtual Reality applications from Nanyang Technological University, Singapore. She worked for the Centre for Advanced Media Technology (CAMTech), a joint research and development centre between NTU and Fraunhofer IGD for 6 years specializing in various immersive VR applications. Her current interests lie in applying Art Theory and looking at how abstractions and connotations/denotations affect the experience in immersive and mixed Virtual Reality environments.
About the Contributors

Sidi Soueina was born in North Africa, educated in the middle east and Japan. His doctorate AI/Intelligent agents. Sidi worked as Research Engineer in Sydney Australia for few years then moved to the US where he currently teaches and does research. His research interest are Personality Based Recognition Tools and Creativity.

Olga Sourina received her MSc in Computer Engineering from Moscow Engineering Physics Institute (MEPhI) in 1983, and her PhD in Computer Science from NTU in 1998. Dr. Sourina was awarded of the honorary diploma of the Academy of Sciences of USSR, the Silver Medal of the National Exhibition Centre of USSR, and the Medal of the Ministry of Education of USSR. Since 1 December 2001 she is Assistant Professor in NTU. Her research interests are in interactive digital media IDM (particularly in visual data mining, virtual reality, and visual and haptic interfaces), and Biomedical Engineering (visual analysis and quantification of brain responses, virtual surgery). She collaborates with SBS, MAE, SCE, and medical doctors from SGH (Singapore General Hospital), NUH (National University Hospital), and NNI (National Neuroscience Institute). She is a member of program committee of international journal and conferences of: Cyberworlds, Journal "Computer Graphics & Geometry", IEEE Computer Society and Biomedical Engineering Society.

Daniel Thalmann is Director of EPFL VRlab, Switzerland. He is a pioneer in Virtual Humans. He is coeditor-in-chief of the Journal of Computer Animation and Virtual Worlds. He has published numerous papers in Graphics, Animation and VR. He is coauthor of several books including "Crowd Simulation" (2007). He received his PhD in CS from University of Geneva and an Honorary Doctorate from University Paul-Sabatier in Toulouse, France.

Joan Truckenbrod exhibits her artwork internationally in Chicago, New York, London, Paris and Berlin. An article about her video sculpture was featured in the September 2007 issue of SCULPTURE magazine. ARTnews has featured a Review of one of Truckenbrod’s exhibitions. A book about her artwork titled 'Portfolio: Joan Truckenbrod' has been published by Telos Publishing. Ms. Truckenbrod published one of the early books about computer art titled Creative Computer Imaging in 1988 (Prentice Hall). She is a Professor in the Art and Technology Department at The School of the Art Institute of Chicago.

Hidenori Watanave is researching the arts in the Virtual Worlds. He is interested in collaborative work in the realms of architecture and environmental design in tele-existence. Spatial design in the Virtual Worlds was established through the Archidemo project (2007-2008), which was selected to be part of FILE2008, SIGGRAPH 2008, SIGGRAPH ASIA 2009 and the 13th Japan Media Arts Festival. His current experiment focuses GPS and GIS, using techniques like those developed by Hidenori in the NetAIBO project (2004-2005, Honorary Mention, Prix Ars Electronica) and the ObaMcCain project (2008) of 3Di-chatterbots-space, which was exhibited in Mission Accomplished at the Location One gallery, New York.