

IFIP-ICEC Program (Version 28th August 2018)

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Program Overview

	Mon., 17 th Sept.		Tue., 18 th Sept.	Wed., 19 th Sept.	Thu., 20 th Sept.
09h30	Workshop 1: Entertainment Comp. A Key for Improving and Reducing Gender Gap?	Tutorial: Bio- Sensing Platforms for “Wellness Entertainment” System Design	Opening: Artur Lugmayr & Chairs ICEC Keynote: Prof. Ellen Yi Luen Do: From Design Comp. to Creating Unique Techn. for Everyone	Session 3: VR and AR (FP: 5, 6; SP 7, 8 9)	Session 5: Storytelling, Narratives & Behaviours (FP: 9, 10; SP: 13, 14)
10h00					
10h30					
11h00	<i>Coffee Break</i>		<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>
11h30	Workshop 1 cont.	Tutorial cont.	WCC Opening & Keynote	WCC Keynote	WCC Keynote
12h00					
12h30					
13h00	<i>Lunch</i>		<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
13h30					
14h00				ICEC Keynote: A/Prof. Aisling Kelliher: Aspirational Cyber Human Systems	Session 6: Entertainment Business, Information Systems, and Media Studies (FP: 11, 12, 13, 14)
14h30	Workshop 2: Designing Entertainment for the Aging Population (DEAP'18)	Tutorial cont.	Session 1: Human- Computer- Interaction (FP: 1, 2; SP: 1, 2, 3)		
15h00					
15h30				<i>Coffee Break</i>	<i>Coffee Break</i>
16h00	<i>Coffee Break</i>		<i>Coffee Break</i>	Session 4: Digital Games (FP: 7, 8; SP: 10, 11, 12)	ICEC Closing Keynote Nikolay Nikolov: AR and VR Near You Conference Closing, Best Papers, IFIP- Award
16h30	Workshop 2 cont.	Tutorial cont.	Session 2: Entertainment Systems & Technology (FP: 3, 4; SP: 4, 5, 6)		
17h00					
17h30					
18h00			ICEC Reception + Posters Demos Art Exhibits	Doctoral Consortium	TC 14 Meeting and TC 14 Dinner
18h30					
19h00	WCC Reception				
19h30					

 Workshop(s)	 Keynotes, Opening, Closing, Awards	 Paper Session(s)
 Tutorial(s)	 WCC Events Co-Located with ICEC	 Lunches and Coffees
 Doctoral Consortium	 Panel	

Social Events

As IFIP-ICEC is co-located with the IFIP-WCC conference, we share a broad set of common events. Please do not get confused by the two programs. For IFIP-ICEC, we have been arranging some special events to allow networking within the IFIP-ICEC community. Please don't miss this opportunity to meet your friends and colleagues from ICEC.

IFIP-ICEC Dedicated Social Events

- Tuesday, 18th September, 18:00-19:30: IFIP-ICEC Conference Reception together with the poster, demo, and art exhibition
- Thursday, 20th September, 17:30-19:00: IFIP TC 14 Meeting and follow up dinner between TC 14 members
- More information can be found on: <http://www.ifip-icec.org/program>

Co-Located Events with IFIP-WCC

- Monday, 17th September, 19:00-20:30: WCC Conference Reception
- Wednesday, 19th September, 19:00-23:00: WCC Conference Dinner
- More information can be found on: <http://www.wcc2018.org/program>

Keynotes

From Design Computing to Creating Unique Technologies for Everyone *Prof. Ellen Yi-Luen Do, ATLAS Inst., Univ. of Colorado Boulder, USA*



Ellen Yi-Luen Do is Director of Innovation and Partnership at the ATLAS Institute, and Professor in the Department of Computer Science at the University of Colorado Boulder. Before joining CU in 2017, she was a professor of Georgia Tech's School of Industrial Design and the School of Interactive Computing. At Georgia Tech she directs the ACME Creativity Machine Group and the Healthcare Design of the Future interdisciplinary R&D initiative for integrating technology into built environments. She was a member of the GVU Center faculty, an affiliate at the Center for Music Technology, and a core faculty at the Health Systems Institute, which hosts her office and lab. Ellen developed the Industrial Design Track of the MS-HCI degree program jointly

with the School of Interactive Computing and served as an Associate Director of the program management team. She received a MDesS degree from Harvard University Graduate School of Design (1991) and a Ph.D. in Design Computing from Georgia Tech (1998). Before returning to Georgia Tech as a professor (in 2006), she taught at the University of Washington in Seattle (1999-2004, Design Machine Group) and Carnegie Mellon University (2004 – 2005, CoDe Lab). Ellen was on leave from Georgia Tech (2013 – 2016) to serve as the co-director of the Keio-NUS CUTE Center at the National University of Singapore.

Now is an exciting time to engage in creative design computing, to implement physically and computationally enhanced environment, to explore experience media and interactive computing projects, towards a smart living environment. Advancing technology offers new ways to solve problems, discover opportunities, and create new objects and experience that delight our senses and improve the way we live and work. With a spark of creativity and enthusiasm, followed up with design and computational thinking, we can explore the goal of “creating unique technology for everyone” through the use of connective, ubiquitous technology for embodiments, in three themes: Tangible Interaction, Augmented Learning, and Embodied Experience.

Aspirational Cyber Human Systems *A/Prof. Aisling Kelliher, Inst. for Creativity, Arts, and Technology, USA*



Aisling Kelliher is an associate professor of Computer Science at Virginia Tech, with joint appointments in the School of Visual Arts and the Institute for Creativity, Arts, and Technology. Aisling creates and studies interactive media systems for enhancing reflection, learning, healing, and communication. She co-leads the Interactive Neurorehabilitation Lab at Virginia Tech where she works with a team of bioengineers, therapists, doctors, designers, and computer scientists in developing interactive systems for stroke rehabilitation in the home. Aisling is a member of the IEEE MultiMedia editorial board and writes or edits the regular “Artful Media” column. She served as the Paper Chair for ACM Creativity and Cognition in 2017 and for ACM Multimedia in 2016. She is also the regular technology correspondent on the “Culture File” show on Irish national radio. Aisling received a Ph.D. in Media, Arts and Sciences from the MIT Media Lab where she was a member of the Interactive Cinema Group. She also holds an MSc. in Multimedia Systems from Trinity College, Dublin, and a B.A. in Communications Studies from Dublin City University.

Aspirational Cyber Human Systems

The promise and threat of artificial intelligence is of growing significance for creative industries. Technical advancements in machine learning aim to better serve, engage, and retain consumers through highly targeted content presentation and personalized recommendations. Other advancements in automated content creation and AI assistive tools are heralded for their ability to efficiently generate highly optimized content at scale. Depending on one's perspective, these developments can be understood as beauty or menace, with a vast landscape of complex issues and implications in between. As designers, creators, and researchers, how can we best conceptualize and handle artificial intelligence as a fundamental material building block in our work? How can the role of the human be elevated through encounters with AI systems that place the experience of the human agent as being as important or even more important than the process of data collection or algorithmic improvement? Using examples from domains such as design, healthcare, and the arts, this talk will examine issues of power, failure, resistance, trust, and social control within the entangled realm of creative AI.

Augmented Reality and Virtual Reality Near You *Nikolay Nikolov, Poland*



I'm an engineer with more 25 years' experience in IT industry across the board. I've seen a lot of transformation driven by technology during this period. I was doing online CRM architectures and deployments back in 2000's and I end up assembling highly productive mobile teams in recent years. My latest production project, where I led technical architecture, system design and implementation of GSK MyAsthma mobile application - a class 1 medical device software for iOS and Android. I spent my last 8 years in GSK experimenting with innovative technologies from Raspberry PI to Microsoft HoloLens and HTC Vive. I have been leading software teams doing proof of concepts with smart glasses and near field communications in area of scientific experiments and smart medical devices.

Augmented reality and Virtual reality open people imagination today. Everyone can explore it using smart devices. Invest your time now in smart AR and VR technology and bring new horizons to your products and services. "Virtual reality (VR), along with its sister technology augmented reality (AR), offers retailers the opportunity to transform how people shop. One customer might try on shirts without having to travel to the store. Another might order furniture on the spot, confident that it's right for the house. Applications using either technology stand to eliminate customer pain points, elevate customer service, and create a differentiated, personalized customer experience. The successful incorporation of VR and AR into retail models also has the potential to vastly change the way retailers are thinking about stores of the future. "

Source: HBR: [Virtual and Augmented Reality Will Reshape Retail](#), [Dan McKone](#), [Rober Haslehurst](#) and [Maria Steingoltz](#)

Twitter: nnikolov66, LinkedIn: [linkedin.com/in/nnikolov66](https://www.linkedin.com/in/nnikolov66)

Keynotes Co-Located with IFIP-WCC

- Prof. Wil van der Aist, Responsible Data Science in a Dynamic World
- Dr. Jan Camenisch, The Pros and Cons of Blockchain for Privacy
- Prof. Leslie Valiant, What Needs to be Added to Machine Learning
- Shamika N. Sirimanne, to be announced

Workshops

Workshop 1: Entertainment Computation - A Key for Improving and Reducing Gender Gap?

Javier Gomez, NTNU, Norway

Letizia Jaccheri, NTNU, Norway

Jannicke Baalsrud Hauge, KTH, Stockholm & BIBA, Germany

- **Who Will Be the Leaders in Top Academic Positions in Entertainment Computing?**, *Letizia Jaccheri, Soudabeh Khodambashi, Katrien De Moor, Ozlem Ozgobek and Katina Krlevska*
- **Serious Games in Special Education. A Practitioner's Experience Review**, *Guadalupe Montero and Javier Gomez*
- **Perspectives on Accessibility in Digital Games**, *Jannicke Baalsrud Hauge, Neil Judd, Ioana Andreea Stefan, Antoniu Stefan*
- **Adult Perception of Gender-Based Toys and their Influence On Girls' Careers in STEM**, *Serena Lee-Cultura, Katerina Mangaroska and Kshitij Sharma*

Workshop 2: Designing Entertainment for the Aging Population (DEAP'18)

Paula Alexandra Silva (University of Aveiro, Portugal)

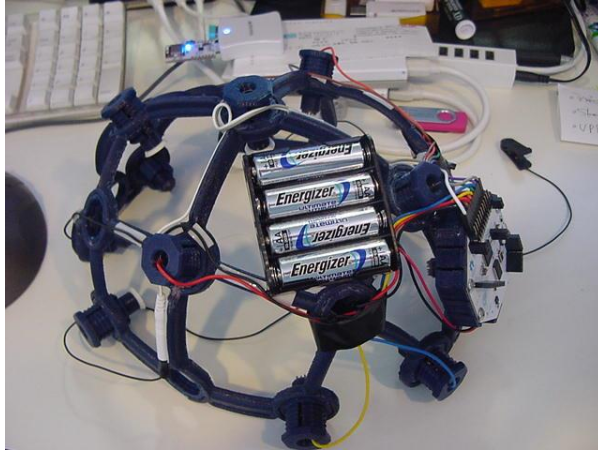
Masood Masoodian (Aalto University, Finland)

- **Storytelling: A Medium for Co-design of Health and Well-being Services for Seniors**, *Leah Burns and Masood Masoodian*
- **User-Centered Design of an Online Mobile Game Suite to Affect Well-Being of Older Adults**, *Isabelle Kniestedt, Stephan Lukosch and Frances Brazier*
- **Providing Life-style-Intervention to Improve Well-Being of Elderly People**, *Thomas Rist, Andreas Seiderer and Elisabeth André*
- **Intergenerational Joint Media Engagement: pre-testing interviews, activities and tablet's applications**, *Ana Carla Amaro, Lidia Oliveira and Vania Baldi*
- **Physical Activity Among Older Adults: A Meta-Review of EU-Funded Research Projects**, *Paula Alexandra Silva*

Tutorials

Bio-Sensing Platforms for “Wellness Entertainment” System Design (Bio-Sensing, Interactive Media, and Wellness Entertainment)

Yoichi Nagashima, SUAC/ASL, Japan



This is a "hands-on" lecture/workshop intended for the designer/artist/therapist of the interactive system for "wellness entertainment". In recent years, the fields of serious games and medical/welfare/rehabilitation applications are gaining attention in the field of entertainment computing. The organizer of this workshop has been promoting R & D activities in this area for over 20 years, and recently targeting "Wellness" or "Well-being" entertainment using bio-sensing technology. This

lecture/workshop contains four parts of practical techniques/ideas to realize effective interactive system for "wellness entertainment" - environment & interface, concept of biofeedback, special techniques using commercial bio-sensors and cutting-edge topics.

Tutorial Website

<http://nagasm.org/ICEC2018workshop/>

Panels

Robot Competitions

David Obdrazalek, Charles University, Czech Republic

Richard Balogh, Slovak University of Technology, Slovakia

Artur Lugmayr, Curtin University, Australia

Robot competitions are more and more used as a tool for education as well as an entertainment activity. This workshop brings together organizers, participants, teachers, and other people interested to share best practices, discuss issues and possibly improve their work. The main objectives of this workshop are to gather organizers of different robot competition events, competition participants, teachers, and other interested people from various environments to: – foster establishing of a network of organizers and their events to support participants exchanges and to motivate them to attend also other than local events, – connect the workshop participants to share best practices, discuss issues and possibly improve their work.

Website

http://senzor.robotika.sk/sensorwiki/index.php/Workshop_on_Robotics_Conests

List of Accepted Papers

Full Papers

FP1	Dynamic Projection Mapping on Multiple Non-Rigid Moving Objects for Stage Performance Applications	Ryohei Nakatsu, Ningfeng Yang, Hirokazu Takata, Takashi Nakanishi, Makoto Kitaguchi and Naoko Tosa,
FP2	Applying Designing Thinking techniques for prototyping a universal game controller	Gabriel Ferreira Alves, Emerson Vitor Souza, Daniela Gorski Trevisan, Anselmo Antunes Montenegro, Luciana Cardoso de Castro Salgado and Esteban Walter Gonzalez Clua,
FP3	Diminishing Reality	Andreas Hackl and Helmut Hlavacs
FP4	Live Probabilistic Editing for Virtual Cinematography	Luiz Velho, Leonardo Carvalho and Djalma Lucio
FP5	Mixed Reality Cycling in an Infinite Procedurally Generated City	Wesley Oliveira, Werner Gaisbauer, Michelle Tizuka, Esteban Clua and Helmut Hlavacs
FP6	Aspects that need to be addressed during the development of location-based games	Jacques Barnard, Magda Huisman and Gunther Drevin
FP7	Games That Make Curious: An Exploratory Survey into Digital Games That Invoke Curiosity	Marcello A. Gómez Maureira and Isabelle Kniestedt
FP8	Learning to Identify Rush Strategies in StarCraft	Teguh Budianto, Hyunwoo Oh and Takehito Utsuro
FP9	Design and evaluation of a fall prevention multi-player game for senior care centres	Joana Silva, Elsa Oliveira, Dinis Moreira, Francisco Nunes, Martina Čaić, João Madureira and Eduardo Pereira
FP10	Comedy in the Ludonarrative of Video Games	Oskari Kallio and Masood Masoodian
FP11	Physiological Affect and Performance in a Collaborative Serious Game between Humans and an Autonomous Robot	Petar Jerčić, Johan Hagelbäck and Craig Lindley
FP12	Analysis of the effect of number of players on the excitement of the game with respect to fairness	Sagguneswaraan Thavamuni, Hiroyuki Iida and Hadzariah Ismail
FP13	The influence of digital convergence/divergence on digital media business models	Zvezdan Vukanovic
FP14	Sensor Ball Raffle – gamification of billboard advertising: How to engage the audience?	Sari Järvinen, Johannes Peltola and Paul Kemppi
FP15	Dance Dance Gradation: a generation of fine-tuned dance charts	Yudai Tsujino and Ryosuke Yamanishi

Short Papers

SP1	Intimate Information Access through Virtual Creatures	Kota Gushima and Tatsuo Nakajima
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SP2	Validating the Creature Believability Scale for Videogames	Nuno Barreto, Rui Craveirinha and Licinio Roque,
SP4	The Programmable Drone for STEM Education	Patrik Voštinár, Dana Horváthová and Nika Klimová
SP5	A Taxonomy of Synchronous Communication Modalities in Online Games	Quentin Gyger and Nicolas Szilas
SP6	Realtime Musical Composition System for Automatic Driving Vehicles	Yoichi Nagashima
SP7	Circus Noel: A case study on natural user interface design for VR	Mirjam Vosmeer and Alyea Sandovar
SP8	Reorientation Method to Suppress Simulator Sickness in Home VR Contents Using HMD	Yuki Ueda and Junichi Hoshino
SP9	A.R.M. - Augmented Reality Muscularity	Dirk Sweere, Martin Hughes, Martijn van Laar and Lisa Rombout
SP10	Virtual Reality as e-Mental Health to Support Starting with Mindfulness-Based Cognitive Therapy	Koen H. B. Damen and Erik D. van der Spek
SP11	Engagement in Interactive Digital Storytelling: Sampling without spoiling	Sergio Estupinan, Kasper Ingdahl Andkjær and Nicolas Szilas
SP12	Playing with Empathy through a Collaborative Storytelling Game	Sindre Skaraas, Javier Gomez and Letizia Jaccheri
SP13	Construction of mixed reality story environment based on real space shape	Kazuma Nagata and Junichi Hoshino
SP14	Digital Therapies	Robert J. Wierzbicki

Posters

P1	Data Reduction of Indoor Point Clouds	Stephan Feichter and Helmut Hlavacs
P2	Designing 'Wall Mounted Level' - A Cooperative Mixed-Reality Game about Reconciliation	Scott Swearingen and Kyoung Swearingen
P3	Automatic Generation of the Periodic Hair Motion of 3D Characters for Anime Production	Kenji Furukawa and Susumu Nakata
P4	An iTV prototype for content unification	Jorge Abreu, Pedro Almeida, Ana Velhinho, Sílvia Fernandes and Rafael Guedes
P5	Content unification: a trend reshaping the iTV ecosystem	Jorge Abreu, Pedro Almeida, Sílvia Fernandes, Ana Velhinho and Ana Rodrigues
P6	Creating art installation in Virtual Reality. The Stilleben Project	Jan K. Argasiński
P7	A mixed-reality serious game to tackle a public health problem	Tiago Lima, Carlos Niquini, Breno Barbosa, Clodoveu Davis Jr.
P8	Converging Data Storytelling and Visualisation	Yangjinbo Zhang
P9	A systematic mapping on game-related methods to tackle a public health problem	Tiago Lima, Clodoveu Augusto Davis Jr.

Demonstrations

D1	NOVELICA: A Visual Novel System to Make People Forget Their Negative Feelings on Mathematics	Nobumitsu Shikine , Toshimasa Yamanaka , Letizia Jaccheri , Javier Gomez and Junichi Hoshino
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Art Exhibits

A1	Imperceptible Art	Aleksandra Vasovic
A2	Tappetina: an Ecosystem of Art, Software, and Research	Letizia Jaccheri , Javier Gomez and Sindre B. Skaraas

Doctoral Consortium Papers

- **Affecting Well-Being Through Digital Games** *Isabelle Kniestedt*
- **A Game-Based Plattform to Tackle a Public Health Problem** *Tiago Fran_ca Melo Lima and Clodoveu Augusto Davis Jr.*

Sessions Overview

Session 1: Human-Computer Interaction

FP1	Dynamic Projection Mapping on Multiple Non-Rigid Moving Objects for Stage Performance Applications	Ryohei Nakatsu, Ningfeng Yang, Hirokazu Takata, Takashi Nakanishi, Makoto Kitaguchi and Naoko Tosa,
FP2	Applying Designing Thinking techniques for prototyping a universal game controller	Gabriel Ferreira Alves, Emerson Vitor Souza, Daniela Gorski Trevisan, Anselmo Antunes Montenegro, Luciana Cardoso de Castro Salgado and Esteban Walter Gonzalez Clua
FP15	Dance Dance Gradation: a generation of fine-tuned dance charts	Yudai Tsujino and Ryosuke Yamanishi,
SP1	Intimate Information Access through Virtual Creatures	Kota Gushima and Tatsuo Nakajima
SP2	Validating the Creature Believability Scale for Videogames	Nuno Barreto, Rui Craveirinha and Licinio Roque,

Session 2: Entertainment Systems & Technology

FP3	Diminishing Reality	Andreas Hackl and Helmut Hlavacs
FP4	Live Probabilistic Editing for Virtual Cinematography	Luiz Velho, Leonardo Carvalho and Djalma Lucio
FP13	The influence of digital convergence/divergence on digital media business models	Zvezdan Vukanovic
SP4	The Programmable Drone for STEM Education	Patrik Voštinár, Dana Horváthová and Nika Klimová
SP5	A Taxonomy of Synchronous Communication Modalities in Online Games	Quentin Gyger and Nicolas Szilas

Session 3: VR and AR

FP5	Mixed Reality Cycling in an Infinite Procedurally Generated City	Wesley Oliveira, Werner Gaisbauer, Michelle Tizuka, Esteban Clua and Helmut Hlavacs
FP6	Aspects that need to be addressed during the development of location-based games	Jacques Barnard, Magda Huisman and Gunther Drevin
SP7	Circus Noel: A case study on natural user interface design for VR	Mirjam Vosmeer and Alyea Sandovar
SP8	Reorientation Method to Suppress Simulator Sickness in Home VR Contents Using HMD	Yuki Ueda and Junichi Hoshino
SP9	A.R.M. - Augmented Reality Muscularity	Dirk Sweere, Martin Hughes, Martijn van Laar and Lisa Rombout

Session 4: Digital Games

FP7	Games That Make Curious: An Exploratory Survey into Digital Games That Invoke Curiosity	Marcello A. Gómez Maureira and Isabelle Kniestedt
FP8	Learning to Identify Rush Strategies in StarCraft	Teguh Budianto, Hyunwoo Oh and Takehito Utsuro
SP10	Virtual Reality as e-Mental Health to Support Starting with Mindfulness-Based Cognitive Therapy	Koen H. B. Damen and Erik D. van der Spek
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SP12	Playing with Empathy through a Collaborative Storytelling Game	Sindre Skaraas, Javier Gomez and Letizia Jaccheri

Session 5: Storytelling, Narratives, and Behaviours

FP9	Design and evaluation of a fall prevention multi-player game for senior care centres	Joana Silva, Elsa Oliveira, Dinis Moreira, Francisco Nunes, Martina Čaić, João Madureira and Eduardo Pereira
FP10	Comedy in the Ludonarrative of Video Games	Oskari Kallio and Masood Masoodian
SP13	Construction of mixed reality story environment based on real space shape	Kazuma Nagata and Junichi Hoshino
SP14	Digital Therapies	Robert J. Wierzbicki

Session 6: Entertainment Business, Information Systems, and Media Studies

FP11	Physiological Affect and Performance in a Collaborative Serious Game between Humans and an Autonomous Robot	Petar Jerčić, Johan Hagelbäck and Craig Lindley
FP12	Analysis of the effect of number of players on the excitement of the game with respect to fairness	Sagguneswaraan Thavamuni, Hiroyuki Iida and Hadzariah Ismail
FP14	Sensor Ball Raffle – gamification of billboard advertising: How to engage the audience?	Sari Järvinen, Johannes Peltola and Paul Kempfi
SP6	Realtime Musical Composition System for Automatic Driving Vehicles	Yoichi Nagashima

Paper Sessions

Monday, 17 Sept, 2018

Monday, 09:30 – 18:00, Parallel Session: Tutorial (Full Day) Bio-Sensing Platforms for “Wellness Entertainment” System Design

TUTORIAL: Bio-Sensing Platforms for “Wellness Entertainment” System Design, Yoichi Nagashima, SUAC/ASL, Japan

This is a "hands-on" lecture/workshop intended for the designer/artist/therapist of the interactive system for "wellness entertainment". In recent years, the fields of serious games and medical/welfare/rehabilitation applications are gaining attention in the field of entertainment computing. The organizer of this workshop has been promoting R & D activities in this area for over 20 years, and recently targeting "Wellness" or "Well-being" entertainment using bio-sensing technology. This lecture/workshop contains four parts of practical techniques/ideas to realize effective interactive system for "wellness entertainment" - environment & interface, concept of biofeedback, special techniques using commercial bio-sensors and cutting-edge topics.

Monday, 09:30 – 11:00, Parallel Session: Workshop 1: Entertainment Computation – A Key for Improving and Reducing Gender Gap?

chair: Javier Gomez, Letizia Jaccheri, and Jannicke Baalsrud Hauge

KEYNOTE: A/Prof. Aisling Kelliher, Inst. for Creativity, Arts, and Technology, USA

Who Will Be the Leaders in Top Academic Positions in Entertainment Computing?
Letizia Jaccheri, Soudabeh Khodambashi, Katrien De Moor, Ozlem Ozgobek and Katina Kralevska

Serious Games in Special Education. A Practitioner's Experience Review *Guadalupe Montero and Javier Gomez*

Perspectives on Accessibility in Digital Games *Jannicke Baalsrud Hauge, Neil Judd, Ioana Andreea Stefan, Antoniu Stefan*

Adult Perception of Gender-Based Toys and their Influence On Girls' Careers in STEM
Serena Lee-Cultura, Katerina Mangaroska and Kshitij Sharma

Monday, 11:00 – 11:30, Coffee break

Monday, 11:30 – 13:00, Parallel Session: Workshop 1: Entertainment Computation – A Key for Improving and Reducing Gender Gap? (CON'T)

chair: Javier Gomez, Letizia Jaccheri, and Jannicke Baalsrud Hauge

KEYNOTE: A/Prof. Aisling Kelliher, Inst. for Creativity, Arts, and Technology, USA

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Adult Perception of Gender-Based Toys and their Influence On Girls' Careers in STEM
Serena Lee-Cultura, Katerina Mangaroska and Kshitij Sharma

Monday, 13:00 – 14:30, Lunch break

Monday, 14:30 – 16:00, Parallel Session: Workshop 2: Designing Entertainment for the Aging Population (DEAP'18)

chair: Paula Alexandra Silva and Masood Masoodian

Storytelling: A Medium for Co-design of Health and Well-being Services for Seniors *Leah Burns and Masood Masoodian*

User-Centered Design of an Online Mobile Game Suite to Affect Well-Being of Older Adults *Isabelle Kniestedt, Stephan Lukosch and Frances Brazier*

Providing Life-style-Intervention to Improve Well-Being of Elderly People *Thomas Rist, Andreas Seiderer and Elisabeth André*

Intergenerational Joint Media Engagement: pre-testing interviews, activities and tablet's applications *Ana Carla Amaro, Lidia Oliveira and Vania Baldi*

Physical Activity Among Older Adults: A Meta-Review of EU-Funded Research Projects
Paula Alexandra Silvapaper title

Monday, 16:00 – 16:30, Coffee break

Monday, 16:30 – 18:00, Parallel Session: Workshop 2: Designing Entertainment for the Aging Population (DEAP'18) (CON'T)

chair: Paula Alexandra Silva and Masood Masoodian

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Paula Alexandra Silvapaper title

Monday, 19:00, Welcome Reception

Tuesday, 18 Sept, 2018

Tuesday, 09:30 – 10:00, OPENING, A/Prof. Artur Lugmayr

Opening Address *Artur Lugmayr, Kathrin Gerling, Esteban Clua, Licino Roque*

Tuesday, 10:00 – 11:00, IFIP-ICEC KEYNOTE, Prof. Ellen Yi Luen Do

KEYNOTE: Responsible Data Science in a Dynamic World, *Prof. Ellen Yi Luen Do, ATLAS Inst., Univ. of Colorado Boulder, USA*

Now is an exciting time to engage in creative design computing, to implement physically and computationally enhanced environment, to explore experience media and interactive computing projects, towards a smart living environment. Advancing technology offers new ways to solve problems, discover opportunities, and create new objects and experience that delight our senses and improve the way we live and work. With a spark of creativity and enthusiasm, followed up with design and computational thinking, we can explore the goal of “creating unique technology for everyone” through the use of connective, ubiquitous technology for embodiments, in three themes: Tangible Interaction, Augmented Learning, and Embodied Experience.

Tuesday, 11:00 – 11:30, Coffee break

Tuesday, 11:30 – 12:00, WCC 2018 Opening

Tuesday, 12:00 – 13:00, WCC 2018 Keynote

Responsible Data Science in a Dynamic World *Prof. Wil van der Aalst*

Tuesday, 13:00 – 14:30, Lunch break

Tuesday, 14:30 – 16:00, Session 1: Human-Computer-Interaction

chair: Radu-Daniel Vatavu

Dynamic Projection Mapping on Multiple Non-Rigid Moving Objects for Stage Performance Applications *Ryohei Nakatsu, Ningfeng Yang, Hirokazu Takata, Takashi Nakanishi, Makoto Kitaguchi and Naoko Tosa (LP)*

Applying Designing Thinking techniques for prototyping a universal game controller *Gabriel Ferreira Alves, Emerson Vitor Souza, Daniela Gorski Trevisan, Anselmo Antunes Montenegro, Luciana Cardoso de Castro Salgado and Esteban Walter Gonzalez Clua (LP)*

Intimate Information Access through Virtual Creatures *Kota Gushima and Tatsuo Nakajima (SP)*

Validating the Creature Believability Scale for Videogames *Nuno Barreto, Rui Craveirinha and Licinio Roque (SP)*

Dance Dance Gradation: a generation of fine-tuned dance charts *Yudai Tsujino and Ryosuke Yamanishi (SP)*

Tuesday, 16:00 – 16:30, Coffee break

Tuesday, 16:30 – 18:00, Session 2: Entertainment Systems & Technology

chair: Zvezdan Vukanovic

Diminishing Reality *Andreas Hackl and Helmut Hlavacs (LP)*

Live Probabilistic Editing for Virtual Cinematography *Luiz Velho, Leonardo Carvalho and Djalma Lucio (LP)*

The Programmable Drone for STEM Education *Patrik Voštinár, Dana Horváthová and Nika Klimová (SP)*

A Taxonomy of Synchronous Communication Modalities in Online Games *Quentin Gyger and Nicolas Szilas (SP)*

The influence of digital convergence/divergence on digital media business models
Zvezdan Vukanovic (LP)

Tuesday, 18:00 – 19:30, ICEC Reception + Posters + Demos + Art Exhibits

chair: Javier Gomez and Benedict Berger

Data Reduction of Indoor Point Clouds *Stephan Feichter and Helmut Hlavacs (Poster)*

Designing ‘Wall Mounted Level’ - A Cooperative Mixed-Reality Game about Reconciliation *Scott Swearingen and Kyoung Swearingen (Poster)*

Automatic Generation of the Periodic Hair Motion of 3D Characters for Anime Production *Kenji Furukawa and Susumu Nakata (Poster)*

An iTV prototype for content unification *Jorge Abreu, Pedro Almeida, Ana Velhinho, Sílvia Fernandes and Rafael Guedes (Poster)*

Content unification: a trend reshaping the iTV ecosystem *Jorge Abreu, Pedro Almeida, Sílvia Fernandes, Ana Velhinho and Ana Rodrigues (Poster)*

Creating art installation in Virtual Reality. The Stilleben Project *Jan K. Argasiński (Poster)*

A mixed-reality serious game to tackle a public health problem *Tiago Lima, Carlos Niquini, Breno Barbosa, Clodoveu Davis Jr. (Poster)*

Converging Data Storytelling and Visualisation *Yangjinbo Zhang (Poster)*

A systematic mapping on game-related methods to tackle a public health problem *Tiago Lima, Clodoveu Augusto Davis Jr. (Poster)*

NOVELICA: A Visual Novel System to Make People Forget Their Negative Feelings on Mathematics *Nobumitsu Shikine, Toshimasa Yamanaka, Letizia Jaccheri, Javier Gomez and Junichi Hoshino (Demonstration)*

Imperceptible Art *Aleksandra Vasovic (Art Exhibit)*

Tappetina: an Ecosystem of Art, Software, and Research *Letizia Jaccheri, Javier Gomez and Sindre B. Skaraas (Art Exhibit)*

Tuesday, 18:00 – 19:30, ICEC RECEPTION

Sessions on Wednesday 19th September 2018

Wednesday, 19 Sept, 2018

Wednesday, 09:30 – 11:00, Session 3: VR and AR

chair: Helmut Hlavacs

Mixed Reality Cycling in an Infinite Procedurally Generated City Wesley Oliveira, Werner Gaisbauer, Michelle Tizuka, Esteban Clua and Helmut Hlavacs (LP)

Aspects that need to be addressed during the development of location-based games Jacques Barnard, Magda Huisman and Gunther Drevin (LP)

Circus Noel: A case study on natural user interface design for VR Mirjam Vosmeer and Alyea Sandovar (SP)

Reorientation Method to Suppress Simulator Sickness in Home VR Contents Using HMD Yuki Ueda and Junichi Hoshino (SP)

A.R.M. - Augmented Reality Muscularity Dirk Sweere, Martin Hughes, Martijn van Laar and Lisa Rombout (SP)

Wednesday, 11:00 – 11:30, Coffee break

Wednesday, 11:30 – 12:30, WCC 2018 Keynote

The Pros and Cons of Blockchain for Privacy Dr. Jan Camenisch

Wednesday, 12:30 – 14:00, Lunch break

Wednesday, 14:00 – 15:00, IFIP-ICEC KEYNOTE, A/Prof. Aisling Kelliher

KEYNOTE: Aspirational Cyber Human Systems A/Prof. Aisling Kelliher, Inst. for Creativity, Arts, and Technology, USA

Wednesday, 15:00 – 15:30, Panel Discussion: Robot Competitions

PANEL: Robot Competition, David David Obdrzalek, Richard Balogh, Artur Lugmayr

Robot competitions are more and more used as a tool for education as well as an entertainment activity. This workshop brings together organizers, participants, teachers, and other people interested to share best practices, discuss issues and possibly improve their work. The main objectives of this workshop are to gather organizers of different robot competition events, competition participants, teachers, and other interested people from various environments to: – foster establishing of a network of organizers and their events to support participants exchanges and to motivate them to attend also other than local events, – connect the workshop participants to share best practices, discuss issues and possibly improve their work.

Wednesday, 15:30 – 16:00, Coffee break

Wednesday, 16:00 – 17:30, Session 4: Digital Games

chair: Jussi Holopainen

Games That Make Curious: An Exploratory Survey into Digital Games That Invoke Curiosity Marcello A. Gómez Maureira and Isabelle Kniestedt (LP)

Learning to Identify Rush Strategies in StarCraft Teguh Budianto, Hyunwoo Oh and Takehito Utsuro (LP)

Virtual Reality as e-Mental Health to Support Starting with Mindfulness-Based Cognitive Therapy *Koen H. B. Damen and Erik D. van der Spek (SP)*

Engagement in Interactive Digital Storytelling: Sampling without spoiling *Sergio Estupinan, Kasper Ingdahl Andkjær and Nicolas Szilas (SP)*

Playing with Empathy through a Collaborative Storytelling Game *Sindre Skaraas, Javier Gomez and Letizia Jaccheri (SP)*

Wednesday, 18:00 – 19:00, Doctoral Consortium

chair: Letizia Jaccheri

Affecting Well-Being Through Digital Games *Isabelle Kniestedt*

A Game-Based Plattform to Tackle a Public Health Problem *Tiago Fran_ca Melo Lima and Clodoveu Augusto Davis Jr.*

Wednesday, 19:00, Congress Dinner

Thursday, 20 Sept, 2018

Thursday, 09:30 – 11:00, Session 5, Storytelling, Narrative, and Behaviours

chair: Licinio Roque

Design and evaluation of a fall prevention multi-player game for senior care centres

Joana Silva, Elsa Oliveira, Dinis Moreira, Francisco Nunes, Martina Čaić, João Madureira and Eduardo Pereira (LP)

Comedy in the Ludonarrative of Video Games *Oskari Kallio and Masood Masoodian (LP)*

Construction of mixed reality story environment based on real space shape *Kazuma Nagata and Junichi Hoshino (SP)*

Digital Therapies Robert J. Wierzbicki (SP)

Thursday, 11:00 – 11:30, Coffee Break

Thursday, 11:30 – 12:30, WCC 2018 Keynote

What Needs to be Added to Machine Learning? *Prof. Leslie Valiant*

Thursday, 12:30 – 14:00, Lunch Break

Thursday, 14:00 – 15:30, Session 6, Entertainment Business, Information Systems, and Media Studies

chair: Junichi Hoshino

Physiological Affect and Performance in a Collaborative Serious Game between Humans and an Autonomous Robot *Petar Jerčić, Johan Hagelbäck and Craig Lindley (LP)*

Analysis of the effect of number of players on the excitement of the game with respect to fairness *Sagguneswaraan Thavamuni, Hiroyuki Iida and Hadzariah Ismail (LP)*

Sensor Ball Raffle – gamification of billboard advertising: How to engage the audience? *Sari Järvinen, Johannes Peltola and Paul Kemppi (LP)*

Realtime Musical Composition System for Automatic Driving Vehicles *Yoichi Nagashima (SP)*

Thursday, 15:30 – 16:00, Coffee Break

Thursday, 16:00 – 16:30, KEYNOTE, Nikolay Nikolov

KEYNOTE: AR and VR Near You *Nikolay Nikolov*

Augmented reality and Virtual reality open people imagination today. Everyone can explore it using smart devices. Invest your time now in smart AR and VR technology and bring new horizons to your products and services.

Wednesday, 16:30 – 17:00, CLOSING SESSION, Best Papers, IFIP-Award

CLOSING ADDRESS AND AWARDS *Artur Lugmayr, Kathrin Gerling, Esteban Clua, Licino Roque*