



2018 IHSED International

1st International Conference on
Human Systems Engineering and Design:
Future Trends and Applications



Final Program

October 25-27, 2018

CHU-Université de Reims

Champagne-Ardenne, France

WWW.IHSED.ORG

Opening Plenary Session and Keynote Address

Date: October 25, 2018 • 13:00-15:00
Auditorium: Paris (Level 1)

IHSED 2018 Conference Address:
Institut Régional de Formation,
CHU-Université de Reims Champagne-Ardenne
51100 Reims, France

DESIGNING A COMFORTABLE PRODUCT/SERVICE-SYSTEM FOR HUMAN SENSORS: THE SWEETNESS OF DISCOMFORT

Prof. Dr. Peter Vink

Chair department Design Engineering,
TU Delft / faculty of Industrial Design
Engineering, The Netherlands



About the speaker

Peter is professor at the faculty of Industrial Design Engineering and is working on interior design and the effects on comfort. He is in the editorial board of many scientific journals (e.g. Applied Ergonomics) , member of the jury of the Crystal Cabin Award (the most prestigious prize in aircraft interiors) and won the Hal W Hendrick Award in 2011, which is for a non-U.S. citizen who has made outstanding contributions to the human factors/ergonomics field. Peter Vink is now chairing the department Design Engineering of the faculty Industrial Design Engineering of the Delft University of Technology after being president of the Dutch Ergonomics Association, head of the section Applied Ergonomics and Design and head of the department Interior Design at TNO.

Abstract

Humans can hear the difference in the temperature of water and after being in cold water a slightly warmer bath (but still cold) could feel comfortable for a while. Sitting on a hard surface in the precondition makes the next seat feel softer and after seeing bright colors the next colors could be experienced different then after being in dark environment. Four examples of strange characteristics of the human sensors and you will experience these differences yourself being in the lecture. Human sensors are not good in recording absolute values, but better in recording fast small differences. New research on the human sensors and how the brain reacts to information coming from the sensors opens new possibilities for design. A product and/or system should be seen in its context, in a system and time should be taken into account as well in designing. Knowledge on the sweetness of discomfort could be used in design. The sweetness of discomfort is that our sensors adapt unconsciously to a slow increase in discomfort and that the phase, after discomfort, could be consciously experienced more comfortable.

CONFERENCE RECEPTION/BANQUET: THURSDAY, OCTOBER 25
18:00 - 22:00
VEUVE CLICQUOT PONSARDIN CENTER
(THE WORLD-FAMOUS CHAMPAGNE HOUSE)
1 RUE ALBERT THOMAS 51100 REIMS, FRANCE

(Dress is business casual, Registered Participant Photo ID Required)

Conference Organization

HONORARY CONFERENCE CHAIR

M. Hervé Quinart, France

CONFERENCE ORGANIZING CHAIRS

R. Taiar, France

W. Karwowski, USA

T. Ahram, USA

IHSED 1: HUMAN-CENTERED DESIGN

Chair: C. Falcão, Brazil

A. Murata, Japan
F. Rebelo, Portugal
D. Coelho, Portugal
A. Polak-Sopinska, Poland
J. Cegarra, France
J. Kantola, Finland

IHSED 2: INNOVATIVE MATERIALS FOR PRODUCT DEVELOPMENT

Chair: S. Camplone, Italy

R. Goossens, Netherlands
A. Ebert, Germany
M. Andujar, USA
M. Friedrich, Germany
S. Parida, Germany

IHSED 3: SYSTEMS DESIGN AND HUMAN DIVERSITY

Chair: G. Di Bucchianico, Italy

H. Vanharanta, Finland
M. Nagamachi, Japan
H. Parsaei, Qatar

IHSED 4: SAFETY ENGINEERING AND SYSTEMS COMPLEXITY

Co-Chairs: B. Mrugalska, Poland
P. Arezes, Portugal

B. Dugue, France
S. Pickl, Germany
I. Nunes, Portugal
H. Pillet, France
D. Thiveaud, France
J. Pierret, France

IHSED 5: SPORTS DESIGN AND SPORTS MEDICINE

Chair: R. Taiar, France

F. Bogard, France
J. Rouillard, France
R. Gaëtan, France
F. Constant Boyer, France
F. Fourchet, Switzerland
N. Antonova, Bulgaria
M. Bernardo Filho, Brazil
C. Machado, Brazil
R. Whiteley, Qatar
J. Seigneur, Switzerland
W. Woo, South Korea
S. Nanayakkara, New Zealand
J. Jeong, South Korea
C. Hansen, Germany
B. Molik, Poland
A. Kuchumov, Russia
D. Da Cunha de Sá-Caputo, Brazil

IHSED 6: BIOMECHANICS, HEALTH DISEASE AND REHABILITATION

Co-Chairs: H. Quinart, France

R. Taiar, France

K. Zerka, Poland
P. Bengtsson, Sweden
Ł. Matuszelański, Poland
F. Constant Boyer, France
F. Fourchet, Switzerland
N. Antonova, Bulgaria
M. Bernardo Filho, Brazil
C. Machado, Brazil
R. Whiteley, Qatar
J. Seigneur, Switzerland
W. Woo, South Korea
S. Nanayakkara, New Zealand
J. Jeong, South Korea
C. Hansen, Germany
B. Molik, Poland
A. Kuchumov, Russia
D. Da Cunha de Sá-Caputo, Brazil

IHSED 7: HUMAN CYBER PHYSICAL SYSTEMS INTERACTIONS

Chair: A. Ebert, Germany

H. Pillet, France
I. Nunes, Portugal
R. Philipsen, Germany
S. Pickl, Germany

IHSED 8: BUSINESS, DESIGN AND TECHNOLOGY

Chair: T. Ahram, USA

B. Mrugalska, Poland
I. Nunes, Portugal
R. Philipsen, Germany
S. Pickl, Germany

IHSED 2018 Conference Administrator
United States of America
admin@ihsted.org

Conference at a Glance

IHSED 2018
REGISTRATION DESK LOCATED AT
INSTITUT RÉGIONAL DE FORMATION
CHU-UNIVERSITÉ DE REIMS
CHAMPAGNE-ARDENNE

REGISTRATION DESK OPEN:

Thursday, October 25.....10:00 - 15:00
 Friday, October 26.....8:00 - 17:00
 Saturday, October 27.....8:00 - 17:00

Complimentary Coffee 7:30-8:30 in Level 1 at the Institut Régional de Formation
 CHU-Université de Reims Champagne-Ardenne

Friday, October 26

#	TITLE	ROOM	TRACK
Session Time: 8:30-10:30			
1	IHSED 1: Human-Centered Design and User Experience I	Paris	HCD
2	IHSED 2: Innovative Materials for Product Development	Reims	ITA
3	IHSED 3: Systems Design and Human Diversity Applications I	Cannes	SHHD
4	IHSED 4: Safety Engineering and Complex Systems Design	Nice	SESC
5	IHSED 5: Sports Design and Sports Medicine	Leon	COG
10:30 - 11:00 Refreshments will be provided in Level 1 Coffee Break Room			
Session Time: 11:00 - 13:00			
6	IHSED 6: Biomechanics and Digital Human Models	Paris	BHDR
7	IHSED 7: Human Cyber Physical Systems Interaction Applications I	Reims	HCPSI
8	IHSED 8: Business, Design and Technology	Cannes	BDT
9	IHSED 1: Human-Centered Design and User Experience II	Nice	HCD
10	IHSED 3: Artificial Intelligence and Intelligent System Design	Leon	SHHD
13:0 - 14:00 • Lunch Break • Lunch Provided in Level 1			
Session Time: 14:00 - 16:00			
11	IHSED 4: Occupational Safety and Risk Assessment	Paris	SESC
12	IHSED 6: Health Management and Rehabilitation I	Reims	BHDR
13	IHSED 7: Human Cyber Physical Systems Interaction Applications II	Cannes	HCPSI
14	IHSED 1: User Interface Design and Human Behavior	Nice	HCD
15	IHSED 3: Systems Design and Human Diversity Applications II	Leon	SHHD
16:00 - 16:30 Refreshments will be provided in Level 1 Coffee Break Room			
Session Time: 16:30 - 18:30			
16	IHSED 4: Transportation System Design and Safety Engineering	Paris	SESC
17	IHSED 6: Health Management and Rehabilitation II	Reims	BHDR
19	IHSED 1: Human-System and Interface Design I	Nice	HCD
20	IHSED 3: Systems Design and Human Diversity Applications III	Leon	SHHD

Conference at a Glance

Complimentary Coffee 7:30-8:30 in Level 1 at the Institut Régional de Formation
CHU-Université de Reims Champagne-Ardenne

Saturday, October 27

#	TITLE	ROOM	TRACK
Session Time: 8:30-10:30			
21	IHSED 4: Safety Evaluation and Ergonomic Risks	Paris	SESC
22	IHSED 6: Biomechanics and Health Management Applications	Reims	BHDR
23	IHSED 1: Human-Centered Design and User Experience III	Cannes	HCD
24	IHSED 4: Organizational and Strategic Interventions	Nice	SESC
25	IHSED 1: Virtual and Augment Reality I	Leon	HCD
10:30 - 11:00 Refreshments will be provided in Level 1 Coffee Break Room			
Session Time: 11:00 - 13:00			
26	IHSED 1: Virtual and Augment Reality II	Paris	HCD
27	IHSED 1: Human-System and Interface Design I	Reims	HCD
28	IHSED 1: Human-System and Interface Design II	Cannes	HCD
30	IHSED 1: Usability Evaluation	Leon	HCD
13:00 - 14:00 • Lunch Break • Lunch Provided in Level 1			
Session Time: 14:00 - 16:00			
31	IHSED 1: Human-Centered Design and User Experience IV	Paris	HCD
32	IHSED 1: Human-Machine Collaboration	Reims	HCD
34	IHSED 1: Human-Centered Design Applications I	Nice	HCD
16:00 - 16:30 Refreshments will be provided in Level 1 Coffee Break Room			
Session Time: 16:30 - 18:30			
35	IHSED 1: Human-Centered Design Applications II	Cannes	HCD
36	IHSED 1: Design Evaluation, Learning and Assessment	Paris	HCD
40	IHSED 4: Transportation System Design and Safety Engineering II	Leon	SESC

ACRONYM	TRACK
HCD	IHSED 1: Human-Centered Design
IMPD	IHSED 2: Innovative Materials for Product Development
SHHD	IHSED 3: Systems Design and Human Diversity
SESC	IHSED 4: Safety Engineering and Systems Complexity
SDSM	IHSED 5: Sports Design and Sports Medicine
BHDR	IHSED 6: Biomechanics, Health Disease and Rehabilitation
HCPSI	IHSED 7: Human Cyber Physical Systems Interactions
BDT	IHSED 8: Business, Design and Technology

Detailed Technical Program

Friday, October 26

Friday, October 26

1	IHSED 1: Human-Centered Design and User Experience I Co-Chairs: Verena Wagner-Hartl, Germany and Neil Gomes, USA	HCD
8:30 - 10:30 - PARIS	<p>Subjective evaluation of EV sounds - a human-centered approach Verena Wagner-Hartl, Bernhard Graf, Markus Resch, Paco Langjahr, Germany</p> <p>Applying human-centered design and human-machine integration techniques to solve key healthcare problems Neil Gomes, Viraj Patwardhan, United States</p> <p>Introduction of user experience into the design of academic services at university centre of defence Jorge Sierra-Perez, Silvia Guillen Lambea, Marcos Pueo, Myriam Cilla Hernández, Carlos Romero-Piqueras, Spain</p> <p>Evaluation of matching degree between touch gestures and user mental model based on event-related potential Ningyue Peng, Jing Ma, Chengqi Xue, China</p> <p>Design and evaluation of an innovative assistive device for improving blood circulation in osteoarthritis Yan Chun Lin, Fong Gong Wu, Taiwan</p>	
2	IHSED 2: Innovative Materials for Product Development Co-Chairs: Christianne Falcao, Brazil and Masaki Shimomura, Japan	IMPD
8:30 - 10:30 - REIMS	<p>Factor analysis of synesthetic perceptual dimensions using aluminum alloy material texture surface in industrial products Jialun Huang, Xiaozhou Zhou, Chengqi Xue, Lei Zhou, Yafeng Niu, China</p> <p>Quantifying sense of depth towards visual texture using optics simulation Masaki Shimomura, Ruriko Kamesaka, Mugi Nishihara, Kei Matsuoka, Takamasa Yoshimura, Takeo Kato, Yoshiyuki Matsuoka, Japan</p> <p>Assistance system (as) for vehicles on indian roads: A case study Neha Soni, Enakshi Sharma, Narotam Singh, Amita Kapoor, India</p> <p>Smart textiles and their role in monitoring the body's fitness and medical conditions Mohamed Eldessouki, Redha Taiar, Tareq Ahram, Stanislav Petrik, Czech Republic</p> <p>Prevention of work-related musculoskeletal disorders using smart workwear – The smart workwear consortium Carl Lind, Leif Sandsjö, Nafise Mahdavian, Dan Högberg, Lars Hanson, Jose Antonio Diaz Olivares, Lijun Yang, Mikael Forsman, Sweden</p> <p>Multi-objective optimization applied to the bioclimatic design of dwellings with ecomaterials Jesus Hechavarria, Robinson Vega, Boris Forero, Ecuador</p>	
3	IHSED 3: Systems Design and Human Diversity Applications I Co-Chairs: Morteza Dianatfar, Finland and Massimo Di Nicolantonio, Italy	SHHD
8:30 - 10:30 - CANNES	<p>Comfort design in human robot cooperative tasks Alireza changizi, Morteza Dianatfar, Minna Lanz, Finland</p> <p>Design for seniors: A case study based on human centric lighting Aldo Deli, Massimo Di Nicolantonio, Emilio Rossi, Italy</p> <p>PlayCube: designing a tangible playware module for Human-Robot Interaction Vinicius Silva, Filomena Soares, Joao Sena-Estevés, Ana Paula Pereira, Portugal</p> <p>Methodology for shaping the agility of the intelligent autonomous environment management system Stefan Trzcielinski, Jowita Trzcielinska, Edmund Pawlowski, Krystian Pawlowski, Poland</p> <p>Design of a framework to promote physical activity for the elderly Alexandre Calado, Pedro Leite, Filomena Soares, Paulo Novais, Pedro Arezes, Portugal</p>	

4	IHSED 4: Safety Engineering and Complex Systems Design Chair: Beata Mrugalska, Poland	SESC
8:30 - 10:30 - NICE	<p>High-hazard complex systems design: HF Integration in practice Karen Priestman, United Kingdom</p> <p>Developing safety competence process for vocational students Sari Tappura, Sanna Nenonen, Noora Nenonen, Finland</p> <p>Capturing the up's and downs of accidents data – The Portuguese case study Celina Leão, Susana Costa, Néilson Costa, Pedro Arezes, Portugal</p> <p>Remaining Useful Life as prognostic approach: A review Beata Mrugalska, Poland</p>	
5	IHSED 5: Sports Design and Sports Medicine Co-Chairs: Aleksandra Polak-Sopinska, Poland and Qi Luo, China	SDSM
8:30 - 10:30 - LEON	<p>DJ-Running: wearables and emotions for improving running performance Pedro Álvarez, José Ramón Beltrán, Sandra Baldassarri, Spain</p> <p>Design and realization of catching and grappling course multimedia CAI System based on web Xin Wang, China</p> <p>Research and Application of Motion Capture Technology in Sports Education Tianyu He, Qi Luo, China</p> <p>Organization of tennis clubs to eliminate barriers most frequently specified by people with visual impairments Aleksandra Polak-Sopinska, Ewa Nebelska, Poland</p>	
10:30 - 11:00 Refreshments will be provided in Level 1 Coffee Break Room		
6	IHSED 6: Biomechanics and Digital Human Models Co-Chairs: Markus Peters, Germany and Ana Sofia Colim, Portugal	BHDR
11:00 - 13:00 - PARIS	<p>Biomechanical digital human models: chances and challenges to expand ergonomic evaluation Markus Peters, Eric Quadrat, Alexander Nolte, Alexander Wolf, Jörg Miehling, Sandro Wartzack, Wolfgang Leidholdt, Sebastian Bauer, Lars Fritzsche, Sascha Wischniewski, Germany</p> <p>Workers' body constitution as a risk factor during manual materials handling Ana Colim, Pedro Arezes, Paulo Flores, Ana Braga, Portugal</p> <p>Design and realization of police physical fitness assessment management system Xin Wang, China</p> <p>Smart joint: Mobile training-diagnostics equipment Alena Cepkova, Lubomír Šooš, Slovakia</p> <p>EMG comparison of sport manual wheelchair propelled by lever drive and push rims and possible consequences for rehabilitation: A case study Krzysztof Fiok, Michalina Bła kiewicz, Ida Wiszomirska, Nadir Skendraoui, Fabien Bogard, Sébastien Murer, Redha Taiar, Poland</p> <p>Full body three dimensional joint angles validation using TEA ergo inertial measurement units Thomas Peeters, Stijn Verwulgen, Raman Garimella, Koen Beyers, Steven Truijen, Belgium</p>	

7	<p>IHSED 7: Human Cyber Physical Systems Interaction Applications I Co-Chairs: Wim Zeiler, Netherlands and Scott Cadzow, UK</p>	HCPSI
11:00 - 13:00- REIMS	<p>Study on interaction modalities between humans and CPS in sociotechnical systems Stuart Chapman, Thomas Kirks, Jana Jost, Germany</p> <p>Ethics as a security role Scott Cadzow, United Kingdom</p> <p>Security Design from Ergonomic Perspective: From “Total Security” to “Acceptable Security” Design for a Better Real Security Ferdinand Monéger, Fabien Coutarel, Patrick Chambre, Marie Izaute, Michel Dhome, France</p> <p>Are we designing cybersecurity to protect people from malicious actors? Alex Cadzow, United Kingdom</p> <p>A human-in-the-loop approach for energy flexibility system integration to support infrastructures Wim Zeiler, Timi Labeodan, Netherlands</p>	
8	<p>IHSED 8: Business, Design and Technology I Co-Chairs: Kristof Briele and Holger Heppner Germany</p>	BDT
11:00 - 13:00- CANNES	<p>Extracting customer-related information for need identification: Applying computational linguistics for innovative product development Antonia Fels, Kristof Briele, Max Ellerich, Robert Schmitt, Germany</p> <p>Becoming digital – Instruments for SME Holger Heppner, Katharina Schlicher, Germany</p> <p>Psychological Contract Violation and Job Satisfaction: The Direct and Moderating Effects of Emotional Labor of Flight Attendants Noriko Okabe, Japan</p> <p>Adaptive Serious Gaming for the development and assessment of 21st century skills Gabrielle Teyssier-Roberge, Sebastien Tremblay, Canada</p> <p>Visualization system design for the process of packing egg powders Irena Jalmuzna, Poland</p> <p>Survey on the Influence of Managing Strikes, Industrial Manifestation for Industrial Harmony in Nigeria Ifetayo Oluwafemi, Clinton Aigbavboa, Jesusetemi Oluwafemi, Jan-Harm C Pretorius, South Africa</p> <p>A Research-Based Approach for Higher Educational System: Nigeria in Perspectives Ifetayo Oluwafemi, South Africa</p>	
9	<p>IHSED 1: Human-Centered Design and User Experience II Co-Chairs: Susanna Aromaa, Finland and Marianne Kjørstad, Norway</p>	HCD
11:00 - 13:00 - NICE	<p>User evaluation of Industry 4.0 concepts for worker engagement Susanna Aromaa, Marja Liinasuo, Eija Kaasinen, Michael Bojko, Franziska Schmalfuß, Konstantinos C. Apostolakis, Dimitrios Zarpalas, Petros Daras, Cemalettin Özturk, Menouer Boubekeuer, Finland</p> <p>Early validation of user needs in concept development: A case study in an innovation-oriented consultancy Marianne Kjørstad, Kristin Falk, Gerrit Muller, José Pinto, Norway</p> <p>Task analysis based on user centred approach for designing the remote aerodrome flight information service systems Satoru Inoue, Kazuhiko Yamazaki, Taro Kanno, Japan</p> <p>Medical device design challenges based on users hierarchy and their correlation with illness Fabiola Cortes-Chavez, Maria Giovanna Trotta, Paulina Manzano Hernandez, Alberto Rossa-Sierra, Gabriela Duran-Aguilar, Mexico</p> <p>Do design outcomes get influenced by type of user data? An experimental study with primary and secondary user research data Abhishek Dahiya, Jyoti Kumar, India</p>	

10	<p>IHSED 3: Artificial Intelligence and Intelligent System Design Co-Chairs: Yuriko Sawatani, Japan and Nicolay Semionovitch, Russia</p>	SHHD
11:00 - 13:00 - LEON	<p>Analysis of internet of things activities in Japanese companies: Towards innovation or cost reduction Yuriko Sawatani, Yuta Tanoue, Japan</p> <p>On inverse problem of artificial intelligence in system-informational culture Nicolay Vasilyev, Vladimir Gromyko, Stanislav Anosov, Russia</p> <p>Towards mathematical modeling of emotions elicited by novelty: An information theoretic approach Hideyoshi Yanagisawa, Japan</p> <p>Real time traffic incident detection by using twitter stream analysis Maryam Afzaal, Nazifa Nazir, Khadija Akbar, Sidra Perveen, Umer Farooq, M. Khalid Ashraf, Zonia Fayyaz, Pakistan</p> <p>Systemic analysis of bioclimatic design of low-income state-led housing program "Socio Vivienda" at Guayaquil, Ecuador Santiago Dick, Jesús Hechavarría, Boris Forero, Ecuador</p>	
13:00 - 14:00 • Lunch Break • Lunch Provided in Level 1		
11	<p>IHSED 4: Occupational Safety and Risk Assessment Co-Chairs: Maria Grazia Monaco, Italy and Hebert Roberto Silva, Brazil and Emmanuel Boateng, Australia</p>	SESC
14:00 - 16:00 - PARIS	<p>Are Teammate Trust and Confidence Dissociable in Risk Intensive Human Machine Teaming? John Blitch, Anna Skinner, United States</p> <p>Augmented reality for health and safety training program among healthcare workers: an attempt at a critical review of the literature Anna Rita Corvino, Paola Arena, Elpidio Maria Garzillo, Arcangelo Cioffi, Maria Grazia Lourdes Monaco, Monica Lamberti, Italy</p> <p>Predicting the level of safety performance using an artificial neural network Emmanuel Boateng, Manikam Pillay, Peter Davis, Australia</p> <p>Evaluation of occupational safety and ergonomics in the reuse and recycling of solid materials Hebert Roberto Silva, Brazil</p> <p>The organizational safety culture assessment Alin Gaureanu, Anca Draghici, Corina Dufour, Hugo Weinschrott, Romania</p> <p>Kaizen approach for the systematic review of occupational safety and health procedures in food industries Renan Zocca, Tânia M. Lima, Pedro D. Gaspar, Fernando Charrua-Santos, Portugal</p>	
12	<p>IHSED 6: Health Management and Rehabilitation I Co-Chairs: Adam Kurowski, Poland, Yan Luximon, Hong Kong and Kiyohiko Nunokawa, Japan</p>	BHDR
14:00 - 16:00 - REIMS	<p>Preliminary study of facial soft tissue thickness in Indian children from Mumbai city Parth Shah, Yan Luximon, Vividh Makwana, Hong Kong SAR China</p> <p>The influence of the manner of grasping a white cane on the ability of visually impaired people to perceive the texture of objects Kiyohiko Nunokawa, Manabu Chikai, Kouki Doi, Shuichi Ino, Japan</p> <p>Therbligh principles as a basic of movement therapy for stroke patients Bernadus Kristyanto, Brilianta Budi Nugraha, Kristanto Agung Nugroho, Suyoto Suyoto, Anugrah Kusumo Pamosoaji, Indonesia</p> <p>Assessment of therapeutic progress after acquired brain injury employing electroencephalography and autoencoder neural networks Adam Kurowski, Andrzej Czyżewski, Poland</p> <p>Education system for Highly Cultural Caring Tomoko Ota, Japan</p>	

13	<p>IHSED 7: Human Cyber Physical Systems Interaction Applications II Co-Chairs: Jaime León Duarte, Mexico and Leonor Teixeira, Portugal</p>	HCPSI
14:00 - 16:00 - CANNES	<p>The effect of cognitive load in 3D virtual environments SiaoWei Huang, Yuchen Hsu, Taiwan</p> <p>A software tool for the calculation of time standards by means of predetermined motion time systems and motion sensing technology Jaime Leon Duarte, Luis Felipe Romero Dessens, Luis Enrique Aguilar Yocupicio, Mexico</p> <p>Research on visual speech recognition based on local binary pattern and stacked sparse autoencoder Yuanyao Lu, Ke Gu, Shan He, China</p> <p>Pythaposi: Indoor location estimation with physics constraint and recursive filtering Hiroaki Tobita, Japan</p> <p>An information management framework to Industry 4.0: A lean thinking approach Leonor Teixeira, Carlos Ferreira, Beatriz Sousa Santos, Portugal</p>	
14	<p>IHSED 1: User Interface Design and Human Behavior Co-Chairs: Richard Harte, Ireland and Margaret Bailey, USA</p>	HCD
14:00 - 16:00 - NICE	<p>User Centric Design and Development of a Lateral Canthotomy and Cantholysis Part Task Trainer Teresita Sotomayor, Margaret Bailey, United States</p> <p>Prototyping a user interface for a new sepsis risk decision support system using participatory design Richard Harte, Leo Quinlan, Evismar Andrade, Patrick Pladys, Alain Beuchee, Enda Fallon, Martina Kelly, Paul O'Connor, Denis O'Hora, Gearóid ÓLaighin, Ireland</p> <p>Methodologies for the Design of ATM Interfaces: A Systematic Review Arturo Moquillaza, Joel Aguirre, Freddy Paz, Peru</p> <p>Live action carnavalía: A case study of a process for user engagement Vladimir Barros, Breno Carvalho, Brazil</p> <p>Defining user needs for a new sepsis risk decision support system in neonatal ICU settings through ethnography, user interviews and participatory design Richard Harte, Leo Quinlan, Evismar Andrade, Patrick Pladys, Alain Beuchee, Enda Fallon, Martina Kelly, Paul O'Connor, Denis O'Hora, Gearóid ÓLaighin, Ireland</p> <p>Beginning, middle, and end: Designing engaging user experiences through storytelling Jeremy Swanston, United States</p>	
15	<p>IHSED 3: Systems Design and Human Diversity Applications II Co-Chairs: Linda Rolfo, Sweden and Barbara Mazur, Poland</p>	SHHD
14:00 - 16:00 - LEON	<p>Predictors of preference for the activity-based flexible office Linda Rolfo, Helena Jahncke, Lisbeth Slunga Järholm, Maria Öhrn, Maral Babapour, Sweden</p> <p>Human diversity and organizational culture Barbara Mazur, Poland</p> <p>An experimental study on relationship between intellectual concentration and personal mental characteristics Wakako Takekawa, Kimi Ueda, Shogo Ogata, Hiroshi Shimoda, Hirotake Ishii, Fumiaki Obayashi, Japan</p> <p>An evaluation method for intellectual concentration based on concentration depth Kimi Ueda, Shota Shimonaka, Hiroshi Shimoda, Hirotake Ishii, Fumiaki Obayashi, Japan</p>	
16:00 - 16:30 Refreshments will be provided in Level 1 Coffee Break Room		

16	IHSED 4: Transportation System Design and Safety Engineering I Co-Chairs: Paul März, Germany and Janusz Rymaniak, Poland	SESC
16:30 - 18:30 - PARIS	<p>Driver stress response to self-driving vehicles and takeover request – an expert assessment Paul Maerz, Uwe Handmann, Germany</p> <p>Modular configuration of the seaport – identification of the research problem Janusz Rymaniak, Bogdan Nogalski, Poland</p> <p>Evaluation of Persona-Based User Scenarios in Vehicle Development Alexander Mueller, Stefanie Beyer, Germany</p> <p>Intelligent material transportation system design for small and medium-sized plants Rujun Gao, China</p> <p>Monitoring driver posture through sensorized seat Alberto Vergnano, Francesco Leali, Italy</p>	
17	IHSED 6: Health Management and Rehabilitation II Co-Chairs: Carlos Ferreira, Portugal and Chika Sugimoto, Japan	BHDR
16:30 - 18:30 - REIMS	<p>National patient registry: A web-based technological solution for haemophilia in Portugal Leonor Teixeira, Vasco Saavedra, Beatriz Sousa Santos, Carlos Ferreira, Portugal</p> <p>Healthcare IT systems design using recognition models to improve reliability Chika Sugimoto, Japan</p> <p>Robotic system for active-passive strength therapy Eliseo de Jesus Cortes Torres, Anibal Alexandre Campos Bonilla, Daniel Martins, Eduardo Bock, Brazil</p> <p>A contactless walking stick using depth sensor and vibrators Dai Kudo, Munehiro Takimoto, Yasushi Kambayashi, Japan</p> <p>Novel sensor-fusion system concepts for indoor and outdoor fall detection Zhengyu Peng, Changzhi Li, Laurent Billonnet, Achille Tchalla, France</p> <p>Walking motion recognition system employing leg-mounted smartphones Yasuyuki Kono, Katsunori Tai, Japan</p>	
19	IHSED 1: Human-System and Interface Design I Co-Chairs: Kazuo Hatakeyama, Brazil and SuKyoung Kim, Japan	HCD
16:30 - 18:30 - NICE	<p>Introduction of service design in a public hospital's medical oncology service. Carlos Romero-Piqueras, Jorge Sierra-Perez, Eduardo Manchado-Pérez, Spain</p> <p>Assistive Devices for Lower Limbs under Mechanism of Neuromodulation and Blood Circulation Hui-I Yin, Taiwan</p> <p>Enhancing user experience with embodied cognition SuKyoung Kim, Japan</p> <p>Design for man-machine-task system Kazuo Hatakeyama, Norma de Melo Pinto, Brazil</p>	
20	IHSED 3: Systems Design and Human Diversity Applications III Chair: Christina Zavlanou, Cyprus	SHHD
16:30 - 18:30 - LEON	<p>Product packaging evaluation through the eyes of elderly people: Personas vs. Aging suit vs. Virtual reality aging simulation Christina Zavlanou, Andreas Lanitis, Cyprus</p> <p>Product Function Analysis: Reducing Cost of Production Service Line with Work Teams Velia Castillo, Liliana Carrasco-Arméandariz, Mario Coffal-Chacón, Ramon Elizondo-Rios, Mexico</p> <p>Affective design approach to mobile security authentication Daehee Park, Jaeyong Lee, Yenah Lee, Scott Song, South Korea</p> <p>Design for innovative development in construction industry: Proposal based on comparative analysis Kazuo Hatakeyama, Brazil</p>	

21	IHSED 4: Safety Evaluation and Ergonomic Risks Co-Chairs: Giuliana Vitiello, Italy	SESC
8:30 - 10:30 - PARIS	<p>Workplace violence in Finnish emergency departments Johanna Pulkkinen, Finland</p> <p>Methodological proposal for the evaluation of ergonomic risks César Corrales, Milagros Chambe, Peru</p> <p>Human Machine Interface Issues for Drone Fleet Management Angela vozella, Giuliana Vitiello, Salvatore luongo, Marianna Di Gregorio, Italy</p> <p>Better safe than sorry: reducing the risk of failure within the new product development process Diana Dragomir, Stefan Bodi, Mihai Dragomir, Romania</p> <p>A comparative analysis of AS/NZS 4801, ISO45001 and OHSAS 18001 safety management systems Manikam Pillay, Australia</p>	
22	IHSED 6: Biomechanics and Health Management Applications Co-Chairs: Richard Macuto, Philippines and Beata Mrugalska, Poland	BHDR
8:30-10:30 - REIMS	<p>Validation of a digital interface for assessment of motor function based on MFM Adriana Gomes L. de Souza, Dominique Vincent-Genod, Carole Vuillerot, Guillaume Thomann, Michel Debois, France</p> <p>Evaluation of jobfit functional assessment implemented by a Queensland-based rail company among new rail employees Richard Macuto, Philippines</p> <p>Anthropometric Evaluation of the Classroom Desk for Middle Schools Ahamed Altaboli, Omar Elfitori, Ahmed Alturkey, Mohammed Almagrhi, Mohammed Dogman, Libya</p> <p>Development of a biomechanical bike with assistive technologies to be used for rehabilitation Anabela Gomes, Portugal</p>	
23	IHSED 1: Human-Centered Design and User Experience III Co-Chairs: Gaboriau Rénaud, France and Katarzyn Abramczuk, Poland	HCD
8:30-10:30 - CANNES	<p>Rob'Autisme project: to be active in social interactions: The Robot-extension Paradigm Gaboriau Renald, Sakka Sophie, Acier Didier, Delacroix Dimitri, France</p> <p>Is truth contextual? The browsing purpose, the availability of comparable material, and the web content credibility evaluation Katarzyna Abramczuk, Michał Kałkol, Radosław Nielek, Cezary Biele, Poland</p> <p>E-material creating and formatting application Kristine Mackare, Anita Jansone, Maksims Zigunovs, Latvia</p> <p>User as Customer: Touchpoints and Journey Map Camila Bascur, Cristian Rusu, Daniela Quiñones, Chile</p> <p>The User Experience of 3D Scanning Tangible Cultural Heritage Artifacts Chee Weng Khong, Muhammad Asyraf Mhd Pauzi, Malaysia</p>	
24	IHSED 4: Organizational and Strategic Interventions Co-Chairs: KJana Schadow, Germany and Tânia Lima, Portugal	SESC
8:30-10:30 - NICE	<p>Development and implementation of a control room resource management training program Jana Schadow, Carmen Bruder, Hinnerk Eißfeldt, Germany</p> <p>Ergo@office: A participatory ergonomics approach for strategic interventions and prevention of musculoskeletal disorders in SMEs Tânia M. Lima, Denis A. Coelho, Portugal</p> <p>Interdisciplinary design teams in Poland - Architecture as a tool for preventing hospital-acquired infections Rafał Janowicz, Poland</p> <p>Study of the school furniture adequacy to students' anthropometric dimensions Agostinho Fernandes, Paula Carneiro, Néelson Costa, Ana Braga, Portugal</p>	

25	IHSED 1: Virtual and Augment Reality I Co-Chairs: Christianne Falcão, Brazil and Anacleto Correia, Portugal	HCD	
8:30-10:30 - LEON	An initial design of the Mei Garden augmented reality tour-guide system based on the needs analysis Hung-Yeh Lin, Shelley Shwu-Ching Young, Taiwan Augmented Reality in the context of naval operations Mario Simões-Marques, Mendes Elvas, Isabel Nunes, Victor Lobo, Anacleto Correia, Portugal UNICAP Virtual: User experience for a VR Application in Brazilian University Christianne Falcão, Breno Carvalho, Brazil The realization of a virtual reality simulator for studying pedestrian behavior Björn Blissing, Sweden		
	10:30 - 11:00 Refreshments will be provided in Level 1 Coffee Break Room		
	26	IHSED 1: Virtual and Augment Reality II Chair: Nicole Fritz, Germany	HCD
	11:00-13:00 - PARIS	Virtual reality simulation as a tool for exploring vehicle-VRU interaction concepts Nicole Fritz, Sven Bischoff, Alexander Eriksson, Niklas Strand, Anders Lindström, Germany Strategies and Metrics for Evaluating the Quality of Experience in Virtual Reality Applications Xiangjie Kong, Yuqing Liu, China Possibilities and challenges in virtual reality simulation to support human-centered design for automated vehicles Niklas Strand, Alexander Eriksson, Anders Lindström, Sweden VR as a tool to study perceived safety of automated vehicles Maria Klingegård, Jonas Andersson, Azra Habibovic, Victor Malmsten Lundgren, Sweden	
27		IHSED 1: Human-System and Interface Design I Co-Chairs: Teresa Madureiro Paulino, Portugal and Jing Cao, China	HCD
11:00-13:00 - REIMS		Design of an integrative system for configurable exergames targeting the senior population Teresa Paulino, John Muñoz, Sergi Bermudez i Badia, Mónica Cameirão, Portugal A preliminary study on color and grayscale images object recognition and scene classification tasks on Amazon Mechanical Turk crowdsourcing platform Aimee Yun-Fang Lin, Shelley Shwu-Ching Young, Harrison Pang-Sheng Lai, Danna Gurari, Taiwan The functional requirement analysis in nuclear power plant human system interface design Shiguang Deng, Xiaoyang Ming, Guangwei Yu, China Human factors integrated system validation in the nuclear power plant main control room Xiaoyang Ming, Shiguang Deng, Guangwei Yu, China Study on APP interface design under the context of “intangible cultural heritage” inheritance and innovation Zijie Xie, China Research Based on Product Design: The Example of Spimi Skin Detector Ying Cao, Jing Cao, China	

28	IHSED 1: Human-System and Interface Design II Co-Chairs: Dirk Schulze Kissing, Germany and Tung-En Chien, Taiwan	HCD
11:00-13:00 - CANNES	<p>Design and development of an image-based system to facilitate reading comprehension of Chinese classic literature Tung-En Chien, Shelley Shu-Ching Young, Taiwan</p> <p>Making multi-team systems more adaptable by enhancing transactive memory system structures: The case of CDM in APOC Dirk Schulze Kissing, Carmen Bruder, Nils Carstengerdes, Anne Papenfuss, Germany</p> <p>Development of a prototype for non-contact keyboard Yasushi Kambayashi, Munehiro Takimoto, Keita Ueda, Masanari Kasahara, Tatsumi Kusano, Japan</p> <p>FLOW: A software application designed to help older adults build distance interaction Wonsil Jang, Stephen Gilbert, Sunghyun Kang, United States</p> <p>Learning from human behavior to improve preventative health information systems Remberto Martinez, Marcos Tong, Luis Diago, Jaana Lindstrom, Finland</p> <p>Thinking Back: Analyzing my Design process After 25 Years of Professional Practice Gonçalo Falcão, Portugal</p>	
30	IHSED 1: Usability Evaluation Co-Chairs: Jyotish Kumar, India and Leo Quinlan, Ireland	HCD
11:00-13:00 - LEON	<p>Investigation of usability issues through physiological tools. An experimental study with tourism websites Jyotish Kumar, Jyoti Kumar, India</p> <p>Usability assessment as a guide to improve the system design of a corneal topographer Carlos Aceves-Gonzalez, Carlos D. de Leon Zuloaga, Zuli T. Galindo-Estupiñan, Citlali Díaz-Gutiérrez, Mexico</p> <p>Investigation of the human factors, usability and user experience of patient monitors used in a hospital setting Evismar Andrade, Richard Harte, Leo Quinlan, Enda Fallon, Martina Kelly, Paul O'Connor, Denis O'hora, Dara Byrne, Michael Scully, John Laffey, Patrick Pladys, Alain Beuchee, Gearóid ÓLaighin, Ireland</p> <p>State of the art and future trends in the usability of patient monitors Evismar Andrade, Leo Quinlan, Richard Harte, Dara Byrne, Enda Fallon, Martina Kelly, Paul O'Connor, Denis O'hora, Michael Scully, John Laffey, Alain Beuchee, Patrick Pladys, Gearóid ÓLaighin, Ireland</p> <p>Usability evaluation of a public transport mobile ticketing solution Daniel Meireles de Amorim, Maria Teresa Galvão Dias, Marta Maria Campos Ferreira, Portugal</p>	
13:00 - 14:00 • Lunch Break • Lunch Provided in Level 1		
31	IHSED 1: Human-Centered Design and User Experience IV Chair: Brit-Eli Danielsen, Norway	HCD
14:00 - 16:00 - PARIS	<p>Sensemaking on the bridge: A theoretical approach to maritime information design Brit-Eli Danielsen, Norway</p> <p>International museums and transcultural impact on gulf states: The Louvre Abu Dhabi as a case study Mohamed El Amrousi, Mohamed Elhakeem, Evan Paleologos, United Arab Emirates</p> <p>All doors lead to the kitchen – sustainability and wellbeing challenges in a shared centrepiece of living Sofie Andersson, Ulrike Rahe, Sweden</p> <p>Optimal design of a robotic assistant based on the structural study using finite elements Graciela Serpa-Andrade, Luis Serpa-Andrade, Vladimir Robles-Bykbaev, Irene Serpa-Andrade, Ecuador</p>	

32	<p>IHSED 1: Human-Machine Collaboration Co-Chairs: Hermann Kaindl, Austria and Jonas Andersson, Sweden</p>	HCD
14:00 - 16:00 - REIMS	<p>Human-machine interaction Hermann Kaindl, Austria</p> <p>The Human-tech matrix: A socio-technical approach to evaluation of automated transport systems Jonas Andersson, Tor Skoglund, Niklas Strand, Sweden</p> <p>Impact of machine's robotisation on the activity of an operator in picking tasks Adrian Couvent, Matt Dridi, Nicolas Tricot, Christophe Debain, Mahmoud Almasri, Gil De Sousa, Gerard Chalhoub, Marie Izaute, Fabien Coutarel, France</p> <p>Design and management of intelligent, autonomous environment (IAE): Research framework Edmund Pawlowski, Krystian Pawlowski, Stefan Trzcielinski, Jowita Trzcielinska, Poland</p> <p>On the Lack of Pragmatic Processing in Artificial Conversational Agents Baptiste Jacquet, Olivier Masson, Frank Jamet, Jean Baratgin, France</p>	
34	<p>IHSED 1: Human-Centered Design Applications I Co-Chairs: Aleksandra Polak-Sopinska, Poland and Ricardo Jimenez, USA</p>	HCD
14:00 - 16:00 - NICE	<p>Sequential recognition rate and latency of frequency-based tactons Ricardo Jimenez, Ana Jimenez, United States</p> <p>Thermal comfort assessment: A study towards workers' satisfaction in metal industry Kazuo Hatakeyama, Norma de Melo Pinto, Brazil</p> <p>FatigueWatcher: Interactive Fatigue Detection For Personal Computer and Mobile Device Hiroaki Tobita, Japan</p> <p>Incorporating Human Factors in In-Plant Milk Run System Planning Models Aleksandra Polak-Sopinska, Poland</p> <p>User-centered-design approach to evaluate the user acceptance of seating postures for autonomous driving secondary activities in a passenger vehicle Sibashis Parida, Sai Satish Chandra Mallavarapu, Sylvester Abanteriba, Matthias Franz, Wolfgang Grüner, Germany</p>	
16:00 - 16:30 Refreshments will be provided in Level 1 Coffee Break Room		
35	<p>IHSED 1: Human-Centered Design Applications II Co-Chairs: Del Coates, United States and Darko Etinger, Croatia</p>	HCD
16:30 - 18:30 - CANNES	<p>Teaching an innovative E-learning design program for visually impaired students Theresa Lobo, United States</p> <p>Examining cloud computing applications from the perspectives of privacy and unified theory of acceptance and use of technology Tihomir Orehovački, Darko Etinger, Snježana Babić, Croatia</p> <p>Research of aesthetics degree evaluation method in product form Li Ming, Zhang Jie, China</p> <p>Products as mass media: Entertainment vs. edification Del Coates, United States</p> <p>Graphic design analysis model Elisabete Rolo, Portugal</p> <p>Ergonomic analysis in the welding laboratory of the Federal Institute of Paraíba - IFPB, João Pessoa Campus. Amanda Ramos de Amorim, Aarão Pereira de Araújo Junior, Brazil</p>	

<p>36</p>	<p>IHSED 1: Design Evaluation, Learning and Assessment Co-Chairs: Sean Barton, USA and Fabiola Cortes Chavez, Mexico</p>	<p>HCD</p>
<p>16:30 - 18:30 - P ARIS</p>	<p>Measuring collaborative emergent behavior in multiagent reinforcement learning Sean Barton, Nicholas Waytowich, Erin Zaroukian, Derrik Asher, United States</p> <p>Packaging design to support small business enterprises in the Republic of El Salvador Alberto Rossa-Sierra, Maria Giovanna Trotta, Fabiola Cortes-Chavez, Francisco J Gonzalez-Madariaga, Mexico</p> <p>Overview of empathetic approaches to design inclusive products Maria Giovanna Trotta, Fabiola Cortes-Chavez, Alberto Rossa-Sierra, Mexico</p> <p>From acceptability assessment during design process to acceptance in real world Matt Dridi, Adrian Couvent, Mahmoud Almasri, Gerard Chalhoub, Gil De Sousa, Marie Izaute, Nicolas Tricot, Fabien Coutarel, France</p> <p>The importance of industrial design in medical devices in the 21st century Gabriela Duran-Aguilar, Fanny Guadalupe Valdivia-Márquez, Pilar Hernandez-Grajeda, Alberto Rossa-Sierra, Mexico</p> <p>Innovating Service Literacy by Cognitive Mediator Kazuyoshi Hidaka, Hisaki Kawamoto, Soichi Nishikiori, Japan</p> <p>Abductive thinking, conceptualization, and design synthesis Dingzhou Fei, China</p>	
<p>40</p>	<p>IHSED 4: Transportation System Design and Safety Engineering II Co-Chairs: Anna-Lena Köhler, Germany and Elise Crawford, Australia</p>	<p>SESC</p>
<p>16:30 - 18:30 - LEON</p>	<p>Slowing down speeders via dynamic infrastructure nudging measures Anna-Lena Köhler, Stefan Ladwig, Maximilian Schwalm, Germany</p> <p>Participatory design for optimising the implementation of new transport technology Elise Crawford, Yvonne Toft, Ryan Kift, Geoff Dell, Australia</p> <p>Path planning based on A* algorithm for unmanned surface vehicle Kang Hou, Xiaojuan Lan, Yucheng Zhang, Sumarga Kumar Sah Tyagi, China</p> <p>Ethical problems of introducing artificial intelligence into the contemporary society Olga A. Burukina, Svetlana V. Karpova, Nikolas Koro, Russia</p>	

Interactive Poster Demonstrations

Posters will be displayed Friday, Oct 26, 2018 and Saturday, Oct 27, 2018. Posters must be removed by the end of each day/session they are scheduled to be demonstrated. Posters can be positioned starting on Friday, Oct 26, 8:00 a.m. and removed by the last poster session on Saturday, Oct 27, after 16:30. Poster demonstration sessions will be at the times shown below.

POSTER/DEMONSTRATION SESSIONS FRIDAY, OCTOBER 26

Session Time: 10:30 - 12:30

- A1. Application of the principle of conformal symmetry in the structure of human internal organs
Galina Spirina, Russia
- A2. VibroTac S: an electronic assistive device for blind and visually impaired people to avoid collisions
Simon Schätzle, Thomas Hulin, Benedikt Pleintinger, Germany
- A3. Medical devices vigilance, "Materiovigilance", as an actor of the hospital safety culture
Marine Berrué, Dominique Thiveaud, France
- A4. A survey on trust in augmented human technologies
Jean-Marc Seigneur, Tareq Ahram, Redha Taiar, Switzerland
- A5. Education and training of road safety auditors on the implementation of human factors principles in safe road design
Sophia Vardaki, Evangelos Bekiaris, Greece
- A6. Construction of multi-purpose Japanese sign language database
Yuji Nagashima, Japan
- A7. Development of Icons for Electric Chart Display and Information System
JunHyuk Jang, Younghoon Yang, Yonggi Bae, Byeong-Geun Chae, South Korea
- A8. Investigation on openability of peelable package by younger and older females
Nozomi Sato, Japan
- A9. Systemic approach for inclusive design of low-income dwellings in popular settlements at Guayaquil, Ecuador
Boris Forero, Jesús Hechavarría, Silvia Alcivar, Virginia Ricaurte, Ecuador
- A10. Two wheeler crashes injury severity analysis using taxi black box data
Seonjung Kim, Younshik Chung, Jisun Lee, South Korea

POSTER/DEMONSTRATION SESSIONS FRIDAY, OCTOBER 26

Session Time: 14:00 - 16:30

- B1. Research design to assess the mental workload of air traffic controllers
Thorsten Muehlhausen, Thea Radüntz, André Tews, Hejar Gürlük, Norbert Fürstenau, Germany
- B2. Noninvasive estimation of lumbar intervertebral disk load using multiple regression analysis to consider the pelvic tilt
Kyoko Shibata, Yasuhito Tsuyoshi, Yoshio Inoue, Hironobu Satoh, Motomichi Sonobe, Japan
- B3. A study for adapting the monitoring system in order to prevent fall down from a bed
Hironobu Satoh, Kyoko Shibata, Japan
- B4. Development of stride estimation system for improvement of walking efficiency
Gen Miyamoto, Kyoko Shibata, Yoshio Inoue, Motomichi Sonobe, Japan
- B5. Experimental analysis of balance mechanism of a golf swing for performance improvement
Minoru Fukumoto, Kyoko Shibata, Yoshio Inoue, Motomichi Sonobe, Japan
- B6. Estimation of hip joint moment by an inertial measurement unit
Hiroki Kotani, Kyoko Shibata, Yoshio Inoue, Motomichi Sonobe, Hironobu Satoh, Japan
- B7. A study on the effect of human factor for atypical design in the architectural design studio
Yun Gil Lee, South Korea
- B8. Designing Virtual Reality to Enhance Spatiality
Youngil Cho, Japan
- B9. A proposal for an affective design and user-friendly voice agent
Heesung Park, Jeongpyo Lee, Sowoon Bae, Daehee Park, Yenah Lee, South Korea
- B10. Demonstration of a Lateral Canthotomy and Cantholysis Prototype Part Task Trainer
Teresita Sotomayor, Margaret Bailey, United States

Interactive Poster Demonstrations

POSTER/DEMONSTRATION SESSIONS SATURDAY, OCTOBER 27

Session Time: 10:30 - 12:30

- C1. The Evaluation of the Interaction between Human Buttocks Thighs and Wheelchair Seat Cushion to Prevent Pressure Ulcers Using Finite Element Analysis
He Thong Bui, Le Van Nguyen, Karl Debray, Philippe Lestriez, Redha Taiar, Thi Hai Van Nguyen, Quang Bang Tao, France
- C2. Formalization and Quantification of Team Contexts for Meso-Cognitive Studies
Taro Kanno, Daichi Mitsuhashi, Satoru Inoue, Daisuke Karikawa, Kohei Nonose, Japan
- C3. Human-Autonomous Technology Interaction: A Systemic-Structural Activity Theory Perspective
Julian Vince and Gregory Bedny, USA
- C4. A Classification of Motor Imagery Brain Signals Using Least Square Support Vector Machine and Chaotic Particles Swarm Optimization
Arwa Aledaily, Saudi Arabia
- C5. Putting Chatbots to the Test: Does the User Experience Score Higher with Chatbots than Websites?
Amélie Bériault-Poirier, Sandrine Prom Tep, Sylvain Sénécal, Canada
- C6. Information display and accident mitigation supports for emergency response systems in nuclear severe accidents
Hyun-Chul Lee, South Korea
- C7. Design of a new upper limb orthosis for patients with hand or wrist spasticity
Jean Dumont, Sébastien Murer, Samuel Créquy, Hervé Quinart, Tareq Ahram, François Constant Boyer, Redha Taiar, France
- C8. Surfboard Impressions and their Mechanical Properties
Shigeki Fujiwara, Takako Nonaka, Japan

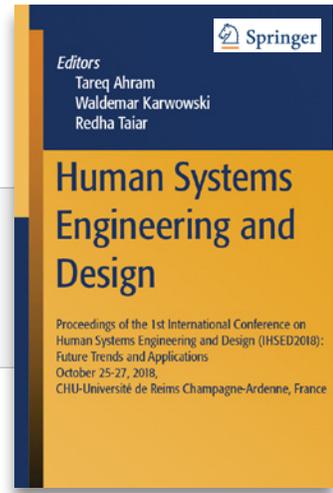
POSTER/DEMONSTRATION SESSIONS SATURDAY, OCTOBER 27

Session Time: 14:00 - 16:30

- D1. A brief report on young adults views on automated driving
Niklas Strand, Alexander Eriksson, Sweden
- D2. Trust and Acceptance of contemporary vehicle automation: a multi-country, on-road assessment
Alexander Eriksson, Anders Lindström, Niklas Strand, Florent Anon, Alain Piperno, Katarina Možina, Sweden
- D3. Co-creation Workshop oriented to the autonomous elderlies in Chile: Unveiling the experience of the participants
Juan Carlos Briede, Cristhian Pérez, Javiera Ortega, Isabel Leal, Chile
- D4. Live migration control method for ensuring sustainable development of e-learning environment
Satoshi Togawa, Kazuhide Kanenishi, Japan
- D5. Experimental investigations and finite element modelling of the vibratory compartment of a manual wheelchair
Nadir Skendraoui, Fabien Bogard, Sébastien Murer, Fabien Beaumont, Fabien Beaumont, Boussad Abbes, Jean Batiste Nolot, Damien Erre, Damien Erre, Redha Taiar, France
- D6. Bringing it together: Three approaches to combine agile software development and human-centered design
Michael Minge, Antonia Föhl, Germany
- D7. A New Approach of Green Light Optimum Speed Advisory with Variable Information Distance and Lower Speed Limit
Hironori Suzuki, Yoshitaka Marumo, Japan
- D8. An alternative ensemble classifier based on penalty strategy for improving prediction accuracy
Cindy-Pamela Lopez, Maritzol Tenemaza, Edison Loza-Aguirre, Ecuador

IHSED2018 Book

Proceedings of the 1st International Conference on Human Systems Engineering and Design (IHSED2018): Future Trends and Applications
October 25-27, 2018,
CHU-Université de Reims Champagne-Ardenne, France



Exhibits

All conference exhibits, posters/demonstrations, and conference refreshment breaks will be held in Level 1 at the Institut Régional de Formation CHU-Université de Reims Champagne-Ardenne



2nd International Conference on Intelligent Human Systems Integration (IHSI 2019)
Hilton San Diego Bayfront, California USA,
February 7-10, 2019.
WWW.IHSINT.ORG

Exhibition Setup:

Thursday, October 25, 8:00 -10:00
Friday, October 26, 7:30 to 8:30

Exhibition Hours:

Friday, October 26, 10:00 to 18:30
Saturday, October 27, 10:00 to 17:00

Exhibition Closing/Dismantle:

Saturday, October 27, 17:30 to 18:30



2nd International Conference on Human Systems Engineering and Design: Future Trends and Applications (IHSED 2019)
Universität der Bundeswehr München
Munich, Germany September 16-18, 2019
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