

AHFE
International
Applied
Human Factors
and Ergonomics
Conference

2012
www.AHFE2012.org

2012 AHFE International

4th International Conference on Applied Human Factors and Ergonomics

jointly with
2nd International Conference
on Human Factors and Ergonomics in Healthcare

2nd International Conference
on Cross-Cultural Decision Making: Focus 2012

2nd International Conference
on Applied Digital Human Modeling

1st International Conference
on Human Side of Service Engineering

1st International Conference
on Affective and Pleasurable Design

1st International Conference
on Human Factors in Transportation

and
14th International Conference
on Human Aspects of Advanced Manufacturing
(HAAMAHA):
Manufacturing Enterprises in a Digital World

21-25 July 2012
Hilton San Francisco Union Square
California

Final Program

Under the auspices of 12 distinguished international Boards
consisting of 317 members from 41 countries

www.ahfe2012.org

Opening Plenary Session and Keynote Address

Date: Sunday, July 22, 2012 • 18:00 - 19:00

Room: Continental Ballroom

Chair: Richard J. Koubek

INTRODUCTORY REMARKS

Gavriel Salvendy - General Conference Chair

Waldemar Karwowski - Program Chair

HUMAN SIDE OF SERVICE ENGINEERING FOR A SMART PLANET

Dr. James ("Jim") C. Spohrer

IBM Innovation Champion and Director of IBM
University Programs Worldwide (IBM UP)



About the speaker

Jim Spohrer is the IBM Innovation Champion and Director of the IBM University Programs Worldwide. He was the founding Director of service research at IBM and has widely published on service science and engineering. He received his undergraduate degree in Physics from MIT and his PhD in Computer Science/Artificial Intelligence from Yale University.

Presentation

This talk explores some of the scientific foundations for service engineering, as well as accumulating experience and data from IBM's Smarter Planet projects around the world. In addition, a vision for the future of service engineering is presented in which technology infrastructure, individual skills, institutional job roles, and cultural information about quality-of-life co-evolve in an upward spiral of technologies, skills, jobs, and quality-of-life measures. Not surprisingly, in this vision of the future sustainable knowledge economy, university-based entrepreneurial ecosystems (UBEE's) are at the core of nested, networked holistic service systems.

REGISTRATION DESK OPEN:

Friday, July 20 Time: 15:00 - 19:00

Saturday, July 21 Time: 7:00 - 19:00

Sunday, July 22 Time: 7:00 - 19:00

Monday, July 23 Time: 7:00 - 18:00

Tuesday, July 24 Time: 7:30 - 18:00

Wednesday, July 25 Time: 7:30 - 18:00

CONFERENCE RECEPTION/BANQUET:

SUNDAY, JULY 22 • 19:15

GOLDEN GATE BALLROOM

(TICKET REQUIRED)

Dress is business casual

Tutorials

PRE-CONFERENCE TUTORIALS

All Tutorials will be held on Saturday, July 21 and Sunday, July 22, 2012

Tutorial Refreshments - Union Square 17&18

SATURDAY, JULY 21

Full Day Tutorials: 8:00 - 17:30

- Practical Statistics for User Research
Presenters: James Lewis and Jeff Sauro
Room: Union Square 15&16
- Human Factors in Health Care: Fundamentals in Human Performance and Patient Safety
Presenter: Vince Duffy
Room: Union Square 19&20

Half Day Tutorials: 8:00 - 12:00

- Computational Analysis of Social and Organizational Systems: Dynamic Network Analysis (DNA) and ORA
Presenters: Kathleen Carley and Jürgen Pfeffer
Room: Union Square 13
- Mobile User-Interface Design: Developing Effective User Experiences for Work Home, Play and on the Way
Presenter: Aaron Marcus
Room: Union Square 14

Half Day Tutorials: 13:30 - 17:30

- Cognitive Neuroscience for the Human Factors Practitioner
Presenter: Chris Forsythe
Room: Union Square 13

SUNDAY, JULY 22

Half Day Tutorials: 8:00 - 12:00

- Digital Human Modeling Fundamentals for Work and Product Design
Presenter: Vince Duffy
Room: Union Square 15&16
- Making Money and Increasing Well-Being with Participatory Ergonomics
Presenter: Peter Vink
Room: Union Square 19&20

Half Day Tutorials: 13:30 - 17:30

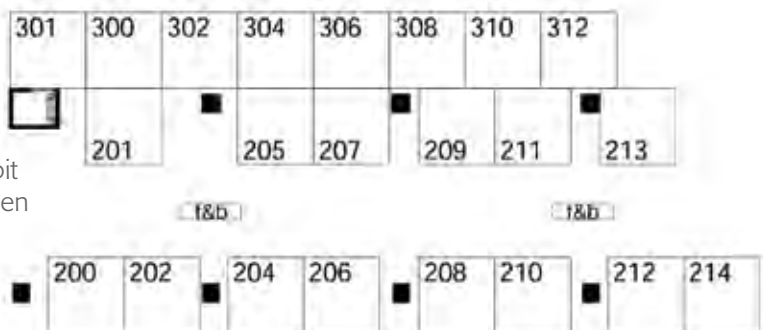
- Physiological Emotion Recognition in Theory and Practice
Presenters: Steffen Walter and Jonghwa Kim
Room: Union Square 15&16
- Overview of Human Information Processing for Human Factors and Ergonomics
Presenters: Robert Proctor and Kim-Phuong Vu
Room: Union Square 19&20
- Aviation Human Factors
Presenter: Steve Landry
Room: Union Square 14

Exhibits

Golden Gate Ballroom

EXHIBITION HOURS
22 JULY 7:00 PM TO 9:30 PM
23 AND 24 JULY: 9:30 TO 17:00
25 JULY: 9:30 TO 16:00

Conference Space	Company Name and Web Site
211	Back Designs Inc / Health By Design - www.backdesigns.com
304,306,308	CRC Press - Taylor & Francis Group LLC - www.crcpress.com
300	NexGen Ergonomics Inc. - www.nexgenergo.com
210, 208	ErgoGenesis - www.ergogenesis.com
207	Noldus Information Technology - www.noldus.com
312	John Wiley & Sons - www.wiley.com
204, 206	Ashgate Publishing Company - www.ashgate.com
212	Seeing Machines - www.seeingmachines.com
205	Xsens - www.xsens.com
310	HCI International 2013 - www.hcii2013.org
214	TEA - CAPTIV - www.teaergo.com
302	AMTI - www.amti.biz
201	University of Michigan, Center for Ergonomics - sitemaker.umich.edu/center-for-ergonomics/home
209	Intific, Inc. - www.intific.com
200	Smart Eye - www.smarteye.se
202	Ergoneers GmbH - www.ergoneers.com
301	EyeTracking, Inc. - www.eyetracking.com
213	Eyetellect - www.eyetellect.com



Layout of the exhibit booths in the Golden Gate Ballroom

ACRONYM	TRACK
ADHM	2nd International Conference on Applied Digital Human Modeling
APD	1st International Conference on Affective and Pleasurable Design
AVIATION	1st International Conference on Human Factors in Transportation: Aviation
C&N	Cognitive and Neuroergonomics
CCDM	2nd International Conference on Cross-Cultural Decision Making: Focus 2012
EMU&SP	Ergonomics Modeling, Usability and Special Populations
HC	2nd International Conference on Human Factors and Ergonomics in Healthcare
HSSE	1st International Conference on Human Side of Service Engineering
MFG	14th International Conference on Human Aspects of Advanced Manufacturing (HAAMAHA): Manufacturing Enterprises in a Digital World
PE&S	Physical Ergonomics & Safety
R&R	1st International Conference on Human Factors in Transportation: Road and Rail
S&O	Social and Organizational Ergonomics

Conference at a Glance

Monday, July 23, 2012

TRACK	ROOM	TITLE
8:00-10:00		
CCDM	Continental 1	When Social Networks Form Through Social Media: Impact and Implications Across Cultures
CCDM	Continental 2	Measuring Performance and Effectiveness of HSCB Methods for Improving Decision Making
R&R	Continental 3	Training and Simulation for Safe Performance and Risk Behaviors in Road and Rail Transport
R&R	Continental 4	Transport Data Collection and Analysis
AVIATION	Continental 5	Training and Evaluation
ADHM	Continental 6	Human Modeling and Applications
HC	Continental 7	Ergonomic Characteristics Assessment in Biomedical Technologies
EMU&SP	Continental 8	Ergonomics in the Design of Consumer Products: I
PE&S	Continental 9	Product Design and Evaluation
C&N	Franciscan A	Systemic-Structural Activity and Human Performance
EMU&SP	Franciscan B	Aging Ergonomics: I
HC	Franciscan C	How to Improve Ergonomic Quality in Healthcare Work
S&O	Plaza Room A	Organization-Technology Multiagent Systems: I
APD	Plaza Room B	Designing for Diversity
HSSE	Franciscan D	HSSE Opening Session: Jim Spohrer and Lou Freund
10:00-10:30 Refreshments will be provided in the Golden Gate Ballroom		
10:30-12:30		
CCDM	Continental 1	Perceptual Training for Cross Cultural Decision Making
CCDM	Continental 2	Tactical Culture Training: Narrative, Personality, and Decision Making
HSSE	Continental 3	Human Dimensions of Information and Communication Technologies in Health Services Systems
HSSE	Continental 4	Service Innovation Management
HSSE	Continental 5	Aging Society: The Impact of Age on Traditional Service Constructs
R&R	Continental 6	Driver Distraction
R&R	Continental 7	Perceptual and Motor Processes in Driving Assessment and Design: I
APD	Continental 8	Product Fit
AVIATION	Continental 9	Terminal Area Operations
ADHM	Franciscan A	Real Problem Solving
HC	Franciscan C	Usability in Healthcare
EMU&SP	Franciscan D	Ergonomics in the Design of Consumer Products: II
MFG	Plaza Room A	Ergonomic Design of Future Production Systems: Part I
PE&S	Plaza Room B	The Influence of Physical Load on Health and Workability
EMU&SP	Franciscan B	Aging Ergonomics: II
S&O	Union Square 23&24	Ergonomics in Industrial Quality

TRACK	ROOM	TITLE
13:30-15:30		
CCDM	Continental 1	Applications of Human, Social, Culture Behavioral Modeling Technology
CCDM	Continental 2	Architecture for Socio-Cultural Modeling
S&O	Continental 3	Security and Organizational Design
HSSE	Continental 4	Learning & Creativity in Service Innovation
HSSE	Continental 5	Research and Innovation in the Anthropology of Services
R&R	Continental 6	User Experience in Mobile Environments
R&R	Continental 7	Understanding Human Performance in Transport
AVIATION	Continental 8	Flight Deck Displays
AVIATION	Continental 9	NextGen Airport Surface Operations
ADHM	Franciscan A	Directions Towards a More Comprehensive Human Modeling
HC	Franciscan B	Healthcare Informatics and Physical Aspects
EMU&SP	Franciscan C	Ergonomics, Aesthetic and the Affective and Emotional Design
MFG	Franciscan D	Ergonomics Product Design
PE&S	Plaza Room A	Effective Methods in Safety Management
EMU&SP	Plaza Room B	Aging Ergonomics: III
S&O	Union Square 23&24	Organization-Technology Multiagent Systems: II
15:30-16:00 Refreshments will be provided in the Golden Gate Ballroom		
16:00-18:00		
CCDM	Continental 1	Operational Use and Requirements
CCDM	Continental 2	Strategic and Tactical Considerations for Cross-Cultural Competency: I
HSSE	Continental 3	Challenges/Successes in Service Design for Health Care
HSSE	Continental 4	Employee Driven and Customer Oriented Service Innovation
HSSE	Continental 5	The Ethics Dividend in Services
R&R	Continental 7	Perceptual and Motor Processes in Driving Assessment and Design: II
APD	Continental 8	Ergonomics Design for Tools and Automobiles
APD	Continental 9	Quantification of Affective Response in Human Machine Interactions
AVIATION	Franciscan A	Uninhabited and Highly Automated Systems
ADHM	Franciscan B	Three-Dimensional Human Surface Scan Post-Processing and Geometric Analysis
HC	Franciscan C	Physical Ergonomics for Patients and Caregivers
EMU&SP	Franciscan D	Ergonomics Evaluation and Physical Demand on Ergonomic Design
MFG	Plaza Room A	Ergonomic Design of Future Production Systems: Part II
PE&S	Plaza Room B	The Use of Bayesian Methods for Classification of Injury Causation in Large Administrative Databases
EMU&SP	Continental 6	Aging Ergonomics: IV
C&N	Union Square 23&24	The Neuroscience of Human-System Integration

TRACK	ROOM	TITLE
8:00-10:00		
CCDM	Continental 1	Strategic and Tactical Considerations for Cross-Cultural Competency: II
CCDM	Continental 2	Cross Cultural Decision Making in the Comprehensive Approach
HSSE	Continental 3	Service Systems are Distributed Cognitive Systems
HSSE	Continental 4	Design Thinking for Service Systems
R&R	Continental 6	E-Mobility in Megacities: Does it Work?
APD	Continental 7	Emotion and Product and Service Design
AVIATION	Continental 8	Pilot Assessment and Performance
AVIATION	Continental 9	Safety (Aviation)
ADHM	Franciscan A	Student Models for Adaptive Technology-Based Instructional Environments
HC	Franciscan B	Medical Error
EMU&SP	Franciscan C	Ergonomics in the Design of Workstations
MFG	Franciscan D	Ergonomics in Manufacturing: Asian Case Studies
PE&S	Plaza Room A	Physical Hazard and Prevention
C&N	Plaza Room B	Human Performance in High Risk Environments
EMU&SP	Continental 5	Modeling and Special Populations
S&O	Union Square 23&24	Ergonomics and Material Environment Design
10:00-10:30 Refreshments will be provided in the Golden Gate Ballroom		
10:30-12:30		
CCDM	Continental 1	Civilization Change: Ideological, Economic, and Historical Change
CCDM	Continental 2	Commercial Research and Applications of Social-Cultural Science
HSSE	Continental 3	Service Dominant Logic & B to B
HSSE	Continental 4	Designing Service Systems for the Customer Experience
HSSE	Continental 5	Automotive Speech Interfaces: Concepts and Strategies for a Successful User Experience
R&R	Continental 6	Human Factors Issues in Ecodriving
R&R	Continental 7	Aesthetics of Universal Design and Optimization
APD	Continental 8	Conflict Detection and Resolution
AVIATION	Continental 9	Advances of DHM for User Centred Design
ADHM	Franciscan B	Patient Safety
HC	Franciscan D	Advanced Manufacturing Systems
HC	Plaza Room A	Applied Upper Extremity Biomechanics: Design and Practice
EMU&SP	Plaza Room B	Usability Issues in Consumer Interfaces and Services
MFG	Franciscan A	HCI - Industry Experiences
PE&S	Franciscan C	Working Times in the Context of Social and Organizational Ergonomics

TRACK	ROOM	TITLE
13:30-15:30		
CCDM	Continental 1	Interfacing, Verifying, and Validating Hybrid Multi-Modal Systems
CCDM	Continental 2	Extracting Understanding from Diverse Data Sources
HSSE	Continental 3	Frameworks for Service Systems
HSSE	Continental 4	User Participation and Experiences in the Design Loop
R&R	Continental 5	Vulnerable Road Users
R&R	Continental 6	Safety and Accidents
APD	Continental 7	Novel Devices for Human Interaction
APD	Continental 8	Kawaii as an Aesthetic and Emotional Value for Product and System Design
AVIATION	Continental 9	Test and Assessment of NextGen Technologies and Procedures
ADHM	Franciscan A	Human Modeling and Validation: I
HC	Franciscan B	Medical User Centred Design
EMU&SP	Franciscan C	Ergonomics in the Design of Built Environments and the Design for Elderly People
MFG	Franciscan D	Ergonomics in Manufacturing: I
PE&S	Plaza Room A	Ergonomics in Space Operation
C&N	Plaza Room B	Human Cognition and Design of Complex Systems
EMU&SP	Union Square 22	Special Populations
S&O	Union Square 23&24	Ergonomics in Building and Architecture
15:30-16:00 Refreshments will be provided in the Golden Gate Ballroom		
16:00-18:00		
CCDM	Continental 1	Countering Cross Cultural Radicalization and Violent Extremism
CCDM	Continental 2	ICEWS and SAA: Early Warnings
HSSE	Continental 3	Societal Frameworks for Service Systems
HSSE	Continental 4	Service Design for Technology-Based Service Systems for Underserved Populations
R&R	Continental 5	Road User Safety and Behaviour
R&R	Continental 6	HMI Design and Evaluation
APD	Continental 7	Affective Source of Traditional Skills
APD	Continental 8	Biosignals in Affect Analysis and Human-Computer Interface
AVIATION	Continental 9	Modeling Human Performance in Aviation
APD	Franciscan A	Affective Textiles and Clothing / Emotion and UX Design
HC	Franciscan B	Patient Users of Medical Devices
HC	Franciscan C	Human Modeling in Healthcare
EMU&SP	Franciscan D	Ergonomics in Design: Universal Design and the Design for Disabled People
MFG	Plaza Room A	Human Performance at Work: I
PE&S	Plaza Room B	Occupational Upper Extremity Injuries: From Observations to Solutions
EMU&SP	Union Square 22	Human Factors and Ergonomics Research in China
S&O	Union Square 23&24	The Application and Coherence of Socio-Technical Principles and Techniques Across Different Domains of Practice

TRACK	ROOM	TITLE
8:00-10:00		
CCDM	Continental 1	Factors that Influence Decision Making
CCDM	Continental 2	Multifarious Modeling Discussions: I
HSSE	Continental 3	Role of Human Resources for Service Systems Governance
HSSE	Continental 4	Value Co-Creation
R&R	Continental 5	Warnings, Automation and Support
R&R	Continental 6	Rail: I
APD	Continental 7	Product Design and Human Interface
AVIATION	Continental 8	Simulation and Collaborative Systems
ADHM	Continental 9	Human Modelling and Validation: II
HC	Franciscan A	Cognitive and Organizational Aspects in Healthcare
MFG	Franciscan C	Human Performance at Work: II
PE&S	Franciscan D	Human Performance and Design
C&N	Plaza Room A	Cognitive Approaches to Design and Evaluation Enhancements
EMU&SP	Plaza Room B	Models of Interactions in the Man-Environment Systems
S&O	Franciscan B	Special Session on Human Factors in Maritime Transportation
S&O	Union Square 23&24	New Ways of Work: I
10:00-10:30 Refreshments will be provided in the Golden Gate Ballroom		
10:30-12:30		
CCDM	Continental 1	Multifarious Modeling Discussions: II
CCDM	Continental 2	Verification, Validation, and Assessment
HSSE	Continental 3	Learning in Experimental Environments
HSSE	Continental 4	Co-Creating Value with Customers
R&R	Continental 5	Rail: II
R&R	Continental 6	Crossings and Intersections / Attention and Distraction
APD	Continental 7	Emotion in HCI
AVIATION	Continental 8	Safety, Ethics, and Fatigue
ADHM	Continental 9	Human Monitoring, Decision and Response Modeling
HC	Franciscan A	Measures and Validation in Healthcare
HC	Franciscan B	Telehealth Research and Practice - Discussing Lessons Learned and Future Directions
MFG	Franciscan D	Knowledge-Based Enterprises
PE&S	Plaza Room A	Safety Management
EMU&SP	Plaza Room B	Usability
EMU&SP	Franciscan C	Design for Usability
S&O	Union Square 23&24	Education and Safety

TRACK	ROOM	TITLE
13:30-15:30		
CCDM	Continental 1	Language, Trust, and Culture
CCDM	Continental 2	Social Media and Culture
HSSE	Continental 3	The Human Aspects of Change When Applying Lean 6 Sigma Methods and Tools
HSSE	Continental 4	The Impact of Service Network Configuration on Customer Experience
R&R	Continental 5	Methods and Standards
APD	Continental 7	Design and Development Methodology
AVIATION	Continental 8	Pilot and Controller Performance and Behavior
AVIATION	Continental 9	Human Factors Experiments, Case Studies, and Management
ADHM	Franciscan A	Future Human Modeling and Applications: I
HC	Franciscan B	Organizational Aspects in Healthcare: I
EMU&SP	Franciscan C	Ergonomics in Design: Miscellanea in Ergonomics in Design
PE&S	Franciscan D	Systems Safety
EMU&SP	Plaza Room B	Human-Centered Design
S&O	Plaza Room A	New Ways of Work: II
S&O	Continental 6	Safety and Organizational Dynamics
15:30-16:00 Refreshments will be provided in the Golden Gate Ballroom		
16:00-18:00		
CCDM	Continental 1	Social Science and Culture
CCDM	Continental 2	Understanding Diverse Populations
R&R	Continental 3	Socio-Technical Systems/Automotive Human Factors and Safety
APD	Continental 4	Information Visualization and Augmented Reality
HSSE	Franciscan D	HSSE Closing Session/2014 Planning Panel Members: Jim Spohrer and Lou Freund
AVIATION	Continental 6	Human Factors on the Road to NextGen
ADHM	Continental 7	Future Human Modeling and Applications: II
HC	Continental 8	Medical Devices and Special Populations
HC	Continental 9	Organizational Aspects in Healthcare: II
MFG	Franciscan A	Ergonomics in Manufacturing: II
EMU&SP	Franciscan B	Ergonomics in Design: Ergonomics and Virtual Reality
EMU&SP	Plaza Room A	Evaluation of Co-Adaptive Interactions: HCI, Accessibility, and Rehabilitation
S&O	Plaza Room B	Social Ergonomics
S&O	Franciscan C	Social Aspects of Ergonomics Design

Detailed Technical Program

Monday, July 23, 2012

CCDM	<p>SESSION 1: When Social Networks Form Through Social Media: Impact and Implications Across Cultures CO-CHAIRS: S. Elson and L. Servi, USA</p>
CONTINENTAL 1 8:00-10:00	<p>Identification of subculture groups and its reflection on topic propagation in the blogosphere K. Megerdooomian and J. Davidson, USA</p> <p>Psycholinguistic analyses of Pakistani bloggers D. Yeung, USA</p> <p>Framing radical rhetoric in social media A. Sanfilippo, USA</p> <p>Decomposing social networks for a better understanding of online activity G. Zarella, USA</p> <p>Social networks, social media, social change J. Pfeffer and K. Carley, USA</p> <p>Identifying differences in cultural behavior in online groups M. Gregory, D. Engel, E. Bell and L. McGrath, USA</p> <p>A mathematical approach to identifying and forecasting shifts in the mood of social media users L. Servi and S. Elson, USA</p>
CCDM	<p>SESSION 2: Measuring Performance and Effectiveness of HSCB Methods for Improving Decision Making CO-CHAIRS: P. Davis and G. Klein, USA</p>
CONTINENTAL 2 8:00-10:00	<p>Fundamentals in empirical validation of and analysis with social science models P. Davis, USA</p> <p>Using models to structure knowledge elicitation and subsequent testing and refinement A. O'Mahony and P. Davis, USA</p> <p>Al-Qa'ida through a discursive lens E. Larson, USA</p> <p>Human Terrain Analysis at CENTCOM B. Connable and W. Perry, USA</p> <p>Countering the adversary B. Levey, S. Shellman and P. Bentley, USA</p> <p>Measuring the operational utility of HSCB modeling and methods J. Fautz, B. Prue, E. Carlson and D. Koelle, USA</p> <p>Evaluating the merit of sociocultural models for enhancing understanding G. Klein, USA</p>
R&R	<p>SESSION 3: Training and Simulation for Safe Performance and Risk Behaviors in Road and Rail Transport CHAIR: H. Biggs, Australia</p>
CONTINENTAL 3 8:00-10:00	<p>The effect of simulator hazard exposure on young driver training R. Allen, USA</p> <p>An attempt to systematize the effects of graduated driver licensing (GDL) T. Vaa, Norway</p> <p>Linking behavioral indicators to safety: What is safe and what is not? M. Martens, R. van Loon and R. Brouwer, The Netherlands</p> <p>Incident investigation training needs for the Australasian rail industry H. Biggs, T. Banks and N. Dovan, Australia</p> <p>The on-call system of work: Fatigue, well-being, and stress amongst UK railway maintenance workers N. Cebola, J. Wilson, D. Golightly and T. Clarke, UK</p> <p>Human factors at the interface between road and rail systems C. Wullems, N. Haworth and A. Rakotonirainy, Australia</p> <p>How do perceptions of risk associated with driving while fatigued and perceptions of effectiveness of countermeasures effect willingness to engage in fatigue reducing countermeasures? K. Armstrong, S. Smith and P. Obst, Australia</p>

R&R	<p>SESSION 4: Transport Data Collection and Analysis CHAIR: G. Walker, UK</p>
CONTINENTAL 4 8:00-10:00	<p>Head EAST at the next intersection? A systems approach to the evaluation of road performance P. Salmon, M. Cornelissen and K. Young, Australia</p> <p>Field operational trials in the UK R. Welsh, A. Morris, S. Reed, J. Lenard and S. Birrell, UK</p> <p>Human factors in a compact mobile workspace: A case study of patrol vehicles M. Sepoori and J. Hill, USA</p> <p>Textual data collection and analysis for human factors M. Neal, USA</p> <p>Human factors now showing in 3D: Presenting human factors analyses in time and space M. Cornelissen, P. Salmon, N. Stanton and R. McClure, Australia/UK</p> <p>Assessment of different experiences related to the automobile C. Silva, M. Okimoto, F. Bernardes and S. Müller, Brazil</p> <p>Focusing on drivers' opinions and road safety impact of Blind Spot Information System (BLIS) G. Piccinini, A. Simões and C. Rodrigues, Portugal</p>
AVIATION	<p>SESSION 5: Training and Evaluation CHAIR: K.-P. Vu, USA</p>
CONTINENTAL 5 8:00-10:00	<p>Effect of force feedback on an aimed movement task R. Rorie, H. Bertolotti, T. Strybel, K.-P. Vu, P. Marayong and J. Robles, USA</p> <p>Improving multi-tasking ability in a piloting task through action videogames D. Chiappe, M. Conger, J. Liao, K. Vu and L. Caldwell, USA</p> <p>Effectiveness of Training on near-term NextGen air traffic management performance A. Kiken, T. Strybel, K.-P. Vu and V. Battiste, USA</p> <p>Student impressions of different air traffic control training methods to introduce NextGen tools M. Herron, S. Billingham, T. Higham, V. Ho, K. Monk, R. O'Connor, T. Strybel and K.-P. Vu, USA</p> <p>An investigation into the potential sources of interference in SA probe techniques C. Morgan, D. Chiappe, J. Kraut, T. Strybel and K.-P. Vu, USA</p> <p>The application of Line Operation Safety Assessment (LOSA) and flight data management technologies to general aviation flight training R. Steckel and M. Patankar, USA</p> <p>Nighttime offshore helicopter operations – identification of contextual factors relevant to pilot performance F. A. C. Nascimento, A. Majumdar and W. Y. Ochieng, UK</p>
ADHM	<p>SESSION 6: Human Modeling and Applications CO-CHAIRS: X. Wang, France, and J. Yang, USA</p>
CONTINENTAL 6 8:00-10:00	<p>Human modeling and simulation with high biofidelity Z. Cheng, S. Mosher, J. Parakkat and K. Robinette, USA</p> <p>Sensitivity analysis of achieving a reach task considering joint angle and link length variability A. Cloutier, J. Gragg and J. Yang, USA</p> <p>Probabilistic and simulation-based methods for study of slips, trips, and falls - State of the art J. Gragg, J. Yang and D. Liang, USA</p> <p>Helmet risk assessment for top and side impact in construction sectors J. Long, Z. Lei, J. Yang and D. Liang, USA</p> <p>Affective LED lighting color schemes based on product type J. Park and J. Rhee, South Korea</p> <p>Human activity and social simulation Y. Haradji, G. Poizat and F. Sempe, France</p> <p>Effects of the order of contents in the voice guidance when operating machine S. Tahara, M. Sakurai, S. Fukano, M. Sakata and S. Yamamoto, Japan</p>

HC	<p>SESSION 7: Ergonomic Characteristics Assessment in Biomedical Technologies CO-CHAIRS: G. Andreoni and F. Costa, Italy</p>
8:00-10:00 CONTINENTAL 7	<p>A multifactorial approach and method for assessing ergonomic characteristics in biomedical technologies G. Andreoni, F. Costa, M. Mazzola, M. Fusca, M. Romero, E. Carniglia, D. Zambarbieri and G. Santambrogio, Italy</p> <p>Case study of integrated ergonomic assessment of a portable ultrasound system L. Forzoni, N. Guraschi, C. Fertino, M. Delpiano, G. Santambrogio, G. Baselli, F. Costa, M. Romero and G. Andreoni, Italy</p> <p>Designing medical devices for use in the home: Addressing the characteristics of patient users J. Martin, UK</p> <p>Designing wearable and environmental systems for elderly monitoring at home S. Muschiato, M. Romero, P. Perego, F. Costa and G. Andreoni, Italy</p> <p>Co-designing better work organization in healthcare J. Garde and M. van der Voort, The Netherlands</p> <p>A smart wearable prototype for fetal monitoring A. Fanelli, M. Signorini, P. Perego, G. Magenes and G. Andreoni, Italy</p>
EMU&SP	<p>SESSION 8: Ergonomics in the Design of Consumer Products: I CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
8:00-10:00 CONTINENTAL 8	<p>Evaluation of safety and usability in projectual methodologies with focus on design of physical artifacts W. Correia, F. Campos, M. Soares and M. Barros, Brazil</p> <p>Sustainable communication design: With human centered research M. Cadarso and F. Moreira da Silva, Portugal</p> <p>Assessment tests for mattresses and pillows as tools of the ergonomic conditions diagnosis L. Saenz, A. Lotero, M. Arias and E. Cadavid, Colombia</p> <p>Study of the relation action and command to the interior of an automobile C. Silva, M. Okimoto and L. Paschoarelli, Brazil</p> <p>Cars interior design customization as an ergonomics major factor P. Dinis and F. Moreira da Silva, Portugal</p> <p>Pedestrian navigation system based on quantitative estimation of landmark's effectiveness H. Furukawa and Y. Nakamura, Japan</p> <p>Contribution of digital simulation to assess human accessibility M. Okimoto, R. Feix, E. Da Silva, R. Bento, C. Silva and C. Miranda, Brazil</p>
PE&S	<p>SESSION 9: Product Design and Evaluation CO-CHAIRS: R. Goonetilleke, Hong Kong, and L. Ma, China</p>
8:00-10:00 CONTINENTAL 9	<p>The evaluation of heat transfer using the foot manikin U. Reischl, USA, I. Salopek Cubric, Z. Skenderi and B. Mijovic, Croatia</p> <p>An analysis of grip design for manual hammer stapling tool A. Sengupta and W. Latta, USA</p> <p>A comparison of required coefficient of friction for both feet in level walking W. -R. Chang, C.-C. Chang and S. Matz, USA</p> <p>Basic study on automotive warning presentation to front/rear hazard by vibrotactile stimulation A. Murata, S. Kemori, T. Hayami and M. Moriwaka, Japan</p> <p>The effects of repetitive lifting on heart rate responses and perceived exertion in a young and middle-aged population M. Boocock and G. Mawston, New Zealand</p> <p>Ergonomic design of classroom furniture for elementary schools M. Gonçalves and P. Arezes, Portugal</p> <p>Digital human modeling for physiological factors evaluation in work system design L. Wang and H. Lau, Hong Kong</p>

C&N	<p>SESSION 10: Systemic-Structural Activity and Human Performance CO-CHAIRS: G. Bedny and W. Karwowski, USA</p>
<p>FRANCISCAN A 8:00-10:00</p>	<p>On the relationship between external and internal components of activity W. Karwowski, USA, F. Voskoboynikov, Russia, and G. Bedny, USA</p> <p>Using systemic approach to identify performance enhancing strategies of rock drilling activity in deep mines M. -A. Sanda, Sweden/Ghana, J. Johansson, B. Johansson and L. Abrahamsson, Sweden</p> <p>Computer technology at the workplace and errors analysis I. Bedny, W. Karwowski and G. Bedny, USA</p> <p>Positioning actions' regulation strategies G. Bedny and W. Karwowski, USA</p> <p>Emotional-motivational aspects of a browsing task H. von Brevern, Switzerland, and W. Karwowski, USA</p> <p>Qualitative facets of the problem statement H. von Brevern, Switzerland and W. Karwowski, USA</p> <p>fNIRS and EEG study in mental stress arising from time pressure S. -Y. Cheng, C.-C. Lo and J. -J. Chen, Taiwan</p>
EMU&SP	<p>SESSION 11: Aging Ergonomics: I CHAIR: B. Jiang, Taiwan</p>
<p>FRANCISCAN B 8:00-10:00</p>	<p>A study of establishing demand assessment and support network of elderly fall-prevention system Y. -J. Chen, Taiwan</p> <p>Relationship among fall-related self-efficacy: Activities of daily living and fall risk in the elderly C. -L. Chan, S.-S. Huang, N.-P. Yang and W. -Y. Chen, Taiwan</p> <p>Comparing muscle activity and younger and older users' perceptions of comfort when using sheet switches for electrical appliances Y. Tanaka, Y. Yamazaki, M. Sakata and M. Nakanishi, Japan</p> <p>Design a force platform for measuring center of pressure (COP) signal P. -D. Sue, C.-W. Huang, Y.-J. Jiang, J.-S. Shieh and B. Jiang, Taiwan</p> <p>Multi-scale entropy analysis for evaluating the balance of the flatfeet T. -C. Chao and B. Jiang, Taiwan</p> <p>Workplace solutions for elderly workers V. Melcher, H. Widloirther and V. Brückner, Germany</p>
HC	<p>SESSION 12: How to Improve Ergonomic Quality in Healthcare Work CHAIR: B. Podtschaske, Germany</p>
<p>FRANCISCAN C 8:00-10:00</p>	<p>Can inclusive environmental design be achieved in acute hospitals? S. Hignett, UK</p> <p>A systems perspective on barriers to ED patient admission: Cognitive ergonomics to cross-unit interactions R. Stephens, USA</p> <p>Workshop concept Fabrica Medica ® - Enhancing collaborative work in heterogeneous design teams B. Podtschaske, D. Fuchs and W. Friesdorf, Germany</p> <p>System ergonomic analysis, evaluation and design of structures and work processes in healthcare D. Fuchs and B. Podtschaske, Germany, W. Koller, Austria, M. Stahl and W. Friesdorf, Germany</p> <p>Supporting structures for information transfer in ICUs G. Yücel Höge, Turkey/Germany, D. Fuchs, Germany, W. Koller, Austria, and W. Friesdorf, Germany</p> <p>Improving patient safety through an ergonomic technical solution M. Stahl, N. Böhning, L. Kroll, B. Kujumdshieva-Böhning, R. Somasundaram and W. Friesdorf, Germany</p> <p>The Daily Plan® - Improved communication, decreased potential errors and increased patient education. Evaluation of The Daily Plan® used in 54 hospitals B. King, USA</p> <p>Structures and processes in health care systems: Lessons learned from the VA HealthVet portal K. Nazi, USA</p>

S&O	SESSION 13: Organization-Technology Multiagent Systems: I CHAIR: L. Pacholski, Poland
8:00-10:00 PLAZA ROOM A	<p>Human factors and well-balanced improvement of engineering L. Pacholski, Poland</p> <p>Socio-technical integrity in maintenance activities M. Jasiulewicz-Kaczmarek, Poland</p> <p>Basic technical – organizational criteria forming labour safety in the medium size production – services companies A. Jasiak and A. Berkowska, Poland</p> <p>Ergonomics aspects of CSR in system shaping the quality of work environment A. Gorny, Poland</p> <p>Ergonomic engineering of anthropotechnical mega-systems E. Tytyk, Poland</p> <p>The assessment criteria of the ergonomic quality of anthropotechnical mega-systems M. Butlewski and E. Tytyk, Poland</p> <p>Macroergonomics methods for social and organizational ergonomics B. Kleiner, USA</p>
APD	SESSION 14: Designing for Diversity CHAIR: S. Kang, USA
8:00-10:00 PLAZA ROOM B	<p>Connectivity model: Design methods for diverse users S. Kang and D. Satterfield, USA</p> <p>Develop new emotional evaluation methods for measuring users’ subjective experiences in the virtual environments N. Elokla and Y. Hirai, Japan</p> <p>Emoticons: Cultural analysis M. Park, USA</p> <p>New concept for newspaper kiosk through understanding users’ behavior Y. Khodadadeh and A. Toobaie, Iran</p> <p>Designing spaces for aging eyes K. Melhus Mitchell, USA</p> <p>Educational play experiences for children with cognitive and physical disabilities D. Satterfield and S. Kang, USA</p> <p>An augmented interactive table supporting preschool children development through playing E. Zidianakis, M. Antona, G. Paparoulis and C. Stephanidis, Greece</p>
HSSE	8:00-10:00 FRANCISCAN D
	<p>SESSION 15: HSSE Opening Session CO-CHAIRS: J. Spohrer and L. Freund, USA SPECIAL GUEST: B. Hesse, USA</p>
10:00 - 10:30 Refreshments will be provided in the Golden Gate Ballroom	

Detailed Technical Program

CCDM	<p>SESSION 16: Perceptual Training for Cross Cultural Decision Making CO-CHAIRS: S. Schatz and A. Bolton, USA</p>
10:30-12:30 CONTINENTAL 1	<p>Perceptual training for cross cultural decision making (session overview) S. Schatz and D. Nicholson, USA</p> <p>Warfighter's perception and human behavior: The research challenges associated with perceptual skills training A. Bolton and P. Squire, USA</p> <p>Methodology for developing the expert model: The case of the combat hunter W. Ross and L. Militello, USA</p> <p>Instructional strategies for cross-cultural perceptual skills in military training K. Lacefield, R. Tarr and N. Malone, USA</p> <p>Bridging the gap between humans and systems: An HSI case study of perceptual training systems and tools D. Nicholson, S. Schatz and K. Bartlett, USA</p> <p>Tailoring culturally-situated simulation for perceptual training R. Wray, III, USA</p> <p>Do you hear me now? Verbal cues to enhance perception K. Bartlett, S. Schatz and D. Nicholson, USA</p>
CCDM	<p>SESSION 17: Tactical Culture Training: Narrative, Personality, and Decision Making CHAIR: I. Estabrooke, USA</p>
10:30-12:30 CONTINENTAL 2	<p>Culture training at the edge I. Estabrooke, USA</p> <p>Assessing changes in decision making as a result of training D. Kobus and E. Viklund, USA</p> <p>Methods for capturing cultural lessons learned and training cross-cultural skills M. McCloskey and K. Behymer, USA</p> <p>Credibility assessment and inference for fusion of hard and soft information R. Núñez, T. Wickramaratne, K. Premaratne, M. Murthi, S. Kübler, M. Scheutz and M. Pravia, USA</p> <p>Economic and civic engagement: Indicators derived from imagery J. Irvine, J. Regan and J. Lepanto, USA</p> <p>Social media: Risks and opportunities for military applications: An international perspective E. Lyon, USA</p> <p>Incorporating sociocultural behavior factors into operational planning R. Harrison and A. Provoncha, USA</p>
HSSE	<p>SESSION 18: Human Dimensions of Information and Communication Technologies in Health Services Systems CO-CHAIRS: M. Baba, USA, and T. Young, UK</p>
10:30-12:30 CONTINENTAL 3	<p>Anthropological and ethnographic perspectives on health information technology M. Baba, C. LaBond and L. Hunt, USA</p> <p>Design challenges for healthcare services: Case for transitional care coordination J. Sairamesh, USA</p> <p>Is patient-centred care really possible? T. Young, UK</p> <p>In sickness and in healthcare IT: Digitization of medical records as the Promiseland R. Koppel, USA</p> <p>EHR Usability: Challenges and opportunities J. Zhang, A. Franklin and M. Walji, USA</p> <p>Challenges of using standardized terminology to describe depression in primary care K. Dontje, USA</p> <p>Macroergonomics in healthcare: Using MEAD to analyze and improve healthcare-related infections (HRIs) B. Kleiner and V. Lewis, USA</p>

HSSE	<p>SESSION 19: Service Innovation Management CO-CHAIRS: Y. Sawatani and I. Sakata, Japan</p>
CONTINENTAL 4 10:30-12:30	<p>Human-centric approach of value proposition in new generation digital business T. Kita, Japan</p> <p>Hospital management support system for patient safety: Mining track record of dosing M. Akiyama, I. Sakata and S. Yamamoto, Japan</p> <p>Combining user and employee driven innovation T. Tanninen-Ahonen, Finland</p> <p>Value co-creation in R&D Y. Sawatani and T. Arimoto, Japan</p> <p>Managing unstructured service encounters: A case on ASP-based call center Y. -H. Lin and R. R. Chen, Taiwan</p> <p>Open services innovation H. Chesbrough, USA</p>
HSSE	<p>SESSION 20: Aging Society: The Impact of Age on Traditional Service Constructs CHAIR: L. Freund, USA</p>
CONTINENTAL 5 10:30-12:30	<p>Human centered system integration (HCSI): Case study of elderly care service design S. Basapur and K. Sato, USA</p> <p>Integrating healthcare service with ambient interactive systems: Conceptual framework J. Sun, S. Basapur and K. Sato, USA</p> <p>Entrusting the reply of satisfaction or physical condition for services to unconscious responses reflecting activities of autonomic nervous system H. Okawai, K. Kato and D. Baya, Japan</p> <p>The intelligent space for the elderly - Including activity detection S. Tivatansakul, S. Tanupaprungsun, K. Areekijseree, T. Achalakul, K. Hirasawa, S. Sawada, A. Saitoh and M. Ohkura, Japan</p> <p>Patient engagement – implications to service engineering I. Riippa and K. Reijonsaari, Finland</p> <p>Public bus services - From physical accessibility to psychosocial inclusion F. Nickpour, UK</p>
R&R	<p>SESSION 21: Driver Distraction CHAIR: K. Young, Australia</p>
CONTINENTAL 6 10:30-12:30	<p>An on-road examination of the errors made by distracted and undistracted drivers K. Young, P. Salmon and M. Cornelissen, Australia</p> <p>Couples arguing when driving, findings from local and remote conversations A. Stephens, Ireland, and T. Lansdown, UK</p> <p>Exploring drivers' compensatory behavior when conversing on a mobile device G. Fitch and R. Hanowski, USA</p> <p>You see what you attend but you don't attend what you see (well not always....) R. Brouwer, The Netherlands</p> <p>Optimized combination of operating modalities and menu tasks for the interaction between driver and infotainment-system using a touchpad with haptic feedback A. Blattner, K. Bengler and W. Hamberger, Germany</p> <p>Optimizing the design of driver support: Applying human cognition as a design feature B. van Waterschoot and M. van der Voort, The Netherlands</p> <p>Driver distraction: A model M. Regan and C. Hallett, France</p>

Detailed Technical Program

R&R	<p>SESSION 22: Perceptual and Motor Processes in Driving Assessment and Design: I CHAIR: F. Mars, France</p>
CONTINENTAL 7 10:30-12:30	<p>Visual control of steering: the role of eye-movements, retinal flow and road edges G. K. Kountouriotis, C. Mole, K. Shire, O. Giles, R. Marks, N. Merat and R. M. Wilkie, UK</p> <p>Why do we move our head during curve driving? D. Mestre and C. Authié, France</p> <p>Human-machine cooperation during shared control of the steering wheel M. Deroo, J. Hoc and F. Mars, France</p> <p>Driver expectations and behavior with Recreational Off-Highway Vehicles (ROVs) R. Larson, M. Kuzel, G. Fowler and J. Brown, USA</p> <p>Differential and unique roles of off-road assessments to on-road safety N. Aksan, J. Dawson, S. Anderson, E. Uc and M. Rizzo, USA</p>
APD	<p>SESSION 23: Product Fit CHAIR: R. Goonetilleke, Hong Kong</p>
CONTINENTAL 8 10:30-12:30	<p>Effects of head movement on contact pressure between a N95 respirator and headform Z. Lei and J. Yang, USA</p> <p>Self-inflating mask interface for noninvasive positive pressure ventilation U. Reischl, L. Ashworth, L. Haan and C. Colby, USA</p> <p>Why the optimal fitting of footwear is difficult T. Weerasinghe, R. Goonetilleke and G. Signes, Hong Kong</p> <p>Safety boots for women - From theory to practice I. Krauss, P. Meiser, M. Pohl and S. Grau, Germany</p> <p>Affective design and its role in energy consuming behavior: Part of the problem or part of the solution? K. Revell and N. Stanton, UK</p> <p>Product personality assignment as a mediating technique in biologically and culturally inspired design D. Coelho, C. Versos and A. Silva, Portugal</p>
AVIATION	<p>SESSION 24: Terminal Area Operations CO-CHAIRS: B. Gore and J. Mercer, USA</p>
CONTINENTAL 9 10:30-12:30	<p>Evaluation of the terminal area precision scheduling and spacing system for near-term NAS application J. Thipphavong, L. Martin, H. Swenson, P. Lin and J. Nguyen, USA</p> <p>An efficient binary search tree for scheduling arriving aircraft Y. Cao and D. Sun, USA</p> <p>Controller-managed spacing within mixed-equipage arrival operations involving flight-deck interval management C. Cabrall, T. Callantine, M. Kupfer, L. Martin and J. Mercer, USA</p> <p>Assessing wake vortex hazards using pilot/vehicle analyses R. Hess, USA</p> <p>Comparison of procedures for dual and triple closely spaced parallel runways S. Verma, S. Subramanian, T. Kozon and D. Ballinger, USA</p> <p>A preliminary investigation of tower flight data manager safety benefits A. Alexander and T. Reynolds, USA</p>

ADHM	<p>SESSION 25: Real Problem Solving CHAIR: Y. Motomura, Japan</p>
<p>FRANCISCAN A 10:30-12:30</p>	<p>Service management system based on computational customer models using large-scale log data of chain stores H. Koshiba, T. Takenaka and Y. Motomura, Japan</p> <p>Text classification of consumer complaints from PIO-NET (Practical Living Information Online NETWORK System) T. Fukuhara, H. Takahashi, Y. Motomura and T. Nishimura, Japan</p> <p>Development of the database on daily living activities for the realistic biomechanical simulation H. Kakara and Y. Nishida, Japan, S. Yoon, Korea, Y. Miyazaki, H. Mizoguchi and T. Yamanaka, Japan</p> <p>Development of spatiotemporal living database for an multidisciplinary team approach to healthcare K. Kitamura and Y. Nishida, Japan</p> <p>Social system design using models of social and human mind network - CVCA, WCA and Bayesian network modeling T. Maeno, T. Yasui and S. Shirasaka, Japan and O. Bosch, Australia</p> <p>Promotion of social participation among the elderly based on happiness structure analysis using extended ICF M. Inoue, K. Kitamura and Y. Nishida, Japan</p> <p>Barcode scanning data acquisition systems in temporary housing area to support victim community T. Nishimura, H. Koshiba, Y. Motomura and K. Ohba, Japan</p>
HC	<p>SESSION 26: Usability in Healthcare CO-CHAIRS: N. Lightner and V. Duffy, USA</p>
<p>FRANCISCAN C 10:30-12:30</p>	<p>Model-based usability-evaluation and design of human-machine-interfaces for an integrated OR-system A. Janss, Germany</p> <p>Human factors considerations for a reusable medical equipment reprocessing support system N. Lightner, R. Ellis, S. Yee, K. Yang and W. Jordan, USA</p> <p>Human factors principles of patient observation charts: Examining the utility of the seagull sign M. Christofidis, Australia</p> <p>Contemporary configuration of the medicine package leaflet: Changes in the ergonomics of a technical scientific object P. Lopes Fujita, C. José Saldanha Machado and M. de Oliveira Teixeira, Brazil</p> <p>A case study on the effects of the introduction of information and communications technology in education on the quality of life of patients with chronic illnesses A. Angeles, I. Bernardo and R. Pader, Philippines</p> <p>The construction of the educational program of the problem solving thinking based on the management system (HACCP) M. Nozaki, Y. Kikuchi, S. Yasuoka, N. Imajo and S. Kojima, Japan</p>
EMU&SP	<p>SESSION 27: Ergonomics in the Design of Consumer Products: II CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
<p>FRANCISCAN D 10:30-12:30</p>	<p>The importance of perceived affordances and hazard perception in package design H. Ayanoglu, E. Duarte, P. Noriega, L. Teixeira and F. Rebelo, Portugal</p> <p>Ergonomic garment design for a seamless instrumented swimsuit G. Montagna, H. Carvalho, A. Catarino, F. Moreira da Silva and H. Albuquerque, Portugal</p> <p>Breast design: The role of ergonomic underwear during lifetime A. Filipe, G. Montagna, C. Carvalho and F. Moreira da Silva, Portugal</p> <p>Ergonomics as an important factor of change in women's clothing at "Belle Époque" period M. Albuquerque, Portugal</p> <p>Ergonomics and design: Biotechnology as a tool for new materials M. Carvalho, C. Morais and G. Montagna, Portugal</p> <p>Perceptive and ergonomics concerns in corporate visual identity D. Martins and F. Moreira da Silva, Portugal</p> <p>The role of participative ergonomic in the development of methodologies to the assessment of the physical accessibility in urban spaces L. Martins, G. Ribeiro and C. Monteiro, Brazil</p>

MFG	SESSION 28: Ergonomic Design of Future Production Systems: Part I CO-CHAIRS: C. Schlick and M. Mayer, Germany
10:30-12:30 PLAZA ROOM A	<p>Integrative production technology for high-wage countries - Resolving the polylemma of production C. Brecher, W. Karmann, S. Kozielski and C. Wesch-Potente, Germany</p> <p>Design and Implementation of a comprehensible cognitive assembly system C. Brecher, S. Müller, M. Faber and W. Herfs, Germany</p> <p>Improving operator's conformity with expectations in a cognitively automated assembly cell using human heuristics M. Mayer and C. Schlick, Germany</p> <p>The effect of anthropomorphic movements of assembly robots on human prediction S. Kuz, A. Heinicke, D. Schwichtenhoevel, M. Mayer and C. Schlick, Germany</p> <p>A precursory look at potential factors affecting humans in a flexible robotic cell A. McLeod and A. Savoy, USA</p> <p>Virtual agent assistance for maintenance tasks in IPS² - First results of a study U. Schmunzsch, C. Sturm, R. Reichmuth and M. Roetting, Germany</p> <p>Syntax and sequencing of assembly instructions P. Thorvald, G. Backstrand, D. Hogberg and K. Case, Sweden/UK</p>
PE&S	SESSION 29: The Influence of Physical Load on Health and Workability CHAIR: Z. Roja, Latvia
10:30-12:30 PLAZA ROOM B	<p>Determination of muscles fatigue for production packers and sawing machine operators in furniture enterprise using myotonometry V. Kalkis, Z. Roja and H. Kalkis, Latvia</p> <p>Heart rate monitoring - physical load objective evaluation method for nurses and assistants of nurses Z. Roja, V. Kalkis, I. Roja and H. Kalkis, Latvia</p> <p>Ergonomics and quality interventions in woodworking technological processes for lightening the workload H. Kalkis, V. Kalkis, Z. Roja, V. Praude and I. Rezepina, Latvia</p> <p>Evaluation and prevention of work-related musculoskeletal disorders in Hungary G. Szabó, Hungary</p> <p>Effects of vibration exposure on action judgment: A field test for professional drivers N. Costa, P. Arezes and R. Melo, Portugal</p> <p>A work-rest allowance model based individual fatigue and recovery attributes L. Ma and Z. Zhang, China</p> <p>The effect of clothing pressures developed by foundation garments on young women's attention based on Erps L. Liu, Z.-T. Hu, H.-B. Zhang and Z. Cui, China</p>
EMU&SP	SESSION 30: Aging Ergonomics: II CHAIR: Y.-G. Kwon, Korea
10:30-12:30 FRANCISCAN B	<p>Accident characteristics and safety measures for aging workers in Korea C. -O. Kim, H.-J. Choi and D. -W. Choi, Korea</p> <p>Cure performance and usability evaluation of electro-conductive textiles based on healthcare clothing system with TENS for the elderly R. -H. Kim and G. Cho, Korea</p> <p>Training standing balance in older adults using physical activity controlled games: A comparison study J. -L. Lin and H. -C. Chuan, Taiwan</p> <p>Users' awareness of computer security and usability evaluation R. -H. Kim, K.-S. Jeong, S.-E. Bae, Y.-K. Kwon, H.-S. Je, J.-W. Choi, D.-G. Shin and J. -S. Jang, Korea</p> <p>Assessment of customer satisfaction and usability evaluation of social networking service R. -H. Kim, K.-S. Jeong, S.-E. Bae, Y.-K. Kwon, K.-J. Min, D.-S. Son, S.-H. Park and J. -S. Choi, Korea</p> <p>A study on development of the Korean stress model for industrial accident prevention - Focused on the married workers Y. Kang, S. Yang and T. Kim, Korea</p> <p>Effects of font size and reflective glare on text-based task performance and viewing distance of young and presbyopic computer users P. Ko, A. Mohapatra and D. Rempel, USA</p>

S&O	<p>SESSION 31: Ergonomics in Industrial Quality CO-CHAIRS: Y.-L. Lee and S.-L. Hwang, Taiwan</p>
<p>10:30-12:30 UNION SQUARE 23&24</p>	<p>Application of Taguchi Method on 3D display quality M. -H. Lin, C.-S. Chen, Y.-S. Chang, S.-L. Hwang, P.-C. Wang, H.-T. Huang and C. -H. Wen, Taiwan</p> <p>Safety oriented voice-based interface for vehicle’s AV systems: Talking car system I. -C. Leong, S.-L. Hwang, M.-H. Wei, P.-Y. Gu, H.-C. Chang, C.-Y. Hung and C. -C. Kuo, Taiwan</p> <p>Warning message of design of LDWS H. -C. Cheng and Y. -L. Lee, Taiwan</p> <p>Subjective perceived depth measurement and visual comfort evaluation for viewing stereoscopic films P. -C. Wang, K.-Y. Chen, S.-L. Hwang and J. -S. Chen, Taiwan</p> <p>Development of virtual instructors for enhancing nuclear power plant personnel training quality C. -W. Yang, T.-L. Hsieh, L.-C. Yang and T. -C. Cheng, Taiwan</p> <p>Applications of ecological interface design on advanced main control room T. -L. Hsieh, M.-C. Hsieh and S. -L. Hwang, Taiwan</p> <p>Improvement of lighting quality in advanced main control rooms C. -F. Chuang, S.-L. Hwang, J.-L. Chen and C. -H. Yang, Taiwan</p>
CCDM	<p>SESSION 32: Applications of Human, Social, Culture Behavioral Modeling Technology CHAIR: J. Cohn, USA</p>
<p>13:30-15:30 CONTINENTAL 1</p>	<p>Leveraging emerging technologies to improve socio-cultural fluency and situational awareness of deployed combat units D. Foster, USA</p> <p>Cultural effects of narratives on individuals and populations W. Stacy, R. McCormack, I. Yohai, B. Skarin and K. Sullivan, USA</p> <p>Developing a performance-based cross-cultural competence assessment system E. Sims, G. Glover, H. Friedman, E. Culhane, M. Guest and M. Van Driel, USA</p> <p>Enhancing cognitive models with affective state for improved understanding and prediction of human socio-cultural behavior P. Ganapathy, T. Tamminedi, I. Juvina and J. Yadegar, USA</p> <p>Simulating civilization change with Nexus cognitive agents D. Duong and J. Pearman, USA</p> <p>Cosmopolis: A massively multiplayer online game for social and behavioral research M. Spraragen, P. Landwehr, B. Ranganathan, M. Zyda, K. Carley, Y.-H. Chang and R. Maheswaran, USA</p> <p>Data mining the cross-cultural decision space for planning and analysis G. Klein, J. Drury, S. Musman, M. Pfaff and A. Liu, USA</p>
CCDM	<p>SESSION 33: Architecture for Socio-Cultural Modeling CO-CHAIRS: C. Fidopiastis and E. Briscoe, USA</p>
<p>13:30-15:30 CONTINENTAL 2</p>	<p>Modeling and assessing multiple cultural perspectives L. Weiss, E. Briscoe, E. Whitaker, E. Trehitt and J. Horgan, USA</p> <p>Cultural engagements: Leveraging a modeling framework for cultural interaction simulations N. Drucker and P. Jones, USA</p> <p>Three-dimensional immersive environments to enable research in cross cultural decision making A. Kruse and J. Lowell, USA</p> <p>Enhancing cultural training platforms with integrated psychophysiological metrics of cognitive and affective states C. Berka, V. Tan, C. Fidopiastis, A. Skinner, D. Martinez and R. Johnson, USA</p> <p>Use of psychophysiological measures and interactive environments for understanding and training warfighter cross-cultural decision making A. Skinner, J. Vice, C. Berka and V. Tan, USA</p> <p>Cross cultural training through digital puppetry A. Lopez, C. Hughes, D. Mapes and L. Dieker USA</p> <p>Correlations of spatial orientation with simulation based robot operator training J. Blitch, C. Bauder, R. Gutzwiller and B. Clegg, USA</p>

S&O	<p>SESSION 34: Security and Organizational Design CO-CHAIRS: R. Saikayasit, A. Stedmon and G. Lawson, UK</p>
13:30-15:30 CONTINENTAL 3	<p>Human factors in counter-terrorism A. Stedmon, G. Lawson, R. Saikayasit and C. Howard, UK</p> <p>Interpreting deceptive behaviors G. Lawson, A. Stedmon, R. Saikayasit and E. Crundall, UK</p> <p>User requirements for security and counter-terrorism initiatives R. Saikayasit, A. Stedmon, G. Lawson and P. Fussey, UK</p> <p>The emerging human performance model for homeland security B. Novak, T. Malone, J. Lockett-Reynolds, D. Wilson and K. Duma, USA</p> <p>Prescribing knowledge for making arrangements regarding human factors in management of change: Toward incorporating human factors considerations into system design process model T. Akasaka and Y. Okada, Japan</p>
HSSE	<p>SESSION 35: Learning & Creativity in Service Innovation CO-CHAIRS: C. Mele and T. Russo Spena, Italy</p>
13:30-15:30 CONTINENTAL 4	<p>The human side of organizational change: Compliance and management control systems within Italian public utilities G. Mangia, P. Canonico, M. Iacono, R. Mercurio and M. Martinez, Italy</p> <p>Creativity and learning in the practices of service innovation T. Russo Spena and C. Mele, Italy</p> <p>Service design to evoke users' enthusiasm - Proposal and evaluation of a museum information providing service M. Takahashi, Y. Yasuma and M. Nakanishi, Japan</p> <p>Ergonomics at home: Contribution to the design of a smart home lighting service G. Poizat, M. Frejus and Y. Haradji, France</p> <p>Designing a mobile-based banking service: The MOBSEV Project A. Simoes, S. Guerreiro, A. Ferreira, S. Rola and G. Freire, Portugal</p>
HSSE	<p>SESSION 36: Research and Innovation in the Anthropology of Services CO-CHAIRS: J. Blomberg and C. Darrah, USA</p>
13:30-15:30 CONTINENTAL 5	<p>The imperative case? Making insights relevant for a company in transition M. Griffin and J. Dautcher, USA</p> <p>Video ethnography and the complexity of service work P. Szymanski, J. Englert, L. Plurkowski and P. Swenton-Wall, USA</p> <p>Exploring the old in the new: Toward an anthropology of services J. Blomberg and C. Darrah, USA</p> <p>Service + social S. Evenson, USA</p> <p>Service engineering as experience design: Where system thinking meets agency, value and meaning E. Churchill, USA</p>

R&R	SESSION 37: User Experience in Mobile Environments CHAIR: K. Bengler, Germany
13:30-15:30 CONTINENTAL 6	<p>Human machine interface design for the driver U. Niederée, Germany</p> <p>Designing developmentally tailored driving assessment tasks E. Roelofs, M. van Onna, K. Brookhuis, M. Marsman and L. de Penning, The Netherlands</p> <p>Merging navigation and anticipation assistance for fuel-saving C. Rommerskirchen and K. Bengler, Germany</p> <p>Control loss following a simulated tire tread belt detachment L. Carr, R. Rucoba, R. Liebbe and A. Duran, USA</p> <p>Empirical investigation of conflict and interference within haptic controlled human-excavator interface B. Osafo-Yeboah and S. Jiang, USA</p>
R&R	SESSION 38: Understanding Human Performance in Transport CO-CHAIRS: S. Sharples and T. Edwards, UK
13:30-15:30 CONTINENTAL 7	<p>A critical review of the STAMP, FRAM and Accimap systemic accident analysis models P. Underwood and P. Waterson, UK</p> <p>The role of situation awareness in classifying driver cognitive distraction states Y. Zhang and D. Kaber, USA</p> <p>Steering angle changes in driving with visual and cognitive task using driving simulator Y. Kuriyagawa and I. Kageyama, Japan</p> <p>Multifactor combinations and associations with performance in an air traffic control simulation T. Edwards, S. Sharples and J. Wilson, UK, and B. Kirwan, France</p> <p>Inferring cognitive state from observed behaviour S. Sharples, T. Edwards, N. Balfe and J. Wilson, UK</p> <p>Improving road user behaviour and pedestrian behaviour at level crossings A. Mills, UK</p>
AVIATION	SESSION 39: Flight Deck Displays CO-CHAIRS: A. Alexander and D. Kaber, USA
13:30-15:30 CONTINENTAL 8	<p>Designing an adaptive flight deck display for trajectory-based operations in NextGen S. Bruni, A. Chang, A. Carlin, L. Swanson and S. Pratt, USA</p> <p>Context-sensitive information presentation in support of NextGen operations N. Sarter, A. Sebok, C. Wickens, M. Nikolic, L. Thomas and S. Lu, USA</p> <p>Aviation display dynamics and flight domain in pilot perceptions of display clutter J. Naylor, D. Kaber, S.-H. Kim, G.-H. Gil and C. Pankok, USA</p> <p>Effectiveness of 3D cockpit displays of weather on pilot performance in NextGen airspace G. Morales, T. Higham, V. Ho, K.-P. Vu, T. Strybel, V. Battiste, J. Lachter and W. Johnson, USA</p> <p>Enhanced audio for NextGen flight decks R. Koteskey, S.-C. Wu, V. Battiste, E. Wenzel, J. Lachter, D. Begault, J. Nguyen, M. Politowicz and W. Johnson, USA</p> <p>A user-centered optimization method for helicopter flight instrument panels C. Alppay and N. Bayazit, Turkey</p>

Detailed Technical Program

AVIATION	<p>SESSION 40: NextGen Airport Surface Operations CHAIR: B. Hooley, USA</p>
13:30-15:30 CONTINENTAL 9	<p>Naming of taxiways on a large airport to improve safety through simpler memorization V. Mollwitz, T. Mühlhausen, H. Többen, J. Jakobi and M. Kreuz, Germany</p> <p>Integrated management of airport surface and airspace constraints P. Smith, A. Spencer, M. Evans, A. Fernandes and R. Beatty, USA</p> <p>Reducing environmental impact while maximizing airport throughput: The consequences of introducing new operational goals with and without automation support in an air traffic control tower simulation J. Holbrook, T. Hoang, W. Malik, G. Gupta, J. Montoya and Y. Jung, USA</p> <p>An initial investigation of the impact of operator-automation goal divergence in the tower L. Strater, J. Holbrook, T. Beard, H. Cuevas and M. Endsley, USA</p> <p>Human-in-the-loop simulations of surface trajectory-based operations E. Stelzer, C. Morgan, K. McGarry and K. Shepley, USA</p> <p>DataComm in flight deck surface trajectory-based operations D. Bakowski, D. Foyle, B. Hooley, G. Meyer and C. Wolter, USA</p> <p>A design rationale capture tool to support design verification and re-use B. Hooley, USA, J. Silva, Brazil, and D. Foyle, USA</p>
ADHM	<p>SESSION 41: Directions Towards a More Comprehensive Human Modeling CHAIR: T. Alexander, Germany</p>
13:30-15:30 FRANCISCAN A	<p>Analysis of the effect of an information processing task on goal-directed arm movements T. Alexander, Germany</p> <p>Combining the strengths of human performance modeling tools to enhance analytical results C. Sams, USA</p> <p>Cognitive and affective modeling in intelligent virtual humans for training and tutoring applications R. Sottolare and J. Hart, USA</p> <p>Intelligent agents and serious games for the development of contextual sensitivity A. Tremori, Italy, C. Baisini and T. Enkvist, Sweden, A. Bruzzone, Italy, and J. Nyce, USA</p> <p>Outdoor augmented reality for adaptive mental model support J. Neuhofer and T. Alexander, Germany</p> <p>An M&S framework for human social cultural behavioral modeling A. Tolk, S. Diallo and J. Padilla, USA</p>
HC	<p>SESSION 42: Healthcare Informatics and Physical Aspects CO-CHAIRS: J. Yi and V. Duffy, USA</p>
13:30-15:30 FRANCISCAN B	<p>Food for the heart: Lessons learned while designing a visual decision support system for patients with coronary heart disease B. Kwon, Z. Dong, K. Yehle, K. Plake, L. Yahiro, S. Kranz, and J. Yi, USA</p> <p>Design heuristics for health IT: functional, technical, affective, and cultural considerations R. Valdez and J. Valdez, USA</p> <p>Social media for the ehealth context. A requirement assessment A. Schaar, A. Calero Valdez and M. Ziefle, Germany</p> <p>A new collaborative tool for visually understanding national health indicators S. Xu, B. Jewell, C. Steed and J. Schryver, USA</p> <p>Identifying and evaluating risk factors for musculoskeletal disorders in equine veterinary work M. Rogers, D. Kaber and K. Taylor, USA</p> <p>Musculoskeletal symptoms, stress and work organizational aspects in hospital nursing activities A. Silva, F. Foltran, R. Moreira, C. Moriguchi, M. Batistão and H. Coury, Brazil</p> <p>Evaluation of bamboo charcoal effect to comfort based on physiological data K. Takao, N. Kuwahara and N. Kida, Japan</p>

<p>EMU&SP</p>	<p>SESSION 43: Ergonomics, Aesthetic and the Affective and Emotional Design CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
<p>FRANCISCAN C 13:30-15:30</p>	<p>Juicy Salif – affective or functional design J. van der Linden, A. Lacerda, R. Porto, L. Basso and M. Seferin, Brazil Function versus emotion in a wheelchair design P. Costa, F. Moreira da Silva and C. Figueredo, Portugal Aesthetic and symbolic aspects versus usability: Evaluation of daily use product - lemon squeezer J. Lanutti, L. Campos, D. Pereira, L. Mattos, E. Inokuti and L. Paschoarelli, Brazil Materials emotional profile from the point of view of graduation design students in Portugal P. Oliveira and F. Moreira da Silva, Portugal Ergonomics and emotional values in design process: The case study Daciano da Costa A. Moreira da Silva, Portugal Evaluation of the user's emotional interactions in the use of washing machine A. Neves and M. Okimoto, Brazil Aesthetics sells: Mobile phone sales as a function of phone attractiveness J. Quinn, USA</p>
<p>MFG</p>	<p>SESSION 44: Ergonomics Product Design CHAIR: A. Chan, Hong Kong</p>
<p>FRANCISCAN D 13:30-15:30</p>	<p>The customer requirements for sandals-Inspirations for design S. Tsang, J. Ho and A. Chan, Hong Kong Evaluating the effectiveness of haptic feedback on a steering wheel for BSW J. Chun, G. Park, S. Oh, J. Seo, I. Lee, S. Choi and S. Han, South Korea Identifying Affective Satisfaction elements of a smartphone application J. Park, S. Han, J. Park and H. Kim, South Korea Development of an affective satisfaction model for smartphones H. Kim, S. Han, J. Park and J. Park, South Korea Identifying elements of user value for smartphones through a longitudinal observation J. Park and S. Han, South Korea Design and evaluation of methods to aid one-handed input in mobile touch screen devices S. Oh, S. Han, J. Seo and D. Park, South Korea Determination of ringtone volumes of mobile phones: Applying signal detection theory H. Moon and S. Han, South Korea</p>
<p>PE&S</p>	<p>SESSION 45: Effective Methods in Safety Management CO-CHAIRS: J. Sinay and H. Pacaiova, Slovakia</p>
<p>PLAZA ROOM A 13:30-15:30</p>	<p>Parameters in phases of causal dependency in the occurrence of negative phenomena J. Sinay, A. Nagyova, S. Vargova and F. Kalafut, Slovakia BBS program (behavior based safety) - Way to raising the level of health and safety in practice H. Pacaiova, A. Nagyova and S. Markulik, Slovakia Whole-body vibration when operating mobile machinery S. Fiserova, Czech Republic Testing of chosen Personal Protective Equipment (PPE) as per standard STN EN ISO 15025:2003 L. Makoviccka Osvaldova, A. Osvald and P. Makovicky, Slovak Republic The system of coordinating security for the construction of nuclear power J. Donic, A. Lezovicova and K. Habina, Slovakia New forms of education as part of effective management of occupational safety and health at work K. Habina, J. Donic and A. Lezovicova, Slovakia Occupational medical service in practice A. Lezovicova, J. Donic and K. Habina, Slovakia</p>

EMU&SP	<p>SESSION 46: Aging Ergonomics: III CHAIR: R. Lin, Taiwan</p>
13:30-15:30 PLAZA ROOM B	<p>The impact of services quality on patient trust and satisfaction for aged patients J. Liu and Y. Wang, Taiwan</p> <p>Exploring elders' digital reading experiences with mobile devices W. Lin and H. -P. Yueh, Taiwan</p> <p>Survey report of recent researches on usability evaluation for elderly people in Japan T. Shimada and M. Ohkura, Japan</p> <p>A comparison study of the effects on road crossing behavior between normal and Parkinson disease Y. -K. Ou, C.-H. Lin and Y. -C. Liu, Taiwan</p> <p>An application of ballistic movement models for comparing ageing differences while interacting with a touchscreen R. Lin, S.-W. Shih and B. Jiang, Taiwan</p> <p>Elders' perception of pad devices: An user experience study H. -P. Yueh and M. -J. Lee, Taiwan</p> <p>Using thinking process as a thinking tool for the problem of the policy of chronic illness refill slip T. -Y. Wu, C.-W. Tseng, W. Zhang and S. -H. Chang, Taiwan</p>
S&O	<p>SESSION 47: Organization-Technology Multiagent Systems: II CHAIR: L. Pacholski, Poland</p>
13:30-15:30 UNION SQUARE 23&24	<p>Factors adversely affected the productivity of software designers applying CASE tools A. Borucki, Poland</p> <p>Analysis of changes in work processes A. Kawecka-Endler and B. Mrugalska, Poland</p> <p>Indirect estimation method of data for ergonomic design on the base of disability research in Polish census 2011 M. Butlewski, Poland</p> <p>Application of integrated score of ergonomic work conditions (ErgQS) in management of ergonomic hazards in enterprise W. Horst, W. Horst and M. Horst-Kończal, Poland</p> <p>Influence of application safety and health management systems on manufacturing process formation: A case study P. Kończal, M. Horst-Kończal and W. Horst, Poland</p> <p>Ergonomic characteristic of software for enterprise management systems K. Hankiewicz, Poland</p> <p>Toward a unified sociotechnical systems approach to improving workplace safety L. Hettinger, M. Dainoff and M. Robertson, USA</p>
<p>15:30 - 16:00 Refreshments will be provided in the Golden Gate Ballroom</p>	
CCDM	<p>SESSION 48: Operational Use and Requirements CO-CHAIRS: B. Costa and J. Bornmann, USA</p>
16:00-18:00 CONTINENTAL 1	<p>Social radar B. Costa and J. Bornmann, USA</p> <p>A pragmatic framework for studying extremists' use of cultural narrative S. Corman, S. Ruston and M. Fisk, USA</p> <p>A decision support capability of the National Operational Environment Model J. Salerno, J. Smith and A. Kwiat, USA</p> <p>Unbiased analytics for the COCOMs W. Hildebrandt and C. McCue, USA</p> <p>Social network analysis reachback capability J. Matthieu, M. Lorber, A. Ounanian, M. Fulk, J. Troop and J. Bornmann, USA</p> <p>Supporting situation understanding (past, present, and implications on the future) in the USSTRATCOM ISPAN program of record J. Starz, M. Hoffman, J. Roberts, J. Losco, K. Spivey, J. Lautenschlager and R. Hingst, USA</p> <p>Civil society initiatives in post-revolution Tunisia J. Halverson, USA</p>

CCDM	<p>SESSION 49: Strategic and Tactical Considerations for Cross-Cultural Competency: I CO-CHAIRS: E. Fitzgerald and J. Gallus, USA</p>
16:00-18:00 CONTINENTAL 2	<p>Strategic interests in cross-cultural competence E. Fitzgerald, USA</p> <p>3C assessment and development in the Army: Past, present, and future J. Klafehn, USA</p> <p>Cultural awareness training for Marine Corps Operations: The CAMO project J. MacMillan, A. Walker, E. Clarke and Y. Marc, USA</p> <p>Efficient cross-cultural models for communicative agents A. Sagae, E. Ho and J. Hobbs, USA</p> <p>Modeling the multicultural perspective taking process and its situational and individual influences in operational settings M. McCloskey, K. Behymer and L. Rassmussen, USA</p> <p>Assessing cross-cultural training for military advisors M. Yager, A. O'Connor and K. Metcalf, USA</p> <p>Operational user requirements and example use cases for human social culture behavior (HSCB) technologies R. Moore, C. Stevens, H. Oonk and M. Averett, USA</p>
HSSE	<p>SESSION 50: Challenges/Successes in Service Design for Health Care CHAIR: S. Spraragen, USA</p>
16:00-18:00 CONTINENTAL 3	<p>Introducing (service) design in an academic medical center B. Berrean, USA</p> <p>Cases on service design approaches for healthcare: Method and principle M. Kim, USA</p> <p>Designing a web-based behavior motivation tool for healthcare compliance R. Lin, S. Ramakrishnan, H. Chang, S. Spraragen and X. Zhu, Taiwan/USA</p> <p>Business models, public policy and service design S. Demello, USA</p> <p>Design for chronic illness: Exploring service systems and new technologies for patients with Type 2 diabetes L. Chapman, USA</p> <p>Self-service for personal health monitoring and decisions Z. Pasek and G. Bacioiu, Canada</p>
HSSE	<p>SESSION 51: Employee Driven and Customer Oriented Service Innovation CO-CHAIRS: B. Edvardsson and P. Skåln, Sweden</p>
16:00-18:00 CONTINENTAL 4	<p>Service systems integration T. Böhmann, Germany, B. Edvardsson and B. Tronvoll, Sweden</p> <p>Front-line employee driven service innovation: An exploratory multiple case study J. Karlsson and P. Skåln, Sweden</p> <p>Exploring in an exploitation based organization - The role of front-line employees M. Dasselar and E. Sundström, Sweden</p> <p>Co-creating better outcomes – engaging in health K. Reijonsaari, Finland</p>

HSSE	<p>SESSION 52: The Ethics Dividend in Services CHAIR: S. Parikh, India</p>
CONTINENTAL 5 16:00-18:00	<p>Ethics in financial inclusion services: Aristotle's four causes theory U. Narain, India</p> <p>How to argue about shared agency F. Alonso, USA</p> <p>Shaping integrity ambassadors J. McCormack, USA</p> <p>The ethical dividend E. McNulty, USA</p> <p>Sensitivity to ethical values for service systems governance: A viable systems perspective C. Bassano and P. Piciocchi, Italy</p> <p>Challenges of borderless eGovernment services for Europeans W. Cellary, Poland</p>
R&R	<p>SESSION 53: Perceptual and Motor Processes in Driving Assessment and Design: II CHAIR: F. Mars, France</p>
CONTINENTAL 7 16:00-18:00	<p>Motorists overtaking bicyclists: Analysis of driver behavior in a simulated driving environment M. Kuzel & R. Gray, USA</p> <p>Selection and regulation of overtaking when driving are affordance-based A. Morice, N. Basilio, C. Martha, R. Bootsma and G. Montagne, France, and G. Diaz and B. Fajen, USA</p> <p>Perceptual errors that can lead to collision C. Purcell, D. Poulter and J. Wann, UK</p> <p>Speed-related auditory feedback from an electric vehicle on the braking behaviour in a 3D-driving simulator L. Bringoux, A. H. Morice, J. F. Sciabica, P. Besson, E. Dousset, T. Marqueste, C. Martha, C. Goulon, C. Bourdin and V. Roussarie, France</p> <p>Designing the non-linearity of human motion perception for dynamic driving simulators A. Stratulat, V. Roussarie, J.-L. Vercher and C. Bourdin, France</p>
APD	<p>SESSION 54: Ergonomics Design for Tools and Automobiles CO-CHAIRS: Y. Kong and M. Jung, Korea</p>
CONTINENTAL 8 16:00-18:00	<p>Correlation between muscle contraction and vehicle dynamics in a real driving S. -M. Mo, Y. Hyun, C.-S. Kim, D.-M. Kim, H.-S. Kang, Y.-K. Kong, I. Lee and M. -C. Jung, Korea</p> <p>Measurement of body pressures in double-lane-changing driving tests Y. Hyun, N.-C. Lee, K.-S. Lee, C.-S. Kim, S.-M. Mo, M.-T. Seo, Y.-K. Kong, M.-C. Jung and I. Lee, Korea</p> <p>Eye-tracking based analysis of the driver's field of view (FOV) in real driving environment S. Ko, S. Lee, Y. Han, E. Cho, H. Kim and Y. Ji, Korea</p> <p>Evaluation of customers' subjective effort and satisfaction in opening and closing tail gates of sport utility vehicles T. Ryu, B. Jin, M. Yun and W. Kim, South Korea</p> <p>Survey and proposal for data application design H. Jung, USA</p> <p>Recognition of human emotion by hand gestures S. Lee, M. Jang, J. Lee and H. Choi, Korea</p> <p>Design standards and layout methods of multi-information visual interface based on eye movement of flight simulator H. Jun and X. Li, China, K. Sato, USA, L. Yao and Y. Jiang, China</p>

APD	<p>SESSION 55: Quantification of Affective Response in Human Machine Interactions CHAIR: M. Yun, Korea</p>
16:00-18:00	CONTINENTAL 9
	<p>A study on the relationship between pleasures and design attributes of digital appliances S. Bahn, J. Song, M. Yun and C. Nam, Korea</p> <p>Effects of age and gender differences on automobile instrument cluster design S. Yoon, H. Hwangbo, J. Choi, Y. Ji, J. Ryu, S. Lee and D. Kim, Korea</p> <p>Quantification of a haptic control feedback using an affective scaling method S. Kwon, W. Kim and M. H. Yun, Korea</p> <p>Effects of age, gender, and posture on user behaviors in use of control on display interface J. H. Lim, Y. Rhie and I. Rhiu, Korea</p> <p>Subjective quality evaluation of surface stiffness from hand press: Development of an affective assessment strategy I. Rhiu, T. Ryu, B. Jin and M. H. Yun, Korea</p> <p>Hemispheric asymmetries in the perception of emotions S. Lim, S. Bahn, J. Woo and C. Nam, USA</p>
AVIATION	<p>SESSION 56: Uninhabited and Highly Automated Systems CO-CHAIRS: M. Draper and C. Samms, USAustralia</p>
16:00-18:00	FRANCISCAN A
	<p>Initial evaluation of video game technologies for future unmanned air vehicle interfaces M. Gacy, G. Calhoun and M. Draper, USA</p> <p>Varying levels of automation on UAS operator responses to traffic resolution advisories in civil airspace C. Kenny and L. Fern, USA</p> <p>Towards an improved pilot-vehicle interface for highly automated aircraft: Evaluation of the haptic flight control system P. Schutte, K. Goodrich and R. Williams, USA</p> <p>A computational model to predict operator performance when controlling unmanned systems C. Wickens, M. Gosakan, M. Gacy and L. Laux, USA</p> <p>An application of SEEV and MRT to study the cognitive workload of UAS operators M. Gosakan, C. Wickens, S. Quesada and J. Pearson, USA</p>
ADHM	<p>SESSION 57: Three-Dimensional Human Surface Scan Post-Processing and Geometric Analysis CHAIR: B. Corner, USA</p>
16:00-18:00	FRANCISCAN B
	<p>On aligning and measuring 3D bodies by the thousands A. Weiss, USA, M. Loper, E. Rachlin, D. Hirshberg and M. Black, Germany</p> <p>Topology free automated landmark detection C. Chuang, J. Femiani, A. Razdan and B. Corner, USA</p> <p>Reliability of an autmoated head/face landmark location function B. Corner, J. Carson, J. Femiani, A. Razdan and C. -Y. Chuang, USA</p> <p>Geometric analysis of 3D torso scans for personal protection applications J. Hudson, G. Zehner and B. Corner, USA</p> <p>Geometric morphometric estimation of vault shape using facial landmarks and head anthropometry D. Slice and B. Corner, USA</p> <p>Shape description of the human body based on discrete cosine transformation P Li, B. Corner and S. Paquette, USA</p> <p>Head-and-face shape difference between American and Chinese workers Z. Zhuang, USA</p>

HC	<p>SESSION 58: Physical Ergonomics for Patients and Caregivers CHAIR: S. Hignett, UK</p>
<p>FRANCISCAN C 16:00-18:00</p>	<p>Environmental audit of UK hospitals to design safer facilities for frail and/or confused older people S. Hignett, UK</p> <p>Extreme makeover: Ergonomic challenges and solutions in a gastroenterology clinic Y. -L. Yeung and K. Monsees, USA</p> <p>Upper extremity musculoskeletal disorder risk in clinical gastroenterology T. James and D. Tendler, USA</p> <p>Rapid improvement event to prevent patient falls L. Wolf, E. Constantinou, P. Matt and L. Schulte, USA</p> <p>Design for patient safety - Considering a patient safety risk assessment E. Taylor, A. Joseph and X. Quan, USA</p> <p>Ergonomic issues of computer use in a major healthcare system A. Hedge and T. James, USA</p>
EMU&SP	<p>SESSION 59: Ergonomics Evaluation and Physical Demand on Ergonomic Design CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
<p>FRANCISCAN D 16:00-18:00</p>	<p>The effect of simulator hazard exposure on young driver training Evaluation of manual torque forces in simulated activities with Brazilian adults of different genders and age groups: Ergonomic design of faucets L. Campos and L. Paschoarelli, Brazil</p> <p>Laterality and usability: Biomechanical aspects in prehension strength L. Paschoarelli, B. Razza, C. Lúcio, J. Ulson and D. Silva, Brazil</p> <p>Pulling strength with pinch grips: A variable for product design B. Razza, L. Paschoarelli, D. Silva, J. Ulson and C. Lucio, Brazil</p> <p>Usability in opening soft drink packagings: Age influence in the biomechanical forces D. Silva and L. Paschoarelli, Brazil</p> <p>Evaluation of grip strength in children: The ergonomic design used in the development of secure lids for packaging L. Paschoarelli and L. Dahrouj, Brazil</p> <p>Perception of products by different levels of interaction: A study with pruning shears L. Campos, J. Lanutti, L. Mattos, D. Pereira, E. Inokuyi and L. Paschoarelli, Brazil</p> <p>Usability testing as a systematic tool for product performance valuation during design process of an ischial support L. Saenz and A. Valencia, Brazil</p>
MFG	<p>SESSION 60: Ergonomic Design of Future Production Systems: Part II CO-CHAIRS: C. Schlick and M. Mayer, Germany</p>
<p>PLAZA ROOM A 16:00-18:00</p>	<p>Navigation as a key for self-optimizing assembly processes R. Schmitt, P. Jatzkowski and A. Schönberg, Germany</p> <p>Adaptive assembly planning for a nondeterministic domain D. Ewert, M. Mayer, D. Schilberg and S. Jeschke, Germany</p> <p>Cooperative disassembly of human and robot using an augmented vision system B. Odenthal, M. Mayer, W. Kabuß and C. Schlick, Germany</p> <p>Planning-modules for the manual assembly using virtual reality technics L. Goldhahn and K. Mueller-Eppendorfer, Germany</p> <p>Involving users in the design of augmented reality-based assistance in industrial assembly tasks K. Mura, D. Gorecky and G. Meixner, Germany</p> <p>Management audit as part of an ergonomics management in production systems M. Bierwirth and R. Bruder, Germany</p>

PE&S	<p>SESSION 61: The Use of Bayesian Methods for Classification of Injury Causation in Large Administrative Databases CO-CHAIRS: M. Lehto and H. Marucci-Wellman, USA</p>
16:00-18:00 PLAZA ROOM B	<p>An overview of coding rules for BLS occupational safety and health data and their implication on auto-coding M. Zak, USA</p> <p>Exploring the automated classification of SOII data A. Measure, USA</p> <p>Near miss narratives from the fire service: A Bayesian analysis J. Taylor, M. Lehto and G. Smith, USA</p> <p>Identification of high risk patients for colonoscopy surveillance from EMR text E. Sherer, H.-Y. Huang, T. Imperiale, G. Nanda and M. Lehto, USA</p> <p>A strategic Bayesian approach for cause of injury coding in the Liberty Mutual Workplace Safety Index H. Marucci-Wellman, M. Lehto and H. Corns, USA</p> <p>Development and evaluation of an auto-coding model for coding unstructured text data among workers' compensation claims S. Bertke, A. Meyers, S. Wurzelbacher, J. Bell, M. Lample and D. Robins, USA</p>
EMU&SP	<p>SESSION 62: Aging Ergonomics: IV CHAIR: C.-J. Su, Taiwan</p>
16:00-18:00 CONTINENTAL 6	<p>Delivering intelligent healthcare web services in a cloud for aging in place C. -Y. Chiang and C. -J. Su, Taiwan</p> <p>Glare sensitivity of pilots with different ages and its effects on visual performance of nighttime flying Y. Liu, M. Dong, Y. Sun and Y. Lin, China</p> <p>Web-oriented architecture for long-term health monitoring in a cloud - Using balance ability monitoring as an example C. -Y. Chiang, C.-J. Su and B. Jiang, Taiwan</p> <p>Innovative long-distance interaction between elderly and their beloved young kids using a Kinect-based exercise game T. -L. Sun and P. -J. Liu, Taiwan</p> <p>How usage context shapes evaluation and adoption criteria in different technologies M. Ziefle and S. Himmel, Germany, and A. Holzinger, Austria</p> <p>Upper extremity interaction modeling for persons with advanced osteoarthritis D. Feathers, USA</p> <p>Digital tablets as a tool for digital inclusion of elderly people R. Rocha, L. Paschoarelli and J. Faria, Brazil</p>
C&N	<p>SESSION 63: The Neuroscience of Human-System Integration CO-CHAIRS: K. Stanney and J. Cohn, USA</p>
16:00-18:00 UNION SQUARE 23&24	<p>Challenges and opportunities for inserting neuroscience technologies into training systems R. Stripling, USA</p> <p>Team neurodynamics: A novel platform for quantifying performance of teams G. Raphael, R. Stevens, T. Galloway, C. Berka and V. Tan, USA</p> <p>Human factors in the design of a search tool for a database of recorded human behavior R. Abbott, C. Forsythe, M. Glickman and D. Trumbo, USA</p> <p>Challenges of representing human cognition to the systems they use J. Cohn, USA</p> <p>Given the state, What's the metric? M. Carroll, K. Stanney, C. Kokini and K. Hale, USA</p> <p>Synthetic environments for assessment R. Darken and J. Cohn, USA</p> <p>Effects of feedback and task difficulty on postural balance task: An EEG study D. Rodrick, V. Jayaprakash, A. Ionescu and W. Karwowski, USA</p>

CCDM	<p>SESSION 64: Strategic and Tactical Considerations for Cross-Cultural Competency: II CO-CHAIRS: E. Fitzgerald and J. Gallus, USA</p>
8:00-10:00 CONTINENTAL 1	<p>VRP 2.0: Cross-cultural training with a hybrid modeling architecture W. Johnson, A. Sagae and L. Friedland, USA</p> <p>Theoretical and practical advances in the assessment of cross-cultural competence W. Gabrenya, Jr., R. Griffith, R. Moukarzel, M. Pomerance and P. Reid, USA</p> <p>Metacognitive underpinnings of 3C development L. Rasmussen and W. Sieck, USA</p> <p>Outreach: Building cross-cultural competence in the total force K. Gregory, M. van Driel, A. Greene-Sands and D. McDonald, USA</p> <p>Intercultural competence in global collaboration courses in computer engineering H. Bernáld, UK, Å. Cajander and M. Daniels, Sweden, C. Kultur, Turkey, A. Löfström, Sweden, R. McDermott, UK, and L. Russell-Dag, Turkey</p> <p>Scope and scale: A framework for social analysis D. Sallach, M. North and W. Rivera, USA</p>
CCDM	<p>SESSION 65: Cross Cultural Decision Making in the Comprehensive Approach CO-CHAIRS: S. Shadrick, USA, and M. Thompson, Canada</p>
8:00-10:00 CONTINENTAL 2	<p>Soldier skills to develop, enhance, and support host-nation governance J. Fite, T. Conrad, R. Mulvaney, A. Hirzel, J. Stern, S. Aude and L. Tindall, USA</p> <p>Evaluation of Alelo's Operational Language and culture training system for use by the Canadian Forces T. Holton, E.-A. Filardo, K. Piasentin, M. Thompson and A. Febbraro, Canada</p> <p>Cooperation and competition in intercultural interactions D. Matsumoto and H. Hwang, USA</p> <p>How language and narratives impact upon cross-cultural decision making F. Butcher, UK</p>
HSSE	<p>SESSION 66: Service Systems are Distributed Cognitive Systems CHAIR: P. Maglio, USA</p>
8:00-10:00 CONTINENTAL 3	<p>Distributed interactions, information, and computation in service systems B. Glushko, USA</p> <p>A distributed-cognition based method for finding social feature opportunities in business services K. Lyons and S. Marks, Canada</p> <p>The distributed co-construction of value propositions: Provider-side interactions in a complex IT service system B. Shaw and Y. Rankin, USA</p> <p>Distributed cognition, service science and 3D multi-user virtual environments N. Flor, USA</p> <p>Distributed cognition in computer system administration P. Maglio, USA</p>

HSSE	<p>SESSION 67: Design Thinking for Service Systems CHAIR: S. Kwan, USA</p>
8:00-10:00 CONTINENTAL 4	<p>The role of event scheduling and bundling flexibility in creating sequence-based event schedules M. Dixon and G. Thompson, USA</p> <p>Moving from B2X to B2X2Y value propositions in service system networks S. Kwan, USA, P. Hottum, Germany, and C. Kieliszewski, USA</p> <p>User eExperience in service design: Defining a common ground from different fields K. Touloum and D. Idoughi, Algeria, and A. Seffah, France</p> <p>A proposal of the service design method and the service example based on human design technology K. Yasui and T. Yamaoka, Japan</p> <p>Facilitating service development in a multi-agent environment: Different roles of consultancy I. Lappalainen, K. Kallio and M. Toivonen, Finland</p> <p>Value co-creation in cross-channel service contexts: A service science perspective T. Rintamäki and L. Mitronen, Finland, and K. Kijima, Japan</p> <p>Service process visualization in nursing-care service using state transition model H. Miwa, T. Fukuhara and T. Nishimura, Japan</p>
R&R	<p>SESSION 68: E-Mobility in Megacities: Does it Work? CHAIR: J. Krems, Germany</p>
8:00-10:00 CONTINENTAL 6	<p>E-Mobility in megacities: Does it work? J. Krems, Germany</p> <p>The MINI E field study - Similarities and differences in international everyday EV driving R. Vilimek, A. Keinath and M. Schwalm, Germany</p> <p>How the properties of an electric vehicle can benefit road safety by inducing behavioural changes? E. Labeye, M. Hugot, M. Regan and C. Brusque, France</p> <p>Drivers' adaptation to electric vehicles in the UK ultra low carbon vehicle demonstrator programme: Facilitators and challenges M. Burgess, M. Harris, S. Mansbridge, L. Bunce, N. King, E. Lewis, C. Walsh and A. Everett, UK</p> <p>User interaction with electric vehicles: implications for human factors research T. Franke, P. Cocron, F. Buehler, I. Neumann, and J. Krems, Germany</p> <p>Evaluation of interaction concepts for the longitudinal dynamics of electric vehicles - Results of study focused on driving experience T. Eberl, R. Sharma, R. Stroph, J. Schumann and A. Pruckner, Germany</p>
APD	<p>SESSION 69: Emotion and Product and Service Design CO-CHAIRS: P. L. P. Rau and J. Liu, China</p>
8:00-10:00 CONTINENTAL 7	<p>Comparing the psychological and physiological measurement of player's engaging experience in computer game W. Cui and P. Rau, China</p> <p>Effect of culture interdependency on interpersonal trust J. Liu and P. Rau, China</p> <p>Study of the interface of information presented on the mobile phones H. Qin, S. Gao and J. Liu, China</p> <p>The design of adhesive bandage from the customer perspective J. Ho, S. Tsang and A. Chan, Hong Kong</p> <p>Journeying toward female-focused m-health applications L. Xue, C. C. Yen, L. Chang, B. C. Tai, H. C. Chan, H. B. Duh and M. Choolani, Singapore</p>

AVIATION	<p>SESSION 70: Pilot Assessment and Performance CO-CHAIRS: P. Schutte and K. Latorella, USA</p>
CONTINENTAL 8 8:00-10:00	<p>Quantifying pilot visual attention in low visibility terminal operations K. Ellis, R. Bailey, J. Arthur, K. Latorella, L. Kramer, K. Shelton, R. Norman and L. Prinzel, USA</p> <p>Model individualized for real-time operator functional state assessment G. Zhang, R. Xu, W. Wang, A. Pepe, F. Li, J. Li, F. McKenzie, T. Schnell, N. Anderson and D. Heitkamp, USA</p> <p>Functional near infrared spectroscopy: Watching the brain in flight A. Harrivel and T. Hearn, USA</p> <p>Non-pareto optimal weather conflict resolution based on a social welfare function Q. Dao, C. Surakitbanharn, S. Lee, J. Kraut and W. Johnson, USA</p> <p>The relationship between pilots' manual flying skills and their visual behavior: A flight simulator study using eye tracking A. Haslbeck, E. Schubert, P. Gontar and K. Bengler, Germany</p> <p>Study on the control rules of X-axis relative speed of chase spacecraft during the manual control rendezvous and docking T. Zhiqiang, J. Ting, W. Chunhui and J. Guohua, China</p>
AVIATION	<p>SESSION 71: Safety (Aviation) CHAIR: N. McDonald, Ireland</p>
CONTINENTAL 9 8:00-10:00	<p>Action research and change management system in aviation M. Leva and N. McDonald, Ireland, P. Ulfvengren, Sweden, and S. Corrigan, Ireland</p> <p>Comparative analysis between the US and Europe approach to system safety performance measures and assessment in Single European Sky and NextGen, the future Aviation Transport System P. Ulfvengren, Sweden, and M. C. Leva, Ireland</p> <p>Can safety regulation in aviation be preventive rather than reactive? N. McDonald, Ireland, and M. Ydalus, Sweden</p> <p>Airline framework for predictive safety performance management P. Ulfvengren, Sweden, M. Leva and N. McDonald, Ireland, and M. Ydalus, Sweden</p> <p>The application of a human factors-based safety management model in aviation industry Y. -L. Hsiao, Taiwan, and C. Drury, USA</p> <p>Evaluating professional aircrew safety related behaviour in-flight S. Burdekin, Australia</p>
ADHM	<p>SESSION 72: Student Models for Adaptive Technology-Based Instructional Environments CHAIR: P. Durlach, USA</p>
FRANCISCAN A 8:00-10:00	<p>Personalized refresher training based on a model of competency acquisition and decay W. Johnson and A. Sagae, USA</p> <p>Modeling student arguments in research reports C. Lynch and K. Ashley, USA</p> <p>Bayesian student modeling in game-based learning environments J. Lester, J. Rowe and B. Mott, USA</p> <p>Modeling student behaviors in an open-ended environment for learning environment G. Biswas, J. Kinnebrew and J. Segedy, USA</p> <p>Detailed modeling of student knowledge in a simulation context A. Munro, D. Surmon, A. Koenig, M. Iseli, J. Lee and W. Bewley, USA</p> <p>Framework for instructional technology P. Durlach and R. Spain, USA</p> <p>Modeling students engaged in dynamic problem solving: Conning ships S. Peters, S. Kirschenbaum and E. Bratt, USA</p>

HC	<p>SESSION 73: Medical Error CHAIR: M. Ohkura, Japan</p>
FRANCISCAN B 8:00-10:00	<p>Error as behavior: Implications for HF/E S. Bogner, USA</p> <p>The study of drug/medical device recall data (I) - Analyses on recall data in Japan M. Kimura, H. Yoneshige, M. Ohkura and F. Tsuchiya, Japan</p> <p>Testing of a voluntary patient safety reporting system by think-aloud protocols: Will a common format help quality and efficient reporting? L. Hua and Y. Gong, USA</p> <p>The study on drug/medical device recall data (II) analyses on data in United States T. Nagata, R. Okuya, M. Kimura, M. Ohkura and F. Tsuchiya, Japan</p> <p>The relation between task errors and the graphic representation of information in medicine inserts in Brazil C. Spinillo, S. Padovani and C. Lanzoni, Brazil</p> <p>A human reliability assessment of low dose rate prostate brachytherapy procedure using the Human Error Assessment and Reduction Technique (HEART) E. Fallon and L. Chadwick, Ireland</p>
EMU&SP	<p>SESSION 74: Ergonomics in the Design of Workstations CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
FRANCISCAN C 8:00-10:00	<p>The health of the pilot of modern machines and their inclusion in a risk society E. Martins, M. Soares and L. Martins, Brazil</p> <p>A new approach to human error in aviation: The behavior of pilots under systemic look E. Martins, L. Giraldo and M. Soares, Brazil</p> <p>The organizational factors in the causalities of aircraft accidents related to maintenance R. Campos, E. Martins and M. Soares, Brazil</p> <p>Ergonomics and design as tools on the risk management D. Ferro and L. Martins, Brazil</p> <p>Intervention in a hydrometers assembly industry: Recommendations of improvements based on an ergonomic assessment G. Ribeiro and L. Martins, Brazil</p> <p>Parameters for evaluating the usability of the platform lift C. Miranda, M. Okimoto and C. Silva, Brazil</p> <p>The first time we never forget: Product evaluation in the context of first usage C. Silva and M. Okimoto, Brazil</p>
MFG	<p>SESSION 75: Ergonomics in Manufacturing: Asian Case Studies CHAIR: A. Matias, Philippines</p>
FRANCISCAN D 8:00-10:00	<p>An analysis on the suitability and comprehensibility of the globally harmonized system for hazard classification and labeling for Filipinos R. Po, Philippines</p> <p>Modification of the NIOSH Lifting Equation (1991) based on the anthropometric measurements of Filipino farmers in Laguna, Philippines R. Po and M. Yap, Philippines</p> <p>Perceptions of traffic enforcers on road traffic noise and its potential non-auditory effects A. Matias, K. Baraquiel, M. Barrios, L. Millare and C. Ocampo, Philippines</p> <p>A study on shoe sizing systems: Foot anthropometry of Filipino children aged 7-12 A. Matias, R. Macaranday, J. Mangubat, R. Reyes and J. Tan, Philippines</p> <p>Investigation of workers' progress along the learning curve with case study on the workers of a baseball and hockey glove manufacturing business in the Philippines I. Martinez, Philippines</p> <p>Studying customer experience for Chinese fast-food service N. Chen, P.-L. Rau and M. -Q. Wang, China</p>

PE&S	<p>SESSION 76: Physical Hazard and Prevention CHAIR: R. Jang, Taiwan</p>
8:00-10:00 PLAZA ROOM A	<p>Learning effect on discriminability of load heaviness R. -L. Jang, Taiwan</p> <p>The suitable sampling duration for performing consecutive maximum voluntary contraction gripping exertions without fatigue P. -C. Sung and C. -L. Lee, Taiwan</p> <p>Human reliability of chemicals trucks filling process C. -W. Lu and C. -Y. Wu, Taiwan</p> <p>Design and evaluation of a standing platform for reducing the physical strains faced by workers on guyed telecommunication towers H. -C. Chen, T.-L. Lin, C.-L. Lee and C. -Y. Chen, Taiwan</p> <p>Nail clipper design for elderly population H. C. Wu, Y.-C. Lin and C. -H. Hou, Taiwan</p> <p>An adjustable assistive chair design for older people C. Huang, Taiwan</p> <p>Effects of different inclination angles on biomechanical loading of the shoulder and hand while pushing construction carts Y. -H. Lin, Taiwan</p>
C&N	<p>SESSION 77: Human Performance in High Risk Environments CO-CHAIRS: H. Liao, USA, and P. Choe, China</p>
8:00-10:00 PLAZA ROOM B	<p>Applicability of situation awareness and workload metrics for use in assessing nuclear power plant designs S. Guznov, L. Reinerman-Jones and J. Marble, USA</p> <p>Promoting temporal awareness for dynamic decision making in command and control S. Tremblay, F. Vachon, R. Rousseau and R. Breton, Canada</p> <p>A neuroergonomic evaluation of cognitive workload transitions in a supervisory control task using Transcranial Doppler Sonography K. Satterfield, T. Shaw, R. Ramirez and E. Kemp, USA</p> <p>Mirror neuron based alerts for control flight into terrain avoidance M. Causse, J. Phan, T. Ségonzac and F. Dehais, France</p> <p>A study on document style of medical safety incident report for latent factors extraction and risk-assessment-based decision making K. Takeyama, T. Akasaka and Y. Okada, Japan</p> <p>An ERP study on instrument form cognition. doc Y. Jiang, J. Hong, X. Li and W. Wang, China</p>
EMU&SP	<p>SESSION 78: Modeling and Special Populations CHAIR: V. Rice, USA</p>
8:00-10:00 CONTINENTAL 5	<p>Measuring and managing the consistency and effectiveness of checklists used to assess jobs at risk for musculoskeletal disorders T. Albin, USA</p> <p>Drillis and Contini revisited J. Peacock, M. Aravindakshan, T. Xin, C. Ping, L. Ping, F. Ding, , T. Chuan, Singapore, M. Hartono, Indonesia, and N. Stella, Singapore</p> <p>Using modeling and simulation to enhance crewmember survivability L. Garrett and R. Kozycki, USA</p> <p>Academics, life experiences, and symptoms of ADHD and ODD V. Rice, L. Banderet, D. Merullo and G. Boykin, USA</p> <p>Perceived issues of pregnant workers and proposed ergonomic solutions P. Alfred, V. Rice and L. Mendez, USA</p> <p>FV-TRIAGE automated tool for military and civilian personnel: Keeping family violence above the radar L. Fatkin, A. Bah, J. Arthur and C. Monighan, USA</p> <p>Energy expenditure & physiological strain in special forces candidates J. Castellani and L. Margolis, USA</p>

S&O	<p>SESSION 79: Ergonomics and Material Environment Design CHAIR: J. Charytonowicz, Poland</p>
8:00-10:00 UNION SQUARE 23&24	<p>The labour market and material environment design K. Lis, Poland</p> <p>Work in organization: Key factors of the reistic approach J. Rymaniak, Poland</p> <p>Rated duty impact on psychomotoric fitness of electric power systems administrators E. Kowal and G. Dudarski, Poland</p> <p>Application of advanced reverse engineering and motion capture techniques in modeling of human lower limbs M. Rychlik and A. Stanowski, Poland</p> <p>Perceptual mechanisms of transparency recognition as measures of increased human spatial orientation M. Brzezicki, Poland</p> <p>The issue of the range of vision in design of grandstands at the contemporary stadiums Z. Pelczarski, Poland</p> <p>Large scale architecture. Design human factors and ergonomics aspects based on state-of-the-art structures N. Juzwa and K. Ujma-Wasowicz, Poland</p>
<p>10:00 - 10:30 Refreshments will be provided in the Golden Gate Ballroom</p>	
CCDM	<p>SESSION 80: Civilization Change: Ideological, Economic, and Historical Change CHAIR: M. Hail, USA</p>
10:30-12:30 CONTINENTAL 1	<p>How the Obama Administration misconstrued the Arab Spring and repeated the errors of the Bush Doctrine J. Pidluzny, USA</p> <p>Helsinki Accords and the clash of civilizations A. Hindman, USA</p> <p>The crisis of the West, the challenge of technology, and the reaffirmation of political philosophy M. Bessette, USA</p> <p>American legal education and the Supreme Court in the 1920s R. Williams, USA</p> <p>The philosophical foundations of the crisis of Western Civilization M. Hail, USA</p> <p>Forgetting functions for collective memory D. Meyer and A. DeCino, USA</p> <p>Turkish population growth, emigration and security considerations L. Cave, USA</p>
CCDM	<p>SESSION 81: Commercial Research and Applications of Social-Cultural Science CHAIR: J. Boiney, USA</p>
10:30-12:30 CONTINENTAL 2	<p>Military application of non-defense social science research methods T. Stump, USA</p> <p>Measuring and identifying culture M. Young, USA</p> <p>Improve your global vision with social media analytics K. Sanchack, USA</p> <p>Exploring strategic communication and influence in foreign media B. Bennett, USA</p> <p>State of the practice and art in sentiment analysis S. Shellman, M. Covington and M. Zangrilli, USA</p> <p>Optimizing asset allocation through statistical modeling of human behavior C. McCue and W. Hildebrandt, USA</p> <p>Using social analytics to discover emerging issues K. McCarty and A. Sardella, USA</p>

HSSE	<p>SESSION 82: Service Dominant Logic & B to B CHAIR: K.-S. Paloheimo, Finland</p>
CONTINENTAL 3 10:30-12:30	<p>Getting beyond 1911 management as science: Challenges from services, liquid enterprises and internationalization D. Hawk, USA</p> <p>The role of positive emotions in the creation of positively deviant Business to Business services: Examination of employee and customer perceptions M. Fischer, Finland</p> <p>Leadership in service dominant logic: Perspectives and development J. Ylitalo, Finland</p> <p>The role of intangible assets in value creation - Within knowledge intensive services C. Hazley, Finland</p> <p>Using a business ecosystem network to expose and predict budgetary risk caused by various human factors N. Boyette and H. Fang, USA</p>
HSSE	<p>SESSION 83: Designing Service Systems for the Customer Experience CHAIR: L. Patricio, Portugal</p>
CONTINENTAL 4 10:30-12:30	<p>A performing arts perspective on designing services for the customer experience R. Fisk, USA</p> <p>Designing services to transform the customer experience M. Bitner, USA</p> <p>Service design through an anthropological lens M. Cefkin, USA</p> <p>Service design and behavioral change B. Mager, Germany</p> <p>Towards an interdisciplinary approach to the design of service systems for the customer experience L. Patricio, Portugal</p>
R&R	<p>SESSION 84: Automotive Speech Interfaces: Concepts and Strategies for a Successful User Experience CO-CHAIRS: O. Tsimhoni and U. Winter, Israel</p>
CONTINENTAL 5 10:30-12:30	<p>Automotive speech interfaces: Concepts for a better user experience O. Tsimhoni and U. Winter, Israel, and T. Grost, USA</p> <p>Using communication research for cultural variability in HMI design D. Carbaugh, E. Molina-Markham and B. van Over, USA, and U. Winter, Israel</p> <p>User adaptation in automotive environments M. Sun and A. Rudnicky, USA, and U. Winter, Israel</p> <p>Language models for text messaging based on driving workload R. Hecht, E. Tzirkel and O. Tsimhoni, Israel</p> <p>Turn-by-turn navigation guidance for complex interactions P. Wang, China, and O. Tsimhoni, Israel</p> <p>Dictating and editing short texts while driving J. Curin, J. Kleindienst, M. Labsky and T. Macek, Czech Republic, H. Young, A. Thyme-Gobbel, L. König, H. Quast and C. Couvreur, USA</p> <p>Statistical methods for building robust spoken dialogue systems in an automobile P. Tsiakoulis, M. Gasic, M. Henderson, J. Planells-Lerma, J. Prombonas, B. Thomson, K. Yu and S. Young, UK, and E. Tzirkel, Israel</p>

R&R	<p>SESSION 85: Human Factors Issues in Ecodriving CHAIR: R. Brouwer, The Netherlands</p>
CONTINENTAL 6 10:30-12:30	<p>Can green behaviours predict ecodriving? S. Jamson and M. Symmons, UK</p> <p>ecoDriver: Supporting the driver in 'green' driving R. Brouwer and T. Hof, The Netherlands, and O. Carsten, UK</p> <p>Impact of feedback torque level on perceived comfort and control in steer-by-wire systems S. Anand, J. Terken, J. Hogema and J. -B. Martens, The Netherlands</p> <p>Modular dashboard for flexible in car HMI testing F. Sulzmann, V. Melcher, F. Diederichs and R. Sahar, Germany</p> <p>Innovative environmental design in means and systems of transport with particular emphasis on the human factor I. Grabarek and W. Choromanski, Poland</p> <p>A review of HMI issues experienced by early adopters of low carbon vehicles A. Woodcock, T. Wellings and J. Binnersley, UK</p>
APD	<p>SESSION 86: Aesthetics of Universal Design and Optimization CO-CHAIRS: T. Park and S. Moon, Singapore</p>
CONTINENTAL 7 10:30-12:30	<p>Development strategies for service applications based on user experience with their aesthetic properties S. Lee and R. Koubek, USA</p> <p>Pleasurable design of haptic icons W. Hwang and J. Hwang, Korea, and T. Park, Singapore</p> <p>Universal product family design for human variability and aesthetics J. Hwang, South Korea, S. Moon and Y. Ho, Singapore, and C. Noh, South Korea</p> <p>Understanding differences in enjoyment: Playing games with human or AI teammates K. McGee, T. Merritt and C. Ong, Singapore</p> <p>The effective measurements to the relationship between consumer emotion and perfume character Z. Chen, R. Yu, P. Rau and M. Yu, China</p> <p>PC2RC Controller using 3D joystick for Efficient Remote Control of Mini-Unmanned Aerial Vehicles (MAVs) H. Son, T. Park and Y. You, Singapore</p>
AVIATION	<p>SESSION 87: Conflict Detection and Resolution CO-CHAIRS: J. Mercer and M. Kupfer, USA</p>
CONTINENTAL 8 10:30-12:30	<p>Examining pilot compliance to collision avoidance advisories A. Pritchett, E. Fleming, J. Zoetrum, W. Cleveland, V. Popescu and D. Thakkar, USA</p> <p>Assessing air traffic control performance in loss of separation incidents: A global review M. -D. Dupuy and A. Majumdar, UK</p> <p>CRM model to estimate probability of potential collision for aircraft encounters in high density scenarios using stored data tracks R. Arnaldo, F. Sáez, E. Garcia and Y. Portillo, Spain</p> <p>Initial evaluation of a conflict detection tool in the terminal area S. Verma, H. Tang, T. Kozon, D. Ballinger and A. Farrahi, USA</p>

ADHM	<p>SESSION 88: Advances of DHM for User Centred Design CO-CHAIRS: D. Högberg, Sweden, R. Marshall and S. Summerskill, UK</p>
10:30-12:30 CONTINENTAL 9	<p>Assessment of manikin motions in IMMA E. Bertilsson, A. Keyvani, D. Högberg, and L. Hanson, Sweden</p> <p>The use of DHM based volumetric view assessments in the evaluation of car A-Pillar obscuration R. Marshall, S. Summerskill and S. Cook, UK</p> <p>The use of volumetric projection in digital human modelling software for the identification of Category N3 vehicle blind spots S. Summerskill, R. Marshall and S. Cook, UK</p> <p>Dynamic wrist exposure analysis of a digital human model I. -M. Rhen, D. Högberg, L. Hanson and E. Bertilsson, Sweden</p> <p>Using ergonomic criteria to adaptively define test manikins for design problems P. Mårdberg, J. Carlson, R. Bohlin, L. Hanson and D. Högberg, Sweden</p> <p>Automatic fitting of a 3D character to a computer manikin S. Gustafsson, S. Tafuri, N. Delfs, R. Bohlin and J. Carlson, Sweden</p> <p>Comparison of algorithms for automatic creation of virtual manikin motions N. Delfs, R. Bohlin, P. Mårdberg, S. Gustafsson and J. Carlson, Sweden</p>
HC	<p>SESSION 89: Patient Safety CHAIR: M. Lehto, USA</p>
10:30-12:30 FRANCISCAN B	<p>Reducing interruptions, distractions and errors in healthcare G. Sculli and A. Fore, USA</p> <p>Identifying and modeling perceptions of risk factors in hand hygiene during healthcare operations K. Taylor and D. Kaber, USA</p> <p>Workflow characterization in busy urban primary care and emergency room settings: Implications for clinical information systems design A. Zafar and M. Lehto, USA</p> <p>Testing the systems and error analysis bundle for healthcare using a Prescription Administration Process in a Cardiothoracic Unit case-study L. Chadwick, E. Fallon and W. van der Putten, Ireland</p> <p>A human-centered design for supporting long term care management A. Chandra and Y. Gong, USA</p>
MFG	<p>SESSION 90: Advanced Manufacturing Systems CO-CHAIRS: D. Zuehlke, Germany, and G. Lawson, UK</p>
10:30-12:30 FRANCISCAN D	<p>Industrial robots – The new friends of an aging workforce? D. Bortot, B. Hawe, S. Schmidt and K. Bengler, Germany</p> <p>Reducing musculoskeletal injuries and improving productivity through management and employee involvement: A case study of ergonomics interventions in manufacturing company J. Kapellusch, A. Garg, S. Boda, P. Bhoyar and G. Reuter, USA</p> <p>User-centered design of a game-based, virtual training system D. Goreky, Germany, G. Lawson, UK, K. Mura, Germany, S. Hermawati, UK, and M. Overby, Denmark</p> <p>Human-machine-systems for future smart factories D. Zuehlke, Germany</p> <p>Assembly motion planning using controlled collisions C. Brecher, D. Behnen, T. Breitbach and W. Herfs, Germany</p>

PE&S	<p>SESSION 91: Applied Upper Extremity Biomechanics: Design and Practice CO-CHAIRS: I. Noy and J. Lin, USA</p>
10:30-12:30 PLAZA ROOM A	<p>Upper limb strength expression during work simulated tasks in a cohort of black African males S. Davies and T. Goba, South Africa</p> <p>Hand/handle interface affects bi-manual pushing strength J. -H. Lin, R. McGorry and C. -C. Chang, USA</p> <p>Ergonomic evaluation of standard and alternative pallet jack handles C. Harris and J. -H. Lin, USA</p> <p>Transformation between different local coordinate systems of scapula X. Xu, J.-H. Lin, K. Li and V. Tan, USA</p> <p>Shoulder muscle loading during repetitive reaching task among younger and older adults J. Qin, J.-H. Lin and X. Xu, USA</p> <p>An assessment of manual material handling and postural stress among the warehouse workers H. Bhatt and P. Sharma, India</p>
EMU&SP	<p>SESSION 92: Usability Issues in Consumer Interfaces and Services CCHAIR: A.-C. Chen, Taiwan</p>
10:30-12:30 PLAZA ROOM B	<p>Investigating the interface usability of Bluetooth earphone controls A. -C. Chen, Y.-H. Su and C. -C. Chen, Taiwan</p> <p>An analysis framework of user oriented systems for call center services in telecommunication A. -C. Chen and H. -W. Huang, Taiwan</p> <p>A study on the interaction styles of an augmented reality game for active learning with a folk festival book C. -W. Chiang and L. -C. Chen, Taiwan</p> <p>A preliminary study on applying UD principles for signage assessment in hospital environment C. -M. Yang, C.-H. Kao and C. -H. Lin, Taiwan</p> <p>Investigating the primary factors of post-sale service to enhance service quality for mobile communication devices P. -Y. Chang, Taiwan</p> <p>Applying user-centered CBR technique for characters design in MMORPGs C. -H. Kao, C.-M. Yang and M. -C. Chuang, Taiwan</p> <p>An experimental study to assess computer keyboard design C. -M. Yang, C.-H. Kao, T. H. Liu, T. Lin and H. -C. Pei, Taiwan</p> <p>Integrating UD principles and TRIZ to re-design computer keyboard C. -M. Yang, C.-H. Kao, T.-H. Liu, H.-C. Pei and T. Lin, Taiwan</p>
EMU&SP	<p>SESSION 93: HCI - Industry Experiences CO-CHAIRS: A. Moallem and Y. Guo, USA</p>
10:30-12:30 FRANCISCAN A	<p>Why should home networking be complicated? A. Moallem, USA</p> <p>Biometrics measurements and data processing using CAPTIV software B. Kapitaniak and H. Arabi, France</p> <p>Design of a touch-based user interface for naval command and control and comparison with a current onboard system in a scenario-based usability test J. Schwarz and O. Witt, Germany</p> <p>"ERGOMASTER" - The software solution to ergonomic design of UI J. Bessonova, A. Oboznov and A. Bakanov, Russia</p> <p>Evaluating WantEat: A social network of people and objects A. Marcengo, A. Rapp, L. Console and R. Simeoni, Italy</p> <p>Usability of automotive integrated switch system using face direction - Comparison of usability between integrated switch system using face directions and traditional touch-panel switch system A. Murata, M. Moriwaka, T. Endoh, T. Hayami, S. Ueda and A. Takahashi, Japan</p> <p>SUS vs. MOS Y. Guo, H. Sales, R. Doherty, D. Waring and P. Corriveau, USA</p>

S&O	<p>SESSION 94: Working Times in the Context of Social and Organizational Ergonomics CO-CHAIRS: G. Zülch and P. Stock, Germany</p>
FRANCISCAN C 10:30-12:30	<p>Influence of the social role of an employee on working time configuration G. Zülch, D. Schmidt and P. Stock, Germany</p> <p>Working time configuration in a call center using a simulation approach P. Stock, M. Leupold and G. Zülch, Germany</p> <p>Social and organizational ergonomics of temporary agency workers in industrial firms M. Bornewasser, Germany</p> <p>Agent-based planning and simulation-based assessment approach to improve the work-life balance of hospital staff T. Gamber and G. Zülch, Germany</p> <p>Work-related stress and work ability S. Guidi and S. Bagnara, Italy</p>
CCDM	<p>SESSION 95: Interfacing, Verifying, and Validating Hybrid Multi-Modal Systems CHAIR: G. Klein, USA</p>
CONTINENTAL 1 13:30-15:30	<p>Interfacing and validating models of the US Army TRAC tactical war game D. Duong and C. Bladon, USA</p> <p>Multi-modeling and socio-cultural complexity: Reuse and validation K. Carley, G. Morgan, M. Lanham and J. Pfeffer, USA</p> <p>Operational implementation and validation of hybrid multiple-model systems E. Waltz, USA</p> <p>Uncertainty propagation and validation for multi-models P. Whitney, USA</p> <p>A V&V approach for complex models: A use case example J. Salerno, D. Leedom, J. Wedgewood, B. Schlicher and J. Smith, USA</p> <p>Validation and verification for multi-models in a fast-turn, decision-support context E. Beeker and M. Koehler, USA</p> <p>Multi-modeling and meta-modeling of human organizations A. Levis, A. Zaidi and M. Rafi, USA</p>
CCDM	<p>SESSION 96: Extracting Understanding from Diverse Data Sources CHAIR: D. Day, USA</p>
CONTINENTAL 2 13:30-15:30	<p>HSCB-ISAAC: Knowledge management and analytical capabilities for overseas civil-military operations T. Clark, USA</p> <p>Elevating insight through geospatial fusion of all-source data K. Campbell, K. McCue and W. Hildebrandt, USA</p> <p>Adding GeoNames to BEN: Event extraction in real-time and space K. Strous, USA</p> <p>Multi-channel sentiment analysis D. Day, J. Boiney, M. Ubaldino and T. Brown, USA</p> <p>Mining big data: Understanding human cultures through many imperfect lens Y. R. Lin and D. Lazer, USA</p> <p>Effective use of qualitative data J. Bornmann, USA</p> <p>Cognitive task analysis as the basis for data integration: Promoting cross cultural situation awareness L. Strater and M. Endsley, USA</p>

<p>HSSE</p>	<p>SESSION 97: Frameworks for Service Systems CHAIR: K. Lyons, Canada</p>
<p>CONTINENTAL 3 13:30-15:30</p>	<p>Service systems design: an intentional agent perspective L. Lessard and E. Yu, Canada Characterizing organizations as service systems K. Lyons and S. Tracy, Canada Citizen-centered municipal service delivery and social media P. Messinger, Canada Service systems and the social enterprise S. Tracy and K. Lyons, Canada Describing service systems B. Glushko, USA Is that affordance essential? Pathology in service systems and redesigns for sustainability D. Ing, Canada Service systems as cognitive systems P. Maglio, USA</p>
<p>HSSE</p>	<p>SESSION 98: User Participation and Experiences in the Design Loop CHAIR: A. Seffah, France</p>
<p>CONTINENTAL 4 13:30-15:30</p>	<p>Three approaches to co-creating services with users E. Kaasinen, K. Koskela-Huotari, V. Ikonen, M. Niemelä and P. Näkki, Finland Persona + patterns = An environment for service consumer engagement in the service design loop H. Javehery, Canada, and A. Seffah, France Reinventing user-centered design in services: Transforming HCI to value co-creation experiences C. Pinhanez, Brazil The tension between user-centered design and E-government services N. Kotamraju, Denmark Mutual full gaze awareness in remote support of IPS² Bo Hoege and M. Roetting, Germany Interactive design method based on structured-scenario K. Kusano, M. Nakatani and T. Ohno, Japan</p>
<p>R&R</p>	<p>SESSION 99: Vulnerable Road Users CHAIR: R. Risser, Austria</p>
<p>CONTINENTAL 5 13:30-15:30</p>	<p>To beep or not to beep: Implications of the low sound emission of electric vehicles P. Cocron, I. Neumann, T. Franke, F. Buehler and J. Krems, Germany Needs of support systems for elderly drivers T. Broberg, Sweden A psycho-ergonomics approach of adaptive behavior of vulnerable road users C. Marin-Lamellet and J. -C. Marquié, France How gender influences user behaviors? The bringing-in of the developmental social psychology M. -A. Granié, A. Abou-Dumontier and L. Guého, France Out-of-home activities and well-being among urban residing old persons with mobility impediments A. Siren, Denmark Conflicts due to the use of navigation devices: The pedestrian and the car driver perspective D. Bell and J. Haupt, Austria, and N. van Nes, The Netherlands Human behavior, infrastructure and transport planning H. Frey and C. Chaloupka-Risser, Austria</p>

R&R	<p>SESSION 100: Safety and Accidents CHAIR: P. Salmon, Australia</p>
13:30-15:30 CONTINENTAL 6	<p>The effect of low cost engineering measures and enforcement on driver behaviour and safety on single carriageway interurban trunk roads J. Cardoso, Portugal</p> <p>The effect of text messaging on young drivers' simulated driving performance Q. Zhang and Z. Jiang, China</p> <p>The influence of speed regulating systems on speed compliance in a sample of Portuguese drivers: A naturalistic driving study A. Ferreira, G. Piccinini, S. Rôla and A. Simões, Portugal</p> <p>Development of a coaching program for young drivers in their first period of solo driving E. Roelofs, J. Vissers, M. van Onna and G. Kern, The Netherlands</p>
APD	<p>SESSION 101: Novel Devices for Human Interaction CHAIR: W. Hwang, Korea</p>
13:30-15:30 CONTINENTAL 7	<p>Conscious and unconscious music from the brain: Design and development of a tool translating brainwaves into music using a BCI device R. Folgieri and M. Zichella, Italy</p> <p>Evaluation of music impact on consumers' choices in a Marketing-oriented synthetic environment, using a BCI device R. Folgieri and L. Iacovone, Italy</p> <p>Digital museum planner system for both museum administrators and visitors S. Ganchev, K. Liu and L. Zhang, USA</p> <p>Affective interactions: Developing a framework to enable meaningful haptic interactions over geographic distance M. Balestra and C. Cao, USA</p> <p>For the emotional quality of urban territories – Glazed tiles claddings design C. Lobo and F. Moreira da Silva, Portugal</p> <p>A study on the perception of haptics in in-cockpit environment K. Lee, S. Ko, D. Kim and Y. Ji, Korea</p>
APD	<p>SESSION 102: Kawaii as an Aesthetic and Emotional Value for Product and System Design CHAIR: M. Ohkura, Japan</p>
13:30-15:30 CONTINENTAL 8	<p>Comparison of evaluation of kawaii ribbons between gender and generation M. Ohkura, T. Komatsu, S. Tivatansakul, Japan, S. Settapat and S. Charoenpit, Thailand</p> <p>Shaboned display: An interactive substantial display using expansion and explosion of soap bubbles S. Hirayama and Y. Kakehi, Japan</p> <p>Study on Kawaii in motion - Classifying Kawaii motion using Roomba S. Sugano, H. Morita and K. Tomiyama, Japan</p> <p>3D character creation system based on sensibility rule extraction T. Ogura and M. Hagiwara, Japan</p> <p>Analysis of search results of kawaii search K. Hashiguchi and K. Ogawa, Japan</p> <p>A Japanese-Korean-Chinese ontology for cutism (kawaii) and its application to literary studies A. Tokosumi, A. Narita and F. Teng, Japan</p> <p>Assessment of material perception of black lacquer T. Komatsu, M. Ohkura, T. Ishikawa and M. Ayama, Japan</p>

AVIATION	<p>SESSION 103: Test and Assessment of NextGen Technologies and Procedures CHAIR: E. Rantanen, USA</p>
CONTINENTAL 9: 13:30-15:30	<p>Expertise, cognition, and CRM issues in NextGen automation use K. Mosier, U. Fischer and J. Orasanu, USA</p> <p>Extending validated human performance models to evaluate NextGen concepts B. Gore, B. Hooey, E. Mahlstedt and D. Foyle, USA</p> <p>Data-driven evaluation of a flight re-route air traffic management decision-support tool L. Hall, N. Underhill, Y. Rodriguez and R. DeLaura, USA</p> <p>Air traffic control voice data analysis to validate NexGen procedures J. Histon, Canada, E. Rantanen and C. Alm, USA</p> <p>Human factors validation of NextGen technologies and procedures E. Rantanen, USA</p>
ADHM	<p>SESSION 104: Human Modeling and Validation: I CO-CHAIRS: J. Pellettiere and T. Marler, USA</p>
FRANCISCAN A 13:30-15:30	<p>Occupant calibration and validation methods J. Pellettiere and D. Moorcroft, USA</p> <p>Model for predicting the performance of planetary suit hip bearing designs M. Cowley, S. Margerum, L. Harvill and S. Rajulu, USA</p> <p>Integration of strength models with optimization-based posture prediction T. Marler, L. Frey-Law, A. Mathai, K. Spurrier, K. Avin and E. Cole, USA</p> <p>Functional analysis of truck pedal operating motions M. Reed, USA</p> <p>Fingertips deformation under static forces: Analysis and experiments E. Peña-Pitarch, N. Tico-Falguera, A. Vinyes-Casasayas and D. Martinez-Carmona, Spain</p>
HC	<p>SESSION 105: Medical User Centred Design CHAIR: D. Buechel, Germany</p>
FRANCISCAN B 13:30-15:30	<p>Implementation of usability engineering process in a business concern A. Schultz, M. Aust, D. Buechel, N. Neumann and H. Hoffmann, Germany</p> <p>Systematic application of usability engineering in medical device development D. Büchel, S. Hacker, T. Paschenda, A. Raeker, S. Stoll and J. Schaper, Germany</p> <p>Systematical improvement of an anesthesia workstation considering physical and mental workload S. Pfeffer and T. Maier, Germany</p> <p>User-centered requirements for health information technology: Case study in cardiac surgery R. Santos and J. Fragata, Portugal</p> <p>Risk analysis for the integrated operating room with respect to the human-machine interaction J. Benzko, A. Janss and K. Radermacher, Germany</p> <p>Design, usability and staff training – What is more important? U. Matern, Germany</p>

EMU&SP	<p>SESSION 106: Ergonomics in the Design of Built Environments and the Design for Elderly People CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
FRANCISCAN C 13:30-15:30	<p>Assessment of parameters of accessibility based on the intuitive use R. Bento, C. Silva, E. Silva and M. Okimoto, Brazil</p> <p>Approaches to the intuitive use in emergency situations M. Okimoto, C. Silva and C. Miranda, Brazil</p> <p>Ergonomics and the environment for the elderly M. Paiva, V. Villarouco, N. Ferrer and M. Oliveira, Brazil</p> <p>Glazed tiles surfaces as perceptual cues in space recognition and urban design C. Lobo and F. Moreira da Silva, Portugal</p> <p>Color in urban furniture: A methodology for urban mapping and wayshowing M. Gamito and F. Moreira da Silva, Portugal</p> <p>An ergonomic look at the open plan office A. Costa and V. Villarouco, Brazil</p> <p>A review of functional evaluation methods used to include people with disabilities at work L. Martins, B. Barkokébas, Jr. and B. Guimarães, Brazil</p>
MFG	<p>SESSION 107: Ergonomics in Manufacturing: I CO-CHAIRS: Y. Takai, Japan, and T. Jeske, Germany</p>
FRANCISCAN D 13:30-15:30	<p>A new method for forecasting the learning time of sensorimotor tasks T. Jeske and C. Schlick, Germany</p> <p>A biomechanical evaluation of dynamic and asymmetric lifting using the AnyBody™ commercial software: A pilot study X. Jiang and A. Sengupta, USA</p> <p>Artificial intelligence in optimizing environmental factors towards human performance A. Ismail, B. Deros and Y. Yusoff, Malaysia</p> <p>Ergonomic analysis to support surgery-averse individuals that live with chronic pain D. Feathers, USA</p> <p>Analysis of operation and eye movement concerning master of wire net A. Goto, Y. Takai, T. Ota, H. Hamada and K. -I. Tsuji, Japan</p> <p>The effect of perceived enjoyment for predicting video call use intention J. Zhang and R. Zhou, China</p>
PE&S	<p>SESSION 108: Ergonomics in Space Operation CHAIR: J. Niu, China</p>
PLAZA ROOM A 13:30-15:30	<p>Investigations on eye movement activities in the manually controlled rendezvous and docking of space vehicles Y. Tian, S. Chen, C. Wang, Q. Yan and Z. Wang, China</p> <p>Research on evaluation and optimization design method of product sensory quality F. Guo, Y. Sun, M. Zhu, L. Zhao and N. Xu, China</p> <p>Automatic landmark identification from three dimensional (3D) human body data using geometric characteristics J. Niu, Y. Wu, F. Hou, A. Feng and X. Chen, China</p> <p>Head and facial anthropometry of young Chinese male aged 18-35 years old X. Zheng, S. Ding, Q. Zhou, T. Liu, X. Yuan and L. Guojie, China</p> <p>Space operation system based on human-in-the-loop S. Guo, D. Li and C. Fan, China</p> <p>Geometric dimension model of virtual human for ergonomic analysis of man-machine system Z. Qianxiang, D. Songtao, L. Zhongqi and Z. Xiaohui, China</p> <p>Influence of interface compatibility on the spacecraft tracing performance in vibration environment C. Wang, T. Jiang and P. Teng, China</p>

C&N	<p>SESSION 109: Human Cognition and Design of Complex Systems CO-CHAIRS: L. Zeng and Y. Guo, USA</p>
13:30-15:30 PLAZA ROOM B	<p>Data-driven analysis and modeling of Emergency Medical Service process L. Wang and B. Caldwell, USA</p> <p>Age and comprehension of written medical information on drug labels M. Chafac, USA, and A. Chan, Hong Kong</p> <p>Challenges in human reliability analysis (HRA): A Reflection on the Accident Sequence Evaluation Program (ASEP) HRA procedure H. Liao, A. Bone, K. Coyne and J. Forester, USA</p> <p>Transfer of learning across two earthmoving equipment simulators J. So, R. Proctor and P. Dunston, USA</p> <p>Overloading disks onto a mind: Quantity effects in the attribution of mental states to technological systems O. Parlangeli, S. Guidi and R. Farina, Italy</p> <p>Cognitive workload analysis and development of a stress index for life science processes M. Swangnetr, Thailand, B. Zhu and D. Kaber, USA. D. Gördes, K. Thurow, N. Stoll and R. Stoll, Germany</p> <p>Designing virtual reality systems for procedural task training N. Gavish, Israel</p>
EMU&SP	<p>SESSION 110: Special Populations CHAIR: V. Rice, USA</p>
13:30-15:30 UNION SQUARE 22	<p>(Less than) perfect aging S. Ng, J. Peacock and K. Tan, Singapore</p> <p>Cognitive performance and age P. Alfred and V. Rice, USA</p> <p>The impact of soldiers' age on balance G. Boykin, Sr., V. Rice and P. Alfred, USA</p> <p>Age differences in postural strategies for low forward reach M. Nasarwanji, V. Paquet and E. Steinfeld, USA</p> <p>Challenges for the nuclear workforce: Ageing and knowledge transfer C. Bazley, USA</p> <p>The Life Preservation Index: Risk assessment of suicidal behavior within the military community L. Fatkin, A. Bah, C. Wilson, C. Atkisson, E. Brent and D. Horton, USA</p>
S&O	<p>SESSION 111: Ergonomics in Building and Architecture CHAIR: J. Charytonowicz, Poland</p>
13:30-15:30 UNION SQUARE 23&24	<p>Desirable features of contemporary domestic kitchen J. Charytonowicz and D. Latala, Poland</p> <p>The application of optical illusions in interior design in order to improve the visual size and proportions of the rooms A. Jaglarz, Poland</p> <p>Emotional ergonomics in the network society W. Bonenberg, Poland</p> <p>Ergonomic shaping of learning places for school children P. Nowakowski, Poland</p> <p>Facades and multimedia screens in contemporary architecture - ergonomics of use A. Bonenberg, Poland</p> <p>Intercultural differences in the formation of space of the courtroom G. Hryniewicz-Lamber and M. Lamber, Poland</p> <p>Laboratory kitchen and "existenzminimum" dwellings J. Urbanik, Poland</p>

15:30 - 16:00 Refreshments will be provided in the Golden Gate Ballroom

CCDM	<p>SESSION 112: Countering Cross Cultural Radicalization and Violent Extremism CO-CHAIRS: G. Lailari and G. Zacharias, USA</p>
16:00-18:00 CONTINENTAL 1	<p>Mitigating cross cultural extremist organizations by legal asphyxiation: Case studies of white supremacist and Islamic terrorist organizations G. Lailari, USA</p> <p>Disengagement and de-radicalization from terrorism: Current and future directions for research J. Horgan, USA</p> <p>Modeling linkages between media and extremist tendencies J. Appleget and C. Christensen, USA</p> <p>Building trust in a counterinsurgency context D. Combs, USA, C. Garris, Saudi Arabia, S. Blincoc, USA, and S. Aldamer, Saudi Arabia</p> <p>Forecasting political violence; A preliminary investigation E. Berman, E. Kapstein and J. Felter, USA</p> <p>From particles to people: Social, cultural and behavioral dynamics in insurgency, terrorism and beyond N. Johnson, USA</p>
CCDM	<p>SESSION 113: ICEWS and SAA: Early Warnings CO-CHAIRS: B. Kettler and T. Solz, USA</p>
16:00-18:00 CONTINENTAL 2	<p>Lessons learned in instability modeling, forecasting and mitigation from the DARPA Integrated Crisis Early Warning System (ICEWS) Program B. Kettler and M. Hoffman, USA</p> <p>Geographical models of crises: Evidence from ICEWS M. Ward, N. Metternich, C. Carrington, C. Dorff, M. Gallop, F. Hollenbach, A. Schultz and S. Weschle, USA</p> <p>Improving ICEWS models: Forecasting SOUTHCOM events of interest using ensemble methods P. Bentley, S. Shellman and B. Levey, USA</p> <p>Human factors issues in military satellite operations and space situational awareness T. Solz, Jr., K. Bartlett and D. Nicholson, USA</p> <p>Discovering the support requirements for geospatial and socio-cultural intelligence analysis and synthesis M. Voshell, E. Roth, S. Mahoney, S. Nolet, M. Farry and B. Prue, USA</p> <p>Data for a worldwide ICEWS and ongoing research A. Shilliday and J. Lautenschlager, USA</p>
HSSE	<p>SESSION 114: Societal Frameworks for Service Systems CHAIR: J. Spohrer, USA</p>
16:00-18:00 CONTINENTAL 3	<p>Computational modeling of real-world services for a co-creative society T. Takenaka, H. Koshiba and Y. Motomura, Japan</p> <p>Service value network: The Insights from the psychological & evolutionary economics perspective P. -H. Hsieh and S. -T. Yuan, Taiwan</p> <p>Case study analysis of higher education and industry partnership service delivery D. Nielsen and A. White, UK</p> <p>Co-producing value through public transit information services A. Steinfeld, S. Rao, A. Tran, J. Zimmerman and A. Tomasic, USA</p> <p>Integrating a user interface design environment into SOA and service engineering D. Dunkle, USA</p> <p>B to B (business to business) product planning and platform making by the business user model T. Mizumoto and K. Yamazaki, Japan</p> <p>Transformative service research: Hope out of hopelessness L. Anderson, USA</p>

HSSE	<p>SESSION 115: Service Design for Technology-Based Service Systems for Underserved Populations CO-CHAIRS: Y. Rankin and M. Shute, USA</p>
<p>CONTINENTAL 4 16:00-18:00</p>	<p>Service ecosystems for afterschool care in low and high-risk urban communities M. Russell, USA</p> <p>Knowledge, attitudes, and HPV vaccine use among African American and Hispanic adolescent girls and parents P. Hull, E. Williams and M. Sanderson, USA</p> <p>Black female voices: Designing an HIV health information artifact F. Cobb Payton, J. Kiwanuka-Tondo and L. Kvasny, USA</p> <p>Supporting greater access to pre- and post-natal services for women in rural Kenya Y. Rankin and J. Thomas, USA</p> <p>Comparison of biomechanical and anthropometrical data of Nigeria Tertiary Institution students with some selected countries A. Musa, S. Ismaila, S. Adejuyigbe, O. Akinyemi and M. Abolarin, Nigeria</p>
R&R	<p>SESSION 116: Road User Safety and Behaviour CHAIR: H. Biggs, Australia</p>
<p>CONTINENTAL 5 16:00-18:00</p>	<p>Evaluation of the UK's national RIDE scheme C. Burgess, P. Broughton, F. Fylan and S. Stradling, UK</p> <p>Evaluating novice motorcyclists' hazard perception skills at junctions using naturalistic riding data M. Ibrahim, A. Rashid and M. Ariffin, Malaysia</p> <p>Effects of visual, cognitive and haptic tasks on driving performance indicators C. Ahlström, K. Kircher, A. Rydström, A. Näbo, S. Almgren and D. Ricknäs, Sweden</p> <p>The Lane Change Task's (LCT) measures and metrics: What do they tell us about driver's secondary task demand? A. Huemer and M. Vollrath, Germany</p> <p>The vision of roundabout by elderly drivers G. Fancello, C. Pinna and P. Fadda, Italy</p>
R&R	<p>SESSION 117: HMI Design and Evaluation CHAIR: N. Stanton, UK</p>
<p>CONTINENTAL 6 16:00-18:00</p>	<p>Automotive HMI international standards C. Heinrich, Germany</p> <p>Evaluation of automotive HMI using eye-tracking - Revision of the EN ISO 15007-1 & ISO TS 15007-2 C. Lange, Germany</p> <p>The error prevention effects and mechanisms of pointing T. Masuda, M. Shigemori, A. Sato, G. Naito, G. Chiba and S. Haga, Japan</p> <p>On learning characteristics of automotive integrated switch system using face direction T. Hayami, A. Murata, Y. Urakami, M. Moriwaka, S. Ueda, and A. Takahashi, Japan</p> <p>Situation awareness in road design G. Walker and I. Chowdhury, UK</p> <p>Driving faster or slower? Biased judgments of fuel consumption at changing speeds G. Eriksson and O. Svenson, Sweden</p> <p>An assessment of cognitive workload using detection response tasks A. Conti, C. Dlugosch, R. Vilimek, A. Keinath and K. Bengler, Germany</p>

APD	SESSION 118: Affective Source of Traditional Skills CHAIR: K. Morimoto, Japan
16:00-18:00 CONTINENTAL 7	<p>Holistic analysis on affective source of Japanese traditional skills K. Morimoto and N. Kuwahara, Japan</p> <p>A study on the traditional charm of natural dyes: Focusing on pre-printing mordant K. -B. Kim, M.-J. Kim and G. -H. Choi, Korea</p> <p>Sensor system for skill evaluation of technicians N. Kuwahara, Z. Huang, A. Nagata, K. Morimoto, J. Ota, M. Kanai, J. Maeda, M. Nakamura, Y. Kitajima and K. Aida, Japan</p> <p>Representation and management of physical movements of technicians in graph-based data model T. Hochin, Y. Ohira, and H. Nomiya, Japan</p> <p>Multimodal motion learning system for traditional arts M. Araki, Japan</p> <p>Development of enhanced teaching materials for skill based learning by using a smart phone and Second Life A. Ando, T. Takaku, T. Saito, Y. Sumikawa and D. Davis, Japan</p> <p>Characteristics of technique or skill in traditional craft workers in Japan M. Kume and T. Yoshida, Japan</p>
APD	SESSION 119: Biosignals in Affect Analysis and Human-Computer Interface CHAIR: J. Kim, Germany
16:00-18:00 CONTINENTAL 8	<p>Parametric decision process for multimodal emotion recognition J. Kim, Germany</p> <p>Self-adaptive biometric signatures based emotion recognition system Y. Gu, S.-L. Tan and K. -J. Wong, Singapore</p> <p>Inferring prosody from facial cues for EMG-based synthesis of silent speech C. Johnner, M. Janke, M. Wand and T. Schultz, Germany</p> <p>The individual Adaption Module (iAM): A framework for individualization and calibration of companion technologies S. Walter, K. Limbrecht, S. Crawcour, V. Hrabal and H. Traue, Germany</p> <p>Multi-modal classifier-fusion for the classification of emotional states in WOZ scenarios M. Schels, M. Glodek, S. Meudt, M. Schmidt, D. Hrabal, R. Böck, S. Walter and F. Schwenker, Germany</p> <p>ATLAS - An annotation tool for HCI data utilizing machine learning methods S. Meudt, L. Bigalke and F. Schwenker, Germany</p>
AVIATION	SESSION 120: Modeling Human Performance in Aviation CHAIR: A. Sebok, USA
16:00-18:00 CONTINENTAL 9	<p>Evaluation of the big-airspace operational concept through a fast-time human performance computation model W. Wei, A. Jadhav, D. Cerić and K. Corker, USA</p> <p>Predicting pilot error in NextGen: Pilot performance modeling and validation efforts C. Wickens, A. Sebok, B. Gore and B. Hooey, USA</p> <p>Enhanced GOMS language (E-GOMSL) tool development for pilot behavior prediction and simulation G. -H. Gil, D. Kaber and S. -H. Kim, USA</p> <p>Towards a new methodology for designing dynamic distributed cooperative human-machine systems F. Tango, Italy, R. Heers and M. Baumann, Germany, C. Ronfle-Nadaud, France, J.-P. Osterloh and A. Luedtke, Germany</p> <p>MIDAS-FAST: A modeling and simulation based tool to predict operator performance in human-robotic automation systems A. Sebok, C. Wickens, A. Gacy, M. Brehon, S. Scott-Nash, N. Sarter, H. Li, B. Gore and B. Hooey, USA</p> <p>How well are human-related hazards captured by multi-agent dynamic risk modelling? S. Stroeve and H. Blom, The Netherlands</p>

APD	<p>SESSION 121: Affective Textiles and Clothing / Emotion and UX Design CO-CHAIRS: G. Cho and G. Kyung, Korea</p>
<p>FRANCISCAN A 16:00-18:00</p>	<p>Effect of color on visual texture of fabrics E. Yi and A. Lee, Korea</p> <p>Effectiveness of decision support with tactile visualization of naturally colored organic cotton (NaCOC) on online shopping M. Paik, M. Lee and G. Cho, Korea</p> <p>Psychological factor in color characteristics of casual wear C. Mizutani, K. Kurahayashi, M. Ukaji, T. Sato, S. Kitaguchi, G. Cho, S. Park and K. Kajiwara, Japan</p> <p>Sound characteristics and auditory sensation of combat uniform fabrics E. Jin, J. Lee, K. Lee and G. Cho, Korea</p> <p>Color, shape, and emotion Y. Kwak, Korea</p> <p>Emotion and BCI G. Kyung, Korea</p> <p>Toward emotional design: An exploratory study of iPhone 4 B. Saket and Y. Lim, Malaysia, and F. Behrang, Iran</p> <p>Invariant comparisons in affective design F. Camargo and B. Henson, UK</p>
HC	<p>SESSION 122: Patient Users of Medical Devices CHAIR: A. Lang, UK</p>
<p>FRANCISCAN B 16:00-18:00</p>	<p>A case study for the inclusion of adolescents in medical device design A. Lang, J. Martin, S. Sharples and J. Crowe, UK</p> <p>The development of a home monitoring device for sickle-cell disease J. Martin, UK</p> <p>The use of vignettes for conducting healthcare research D. Keane, A. Lang, M. Craven and S. Sharples, UK</p> <p>Putting a price on the increased usability of home use medical devices D. Morris, J. Martin, S. Sharples and J. Crowe, UK</p> <p>A comparative study of the effectiveness of leaflets and videos to educate low-literacy mothers to take care of their newborn babies Y. -L. Hung, UK/Taiwan, and S. Li, UK</p> <p>Improving the patient pathway in prosthetic rehabilitation G. Smalley and L. Clift, UK</p>
HC	<p>SESSION 123: Human Modeling in Healthcare CHAIR: R. Goonetilleke, Hong Kong</p>
<p>FRANCISCAN C 16:00-18:00</p>	<p>Digital graffiti: An augmented reality solution for environment marking J. Sausman, K. Sharma, A. Samoylov, S. Regli, P. Tremoulet and K. Stibler, USA</p> <p>Brain activation pattern during passive exercise with and without active exercise T. Hitomi and H. Hagiwara, Japan</p> <p>Spine compression characteristics associated with back pain symptoms of healthcare workers U. Reischl, USA, R. Goonetilleke, Hong Kong, and C. Swoboda, USA</p> <p>3D vision gaze with simultaneous measurements of accommodation and convergence among young and middle-aged subjects M. Miyao, A. Hasegawa, S. Hasegawa, T. Shiomi, H. Hori and H. Takada, Japan</p> <p>Assessment of a virtual reality-based haptic simulation for motor skill training M. Clamann, G.-H. Gil, D. Kaber, B. Zhu, M. Swangnetr, W. Jeon, Y. Zhang, X. Qin, W. Ma, L. Tupler and Y. -S. Lee, USA/Thailand</p> <p>A flexible intelligent algorithm for identification of optimum mix of demographic variables for integrated HSEE-ISO systems: The case of a gas transmission refinery M. Azadeh, Z. Jiryaei and B. Ashjari, Iran, and M. Saberi, Australia</p> <p>A study of universal design principles assessment M. Mustaquim, Sweden</p>

EMU&SP	<p>SESSION 124: Ergonomics in Design: Universal Design and the Design for Disabled People CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
FRANCISCAN D 16:00-18:00	<p>Ergonomics and inclusivity present in the visual communication design project F. Moreira da Silva, Portugal</p> <p>Universal design and accessibility: Discussion of service parameters M. Okimoto and C. Miranda, Brazil</p> <p>Visual monitoring system applied to team workout - An inclusive design monitoring system J. Gago da Silva and F. Moreira da Silva, Portugal</p> <p>Touristic information: The wayfinding and signage systems contribution for an inclusive design J. Neves and F. Moreira da Silva, Portugal</p> <p>Ergonomics versus inclusive design spaces – The case study of some Portuguese museums M. Delgado and F. Moreira da Silva, Portugal</p> <p>Ergonomics and human factors in the process of making Inclusive the Portuguese urban design heritage G. Dias and F. Moreira da Silva, Portugal</p>
MFG	<p>SESSION 125: Human Performance at Work: I CO-CHAIRS: G. Meyer, Germany</p>
PLAZA ROOM A 16:00-18:00	<p>Age-appropriate workplace engineering with the aid of cardboard engineering G. Meyer and P. Nyhuis, Germany</p> <p>Temporal strategy and performance during a short-cycle fatiguing repetitive task T. Bosch, S. Mathiassen, D. Hallman, M. de Looze, E. Lyskov, B. Visser and J. van Die n, The Netherlands</p> <p>Learning and forgetting in production-inventory systems with perishable seasonal items I. Abdul, Nigeria, and A. Murata, Japan</p> <p>Use of a monocular see-through head-mounted display while walking: A comparison of different user interfaces K. Tanuma, K. Kurimoto, M. Nomura and M. Nakanishi, Japan</p> <p>Workforce diversity and ergonomic challenges for sustainable manufacturing organizations A. Hussain, R. Marshall, S. Summerskill and K. Case, UK</p> <p>Influence at years of experience on operation concerning Kyoto style earthen wall A. Goto, H. Sato, A. Endo, C. Narita, Y. Takai and H. Hamada, Japan</p>
PE&S	<p>SESSION 126: Occupational Upper Extremity Injuries: From Observations to Solutions CHAIR: J. Lin, USA</p>
PLAZA ROOM B 16:00-18:00	<p>Ergonomic evaluation of scaffolding task interventions for power plant maintenance S. Gangakhedkar, D. Kaber, M. Diering and P. Reddy, USA</p> <p>In vivo investigation of the effects of force and posture on carpal tunnel pressure R. McGorry and N. Fallentin, USA, J. Andersen, Canada, P. Keir, and T. Hansen, Denmark, J.-H. Lin and G. Pransky, USA</p> <p>Ergonomic analysis of rice field plowing M. Swangnetr, P. Namkorn, C. Phimphasak, and K. Saenlee, Thailand, D. Kaber, USA, O. Buranruk and R. Puntumetakul, Thailand</p> <p>The analysis on force of door operation of applying universal design and the mechanism design of measurement device S. -B. Wang, K.-C. Lin, and C. -F. Wu, Taiwan</p> <p>Analysis and evaluation of muscular strain while working with large scale touchscreens J. Bützler, S. Vetter, M. Kremer, N. Jochems and C. Schlick, Germany</p> <p>Effect of posture, button size and spacing on touch characteristics for disabled and non-disabled participants. A. Chourasia, K. Chen, D. Wiegmann, and M. Sesto, USA</p> <p>Characterization of the hand bike sport gesture: A quantitative kinematic analysis and an ergonomic assessment of different vehicle adjustments M. Mazzola, F. Costa and G. Andreoni, Italy</p>

EMU&SP	<p>SESSION 127: Human Factors and Ergonomics Research in China CO-CHAIRS: W. Zhang and R. Yu, China</p>
<p>UNION SQUARE 22 16:00-18:00</p>	<p>Impact of background music on visual search performance R. Yu and Y. Cheng, China</p> <p>Using virtual environment to investigate way-finding behavior in fire emergency F. Meng and W. Zhang, China</p> <p>Thinking-action-information model-based research on knowledge work process P. Wen, Y. Zhang, S. Yi and S. Xiong, China</p> <p>The effect of online advertisements on internet users' experience X. Lin, F. Wu and R. Zhou, China</p> <p>An empirical approach for driver-driver interaction study: Attributes, influence factors and framework Y. Ba and W. Zhang, China</p> <p>A study on R&D team synergy-oriented knowledge integration model S. Yi, L. Su and P. Wen, China</p> <p>Factors that lead to an early decline of road traffic fatalities in China D. -Y. Wang and W. Zhang, China</p>
S&O	<p>SESSION 128: The Application and Coherence of Socio-Technical Principles and Techniques Across Different Domains of Practice CO-CHAIRS: C. Clegg and S. Coyle, UK</p>
<p>UNION SQUARE 23&24 16:00-18:00</p>	<p>Analyzing sociotechnical systems using the work system method S. Alter, USA</p> <p>Socio-technical thinking in engineering systems design within the aerospace industry L. Bolton, S. Coyle and C. Clegg, UK</p> <p>A process-driven socio-technical approach to engineering high-performance organisations D. Tuffley, Australia</p> <p>Socio-technical systems engineering G. Baxter and I. Sommerville, UK</p> <p>Modelling socio-technical systems P. Kroes and M. Franssen, The Netherlands</p>

EDITORIAL BOARD MEETING FOR THE JOURNAL HUMAN FACTORS AND ERGONOMICS
 IN MANUFACTURING AND SERVICE INDUSTRIES
 (FOR BOARD MEMBERS ONLY)
 TUESDAY, JULY 24, 12:00-14:00
 SUTTER A&B

CCDM	<p>SESSION 129: Factors that Influence Decision Making CO-CHAIRS: J. MacMillan and C. Samms, USA</p>
<p>CONTINENTAL 1 8:00-10:00</p>	<p>Displaying survey-based HSCB data for Decision-makers J. Rix and R. Fricker, USA</p> <p>Recognizing patterns of anomie that set the conditions for insurgency K. Guttieri, C. Blais, R. Shearer, S. Buttrey, J. Jackson and T. Deveans, USA, N. Eggenberger-Argote and A. Gschwend, Switzerland</p> <p>Linked visible behaviors: A system for exploring causal influence D. Jonker, USA</p> <p>Stable versus flexible dynamic decision making across cultures: A growth mixture modeling approach P. Fadil, C. Güss and J. Evans, USA, and S. Strohschneider, Germany</p> <p>Towards a taxonomy of socio-cultural factors that influence decision making C. Samms, A. Animashaun, S. Henry, S. Hill, D. Patton and D. Ungvasky, USA</p>
CCDM	<p>SESSION 130: Multifarious Modeling Discussions: I CO-CHAIRS: D. Foster and M. Paley, USA</p>
<p>CONTINENTAL 2 8:00-10:00</p>	<p>Resource constrained conterinsurgency C. Lofdahl, USA</p> <p>Creating the foundations for modeling irregular warfare D. Hartley and L. Lacy, USA</p> <p>Granular ABM simulations for operational use: Forecasting and what-if experiments with models of Kandahar and Kunduz B. Alcorn, M. Garces and I. Lustick, USA</p> <p>Culture that works S. Wertheim and M. Agar, USA</p> <p>Discovering entity characteristics and relationships through topic modeling I. Yohai, B. Riordan, A. Duchon and M. Paley, USA</p> <p>Social aimulations for border aecurity M. Latek, A. Crooks, S. Rizi and M. Fraser, USA</p> <p>Using survey data to assess agent-based HSCB modeling assumptions S. Jones and R. Fricker, USA</p>
HSSE	<p>SESSION 131: Role of Human Resources for Service Systems Governance CO-CHAIRS: C. Bassano, Italy, S. Barile, Italy, P. Piciocchi, Italy, and J. Spohrer, USA</p>
<p>CONTINENTAL 3 8:00-10:00</p>	<p>Smart governance to mediate human expectations and systems context interactions P. Piciocchi, Italy, J. Spohrer, USA, C. Bassano and A. Giuiusa, Italy</p> <p>Governing human relations to promote local service systems in processes of internationalization I. Orlando, A. Siniscalchi, P. Piciocchi, C. Bassano and A. Amendola, Italy</p> <p>A VSA communication model for service systems governance A. Siano, P. Piciocchi, M. Volpe, M. Confetto, A. Vollero and M. Siglioccolo, Italy</p> <p>The ARISTOTELE project for governing human capital intangible assets: A service science and viable systems perspective S. Salerno, P. Piciocchi, C. Bassano, P. Ritrovato and G. Santoro, Italy</p> <p>Human resources for governing business dynamics. The viable systems approach G. Golinelli and C. Bassano, Italy</p> <p>Modeling cooperative behaviors in innovation networks: An empirical analysis L. Prota, M. D'Esposito, D. De Stefano, G. Giordano and M. Vitale, Italy</p>

HSSE	<p>SESSION 132: Value Co-Creation CO-CHAIRS: Y. Sawatani and K. Kijima, Japan</p>
CONTINENTAL 4 8:00-10:00	<p>Value co-creation in tourism: Incorporating non-expert's design into expert's design activities T. Hara, S. Shimada, N. Yabe, Y. Kurata, K. Aoyama and Y. Hompo, Japan</p> <p>Value orchestration platform: Model and strategies K. Kijima, Japan, T. Rintamki and L. Mitronen, Finland</p> <p>Service space communication by voice tweets in nursing K. Torii, N. Uchihira, T. Chino, K. Iwata, T. Murakami and T. Tanaka, Japan</p> <p>Service modeling of compliments and complaints and its implications for value co-creation F. Villarroel Ordenes, M. Zaki, B. Theodoulidis and J. Burton, UK</p> <p>The human side of service ecosystems: Resource integration, institutions, meanings S. Vargo and R. Lusch, USA</p> <p>Managing human resources in information-intensive service providers: Models for decision support Y. Leung, USA</p> <p>Using value-in-use: A dynamic model for value-in-exchange and value-in-use H. Masuda and Y. Hara, Japan</p>
R&R	<p>SESSION 133: Warnings, Automation and Support CHAIR: R. Brouwer, The Netherlands</p>
CONTINENTAL 5 8:00-10:00	<p>Implementation and evaluation of lane departure warning and assistance systems E. Johansson, E. Karlsson, C. Larsson and L. Eriksson, Sweden</p> <p>LDW or rumble strips in unintentional lane departures: Driver acceptance and performance L. Eriksson, A. Bolling, T. Alm, A. Andersson, C. Ahlstrom, B. Blissing and G. Nilsson, Sweden</p> <p>Older drivers and their ordinary front seat passengers - A study on co-operation and driver support S. Mårdh, Sweden</p> <p>Speed vs. acceleration advice for advisory cooperative driving Q. Shahab and J. Terken, The Netherlands</p> <p>Evaluation of a contact analogue head-up display for highly automated driving D. Damböck, T. Weißgerber, M. Kienle and K. Bengler, Germany</p> <p>Identifying customer-oriented key aspects of perception with focus on longitudinal vehicle dynamics T. Mueller, C. Gold, A. Eichinger and K. Bengler, Germany</p>
R&R	<p>SESSION 134: Rail: I CHAIR: N. Stanton, UK</p>
CONTINENTAL 6 8:00-10:00	<p>From flight data monitoring to train data monitoring G. Walker and A. Strathie, UK</p> <p>Learning safety via experience-based software (SIM-ERROR) M. Shigemori, A. Sato and T. Masuda, Japan</p> <p>Professionally important qualities of train drivers and risk prevention of their erroneous work V. Samsonkin, O. Leshchenko, K. Pertseva and O. Burov, Ukraine</p> <p>The future of driver training: Integrating non technical skills A. Mills and K. Bonsall, UK</p> <p>Active planning requires appropriate graphical support tools: The case of scheduling trains at stations R. Charles, N. Balfe, J. Wilson, S. Sharples and T. Clarke, UK</p> <p>Fatigue and shiftwork for freight locomotive drivers and contract trackworkers A. Mills, S. Hesketh, K. Robertson, M. Spencer, A. McGuffog and B. Stone, UK</p>

APD	<p>SESSION 135: Product Design and Human Interface CHAIR: H. Kim, Korea</p>
CONTINENTAL 7 8:00-10:00	<p>The pertinence of CMF between mobile phone design and fashion design C. Qiu and H. Su, China</p> <p>Evaluating the usability of futuristic mobile phones in advance H. Kim and J. Lim, Korea</p> <p>Material sensibility comparison between glass and plastic used in mobile phone window panel J. Park, E. Kim, M. Kim, S. Kim, S. Ha and J. Lee, Korea</p> <p>Will they buy my product - Effect of UID and Brand M. Agarwal, A. Hedge and S. Ibrahim, USA</p> <p>Towards a more effective graphical password design for touch screen devices X. Suo and J. Kourik, USA</p> <p>Measuring contradictory semantics in product appearance W. -K. Hung and L. -L. Chen, Taiwan</p>
AVIATION	<p>SESSION 136: Simulation and Collaborative Systems CHAIR: A. Majumdar, UK</p>
CONTINENTAL 8 8:00-10:00	<p>Advanced collaborative flight guidance and control system S. Fritz, USA</p> <p>An initial inventory of pilot and air traffic controller performance data to support aviation simulations D. Bauer, P. Picciano, B. Beard, J. Holbrook and A. Ahumada, USA</p> <p>Developing a model of team cooperation in ATC: The Japanese experience K. Nonose, Japan, and A. Majumdar, UK</p> <p>Measuring controller team situation awareness in Enroute Control sector teams S. Corver and G. Grote, Switzerland, and K. Nonose, Japan</p> <p>StormGen: A proposed solution to weather simulation in NextGen research J. Kraut, T. Quinonez, S.-C. Wu, R. Koteskey, W. Johnson and V. Battiste, USA</p> <p>Innovative flight deck function allocation concepts for NextGen E. Letsu-Dake, W. Rogers, M. Dorneich and R. DeMers, USA</p>
ADHM	<p>SESSION 137: Human Modelling and Validation: II CO-CHAIRS: S. Rajulu and M. Reed, USA</p>
CONTINENTAL 9 8:00-10:00	<p>Multi-scale human modeling for injury prevention S. Sultan and T. Marler, USA</p> <p>Measuring body shape in supported seated postures M. Reed, USA</p> <p>Comparative ergonomic evaluation of spacesuit and space vehicle design S. England, E. Benson, M. Cowley, L. Harvill, C. Blackledge, E. Perez and S. Rajulu, USA</p> <p>Evaluation of the enlarging method with haptic using multi-touch interface K. Makabe, M. Sakurai and S. Yamamoto, Japan</p> <p>Reconstruction of skin surface models for individual subjects Y. Endo, N. Miyata, M. Tada, M. Kouchi and M. Mochimaru, Japan</p> <p>Effects of high heel shape on gait dynamics and comfort perception M. Kouchi and M. Mochimaru, Japan</p>

HC	<p>SESSION 138: Cognitive and Organizational Aspects in Healthcare CHAIR: A. Parush, Canada</p>
8:00-10:00 FRANCISCAN A	<p>Transactive memory systems and coordination in trauma care S. Duff, R. Blocker, D. Shoued, B. Gewertz, J. Blaha, E. Ley, K. Catchpole and D. Wiegmann, USA</p> <p>Capturing team mental models in complex healthcare environments C. Kramer, G. Dubé, A. Parush, E. Breton, G. Chiniara, M. Weiss and S. Tremblay, Canada</p> <p>Computer supported collaboration in health care J. Chakraborty, D. Ho and A. Norcio, USA</p> <p>Dispedia.de – A knowledge model of the service system on the rare disease R. Elze, M. Martin and K. -P. Fähnrich, Germany</p> <p>A review of sensory feedback and skill learning for rehabilitation B. Zhu and D. Kaber, USA</p> <p>Supporting occupational health and safety at the workplace of people with cognitive impairments with a speech driven interaction system B. Tannert, S. Zare, M. Lund and S. Wilske, Germany</p>
MFG	<p>SESSION 139: Human Performance at Work: II CHAIR: S. Trzcielinski, Poland</p>
8:00-10:00 FRANCISCAN C	<p>Human motion of weaving “Kana-ami” technique by biomechanical analysis K. Tsuji, Y. Takai, A. Goto, T. Ota and H. Hamada, Japan</p> <p>A game system for visually impaired utilizing Kinect N. Takahashi, T. Shogen, Y. Ikegami and M. Ohkura, Japan</p> <p>Comparison of painting technique of Urushi products between expert and non-expert A. Goto, A. Endo, C. Narita, Y. Takai, Y. Shimode and H. Hamada, Japan</p> <p>Subjective evaluation for beauty of texture on metal surface with chasing operation M. Nishina, G. Sasaki, Y. Takai, A. Goto and H. Hamada, Japan</p> <p>Effects of preference on crape structure of Saijo Japanese paper H. Hu, Y. Takai, N. Saiki, T. Tsujinaka, M. Ochi, A. Goto and H. Hamada, Japan</p> <p>Subjective evaluation of Kyo-Yuzen-dyed fabrics with different material in putting-past (Nori-oki) process T. Furukawa, A. Endo, C. Narita, T. Sasaki, Y. Takai, A. Goto and H. Hamada, Japan</p>
PE&S	<p>SESSION 140: Human Performance and Design CO-CHAIRS: E. Blankenheim and J. Ellison, USA</p>
8:00-10:00 FRANCISCAN D	<p>Materialization of the storage halls lighting I. Tureková, M. Rusko and J. Harangozó, Slovak Republic</p> <p>Six ways to manage laboratory ergonomics more efficiently J. Ellison, USA</p> <p>The importance of qualitative ergonomic data in assisting the medical community in differential diagnosis and effective treatment of musculoskeletal disorders E. Blankenheim, USA</p> <p>Effects of restrictive clothing on lumbar range of motion in adolescent workers W. Eungpinichpong, P. Areedomwong, N. Pramodhyakul, V. Butttagat, M. Swangnetr, D. Kaber, USA, and R. Puntumetakul, Thailand</p> <p>A comparative study of static balance before and after a simulated firefighting drill in career and volunteer Italian firefighters M. Pau, G. Cadoni, B. Leban and A. Loi, Italy</p> <p>An investigation into blood pressure of blue collar workers of casting and forging SMEs: A study in India L. Singh, India</p> <p>Performance of new raters using an observational physical ergonomic risk assessment instrument K. Streilein, E. Irwin and T. Armstrong, USA</p>

C&N	<p>SESSION 141: Cognitive Approaches to Design and Evaluation Enhancements CHAIR: A. Savoy, USA</p>
<p>PLAZA ROOM A 8:00-10:00</p>	<p>Augmented navigation: A cognitive approach E. Onal, A. Savoy and S. McDonald, USA</p> <p>The impact of active navigation combined with the viewpoint displacement effect on the transfer of spatial learning from virtual to real environments G. Wallet, H. Sauz�on, F. Larrue, P. Arvind-Pala and B. N'Kaoua, France</p> <p>Interaction effects of physical and mental tasks on auditory attentional resources A. Basahel, M. Young and M. Ajovalasit, UK</p> <p>Availability and future prospects of functional near-infrared spectroscopy (fNIRS) in usability evaluation H. Iwasaki and H. Hagiwara, Japan</p> <p>Development of a neuroergonomic application to evaluate arousal D. Gartenberg, R. McGarry, D. Pfannenstiel, D. Cisler, T. Shaw and R. Parasuraman, USA</p> <p>From biomedical research to end user BCI applications through improved usability of BCI++ v3.0 P. Perego, E. Gruppioni, F. Motta, G. Verni and G. Andreoni, Italy</p> <p>Understanding Implicit Human Intention based on Pupil Dilation S. -Y. Lee and S. -Y. Dong, Korea</p>
EMU&SP	<p>SESSION 142: Models of Interactions in the Man-Environment Systems CO-CHAIRS: J. Grobelny and R. Michalski, Poland</p>
<p>PLAZA ROOM B 8:00-10:00</p>	<p>An application of the objects' layout optimization models in an ergonomic analysis - A case study J. Koszela, J. Grobelny and R. Michalski, Poland</p> <p>The role of web layout design factors in modelling the internet user behavior R. Michalski, J. Grobelny and W. Lindert, Poland</p> <p>A cellular automata based model as a tool of the organizational culture change analysis A. Kowalska-Stycze�n, Poland</p> <p>Investigating layout preferences of online shop buyers: A case study of a purpose-built software and its evolution M. Kuli�nski and K. Jach, Poland</p> <p>Heuristic evaluation for e-commerce web pages usability assessment K. Jach and M. Kuli�nski, Poland</p> <p>A case study of creating public space for people with disabilities J. Bartnicka and A. Kowalska-Stycze�n, Poland</p>
S&O	<p>SESSION 143: Special Session on Human Factors in Maritime Transportation CO-CHAIRS: G. Di Bucchianico and A. Vallicelli, Italy</p>
<p>FRANCISCAN B 8:00-10:00</p>	<p>UCD vs ECD: From "user" to "experiencer" centered-approach in sailing yacht design G. Di Bucchianico, S. Camplone and A. Vallicelli, Italy</p> <p>Operate a boat M. Musio-Sale, Italy</p> <p>Discussion of issues relevant to the ergonomics of a 50 ft. sailing yacht M. Biferali, UK</p> <p>Safety and comfort as design criteria for high speed passenger craft E. Begovic and C. Bertorello, Italy</p> <p>Design for all on board - Boat design in the era of access for (almost) everybody S. Piardi, A. Ratti and S. Ercoli, Italy</p> <p>10 meters Daysailer for all. Sustainable technological solutions for easy navigation E. Rossi, G. Di Bucchianico and M. Di Nicolantonio, Italy</p>

S&O	<p>SESSION 144: New Ways of Work: I CO-CHAIRS: P. Vink and E. de Korte, The Netherlands, and M. Robertson, USA</p>
8:00-10:00 UNION SQUARE 23&24	<p>Simulation and assessment of physical activity at office workplaces R. Ellegast, B. Weber, R. Mahlberg and V. Harth, Germany</p> <p>Requirements for the back seat of a car for working while travelling S. van Veen, P. Vink and S. Hiemstra-van Mastrigt, The Netherlands, and I. Kamp and M. Franz, Germany</p> <p>Towards the ideal loungeworkseat A. Verkuijl and P. Vink, The Netherlands</p> <p>New ways of work: Task specific train seat design L. Groenesteijn, M. Blok, S. Hiemstra-van Mastrigt and P. Vink, The Netherlands, and C. Gallais, France</p> <p>The difference in new ways of work in different countries D. Trippany, USA</p> <p>Social Mobile Learning System: "SoMoLe" S. Zare, B. Tannert and M. Lund, Germany</p>
<p>10:00 - 10:30 Refreshments will be provided in the Golden Gate Ballroom</p>	
CCDM	<p>SESSION 145: Multifarious Modeling Discussions: II CHAIR: J. Wedgwood, USA</p>
10:30-12:30 CONTINENTAL 1	<p>Modeling essential services, security, employment, and economics (MESSEE) in the Sahel Region of West Africa W. Kulzy, R. Fricker, J. Negaard and A. Shilling</p> <p>A non-therapeutic, micro-worlds based, application of ACT (Acceptance and Commitment Therapy) to fostering cross-cultural competence K. Reese, M. Crozier and G. Sarkessian, USA</p> <p>What lies beneath: Forecast transparency to foster understanding and trust in forecast models J. Wedgwood, A. Ruvinsky and T. Siedlecki, USA</p> <p>Elicitation of development needs in conflict-torn communities using participatory multiagent modeling A. Geller, M. Latek and S. Rizzi, USA</p> <p>The climate for refugees: an integrated model of human/environment interaction and migration under stress T. Gulden, C. Cotla and A. Crooks, USA</p> <p>Combining social and environmental models I. Yohai, R. McCormack, J. Sidman, J. Galantowicz, C. Borden and S. Pritchett, USA</p>
CCDM	<p>SESSION 146: Verification, Validation, and Assessment CO-CHAIRS: T. Perkins and D. Sallach, USA</p>
10:30-12:30 CONTINENTAL 2	<p>Verification as a form of validation: Deepening theory to broaden application of DOD protocols to the social sciences I. Lustick and M. Tubin, USA</p> <p>Establishing bounds of responsible operational use of social science models via innovations in verification and validation A. Ruvinsky, J. Wedgwood and J. Welsh, USA</p> <p>Contextual validation: Concept and application D. Sallach, USA</p> <p>Validation of a household model of the societies of East Africa W. Kennedy, C. Cotla, T. Gulden, M. Coletti and C. Cioffi-Revilla, USA</p> <p>Towards a pre-intervention analytical methodology L. Whalley, T. Perkins, D. Krooks, M. Hargrave and C. Rewerts, USA</p>

HSSE	<p>SESSION 147: Learning in Experimental Environments CHAIR: W. Ganz, Germany</p>
10:30-12:30 CONTINENTAL 3	<p>Introduction of computer supported quality control circle in a Japanese cuisine restaurant R. Ueoka, T. Shinmura, R. Tenmoku, T. Okuma and T. Kurata, Japan</p> <p>Leading change by playing: Design and implementation of a management game for aviation ground services J. Kramer, F. Mayer, M. Gassner and R. Nägele, Germany</p> <p>Incorporating Kano's model and Markov chain into Kansei Engineering in services M. Hartono, Indonesia, T. Chuan and J. Peacock, Singapore</p> <p>Evaluating an innovative motion sensing-enabled system with rehabilitation exercises R. -R. Chen, Y.-H. Lee, J.-D. Chen and T. -H. Lu, Taiwan</p> <p>A study of the productivity enhancement in medical practice by the introduction of a handheld tablet computer K. Yamada, S. Ishikawa, Y. Sakamoto, Y. Motomura, T. Nishimura and T. Sugioka, Japan</p>
HSSE	<p>SESSION 148: Co-Creating Value with Customers CHAIR: Y. Yahya, Malaysia</p>
10:30-12:30 CONTINENTAL 4	<p>DNA and dynamics of collaboration and co-creation G. Bhalla, USA</p> <p>How much professional practice is necessary to prepare T-shaped talent: A college value perspective P. Gardner, USA</p> <p>Ergonomics framework in developing T-shaped HEI service deliverers D. Nielsen and A. White, UK</p> <p>Co-creating value with citizens through listen-engage-respond: A web based application Y. Yahya and M. Mukhtar, Malaysia</p> <p>Value co-creation in healthcare services: Challenges and opportunities M. Mahmood, Australia</p>
R&R	<p>SESSION 149: Rail: II CHAIR: G. Walker, UK</p>
10:30-12:30 CONTINENTAL 5	<p>A human performance operational railway index to estimate operators' error probability M. Kyriakidis, A. Majumdar and W. Ochieng, UK</p> <p>An evaluation of the low-event task subjective situation awareness (LETSSA) technique J. Rose, C. Bearman and J. Dorrian, Australia</p> <p>The multi-faceted public transport problems revealed by a small scale transport study A. Woodcock, S. Topolavic and J. Osmond, UK</p> <p>Identifying the information needs of users in public transport S. Hörold, C. Mayas and H. Krömker, Germany</p> <p>Meeting the challenges of individual passenger information with personas C. Mayas, S. Hörold and H. Krömker, Germany</p> <p>Pragmatic measures to vitalize railroad-station-service employees' activities that can reinforce customers' safety and comfort N. Tsuji, R. Ikeda and Y. Okada, Japan</p>

R&R	<p>SESSION 150: Crossings and Intersections / Attention and Distraction CO-CHAIRS: M. Lenne, Australia, and K. Young, Australia</p>
10:30-12:30 CONTINENTAL 6	<p>Study on young novice drivers' unsafe driving behavior Z. Jiang, D. Man and Q. Zhang, China</p> <p>A safety adapted car following model for traffic safety studies K. Bevrani and E. Chung, Australia</p> <p>The effects of short time headways within automated vehicle platoons on other drivers M. Gouy, C. Diels, N. Reed, A. Stevens and G. Burnett, UK</p> <p>Integrated analysis of driver behavior by vehicle trajectory and eye movement H. Nakayasu and T. Miyoshi, Japan, and P. Patterson, USA</p> <p>Effectiveness of two-channel bone conduction audio communication system in speech recognition tasks M. McBride, R. Weatherless and T. Letowski, USA</p> <p>Assessing driver behaviour at highway-rail grade crossings using on-road test vehicles M. Lenne, P. Salmon, T. Triggs and N. Stanton, UK</p> <p>Traffic light assistant – Evaluation of information presentation M. Krause and K. Bengler, Germany</p> <p>The study of optimum cognition on character images for in-vehicle navigation systems M. -C. Lin, M.-S. Chen and C. -C. Lin, Taiwan, and C. Chang, USA</p>
APD	<p>SESSION 151 : Emotion in HCI CHAIR: S. Bahn, USA</p>
10:30-12:30 CONTINENTAL 7	<p>Does user frustration really decrease task performance? G. Washington, USA</p> <p>Systematic consumer evaluation measurement for objectified integration into the product development process M. Köhler and R. Schmitt, Germany</p> <p>Psychological structures of six positive emotion groups (interest, joy, amusement, attachment, serenity, awe) and their relevance to affective design T. Amemiya, Japan</p> <p>Exploration on the relationship between Chinese characters and ergonomic affordances W. -H. Chen and Y. -J. Lin, Taiwan</p> <p>Comfortable information amount model for motion graphics M. Sekine and K. Ogawa, Japan</p> <p>The Kansei research on the price labels of shoes S. Charoenpit and M. Ohkura, Japan</p>
AVIATION	<p>SESSION 152: Safety, Ethics, and Fatigue CHAIR: T. von Thaden, USA</p>
10:30-12:30 CONTINENTAL 8	<p>Managing fatigue in aviation operations L. Barger and E. Evans, USA</p> <p>The safety and ethics of crew meals I. Barshi and J. Feldman, USA</p> <p>Fatigue risk management strategies in aviation maintenance A. Hobbs, USA</p> <p>Confidential safety incident reporting: Evolution of the NASA aviation safety reporting system L. Connell, USA</p> <p>Assuring controller alertness and performance in 24-7 air traffic control operations J. Orasanu, B. Parke, N. Kraft, Y. Tada, A. Hobbs, B. Anderson, L. McDonnell and V. Dulchinos, USA</p> <p>Safety culture, ethics and fatigue in aviation maintenance professionals T. von Thaden, USA</p>

ADHM	SESSION 153: Human Monitoring, Decision and Response Modeling CO-CHAIRS: V. Duffy
CONTINENTAL 9 10:30-12:30	<p>Framing the socio-cultural context to aid course of action generation for counterinsurgency M. Farry, B. Stark, S. Mahoney, E. Carlson and D. Koelle, USA</p> <p>The vmStrat domain specific language J. Ozik, N. Collier, M. North, W. Rivera, E. Palomaa and D. Sallach, USA</p> <p>Decision support system for generating optimal sized and shaped tool handles G. Harih, B. Dolšak and J. Kaljun, Slovenia</p> <p>Ergonomic work analysis applied to chemical laboratories on an oil and gas research center C. Guimaraes, G. Cid, A. Paranhos, F. Pastura, G. Franca, V. Santos, M. Zamberlan, P. Streit, J. Oliveira and G. Correa, Brazil</p> <p>Developing digital content on childhood injury prevention based on health belief model M. Inoue, Y. Nishida, K. Kitamura and H. Joh, Japan</p> <p>Evaluation of the map for the evacuation in disaster using PDA based on the model of the evacuation behavior Y. Asami, M. Sakurai, D. Kobayashi, K. Ishihara, N. Nojima and S. Yamamoto, Japan</p>
HC	SESSION 154: Measures and Validation in Healthcare CHAIR: V. Duffy, USA
FRANCISCAN A 10:30-12:30	<p>Development of moderators and measuring criteria in healthcare TAM research B. Cheol, USA, and V. Duffy, Russia/USA</p> <p>Value-motivational structure of individuals in their relationship with post-traumatic functional reliability in particular occupations E. Lazenbaya and J. Bessonova, Russia</p> <p>Integrated gesture recognition based interface for people with upper extremity mobility impairments H. Jiang, B. Duerstock and J. Wachs, USA</p> <p>Using computerized technician competency validation to improve reusable medical equipment reprocessing system reliability K. Yang, N. Lightner, S. Yee, M. Fard and W. Jordan, USA</p> <p>Paramedic service communication centre: Workload analysis and predictive modelling L. Hagen, M. Keown, S. Pronovost, D. Pasma and J. Murray, Canada</p> <p>Validity verification of coloring recreation taken place at pay nursing home S. Kawabata, M. Nasu, A. Yamamoto, Y. Kida, N. Kuwahara and H. Hamada, Japan</p>
HC	SESSION 155: Telehealth Research and Practice - Discussing Lessons Learned and Future Directions CHAIR: C. Clegg, UK
FRANCISCAN B 10:30-12:30	<p>Integrating business and socio-technical perspectives for the design of telehealth services C. Kelly, L. Machon, H. Hughes, C. Clegg and D. Ross, UK</p> <p>Sociotechnical considerations in the delivery of care to the frail elderly at home K. Eason and P. Waterson, UK</p> <p>User-driven innovation as a tool for developing telehealth technology: Lessons learned from the telehomecare project TELEKAT B. Dinesen, Denmark</p> <p>Why is it difficult to implement telehealthcare services? F. Mair, C. May, T. Finch, C. O'Donnell, F. Sullivan, L. Robinson and E. Murray, UK</p> <p>The patient work of adaptation and integration of telehealth and telecare for long term condition management A. Rogers, UK</p>

MFG	<p>SESSION 156: Knowledge-Based Enterprises CHAIR: E. Pawlowski, Poland</p>
10:30-12:30 FRANCISCAN D	<p>Organizational innovations and knowledge based enterprises. Theoretical postulates and empirical issues E. Pawlowski, Poland</p> <p>Linking lean and ergonomics: Towards better workstation design processes G. Bäckstrand and D. Högberg, Sweden</p> <p>Proposal for a Kansei index related to the uniqueness of a product Y. Ohta and K. Kasamatsu, Japan</p> <p>Two roads of the ergonomics S. Janik and A. Niemiec, Poland</p> <p>A case study of participatory ergonomics in the quality assessment of a drilling “dog house” M. Camilli, G. Forte, G. Massara, L. Spirito, C. Strinati and S. Mastrangelo, Italy</p> <p>Chosen methods supporting management of enterprise's agility S. Trzcielinski, Poland</p>
PE&S	<p>SESSION 157: Safety Management CHAIR: P. Carvalho, Brazil</p>
10:30-12:30 PLAZA ROOM A	<p>Using fuzzy set theory to model resilience in safe-critical organizations C. Grecco, M. Vidal and P. Carvalho, Brazil</p> <p>Development of measurement method of individual hazard perception A. Hirose and D. Takeda, Japan</p> <p>Evaluation of office chairs by measuring the seat pressure variations in daily office work J. Park, S. Kim, M. Kim, H. Jung and Y. Shim, Korea</p> <p>Decision support in safety management T. Waefler, S. Binz, K. Gaertner and K. Fischer, Switzerland</p> <p>An improvement of staffs' motivation/satisfaction for safety activities in a railroad operation department R. Nihongi and Y. Okada, Japan</p> <p>The analysis of complexload of machine production workers M. Kapustová, I. Tureková and K. Balog, Slovak Republic</p> <p>The complementarity between ergonomics and occupational safety G. Silva and N. Diniz, Brazil</p>
EMU&SP	<p>SESSION 158: Usability CHAIR: Y.-L. Lin, Taiwan</p>
10:30-12:30 PLAZA ROOM B	<p>Design and assessment of digital drawing system for children gesture movement with visual interface feedback F.-G. Wu, Y.-S. Fong and C.-H. Chen, Taiwan</p> <p>Improving small visual displays for low vision users M. Uslan, M. Blubaugh and C. Eghtesadi, USA</p> <p>Optimal scroll method to browse Web pages using an eye-gaze input system A. Murata, K. Hayashi, M. Moriwaka, and T. Hayami, Japan</p> <p>A proposal of usability task analysis for user requirements and evaluation T. Yamaoka, Japan</p> <p>Evaluation of interactive graphic interface for mobile financial service Y.-L. Lin and H.-T. Yang, Taiwan</p> <p>The development of a device selection model for wireless computing devices used to support communication flow in high consequence emergency management P. McCauley-Bush, S. Gaines, A. Watlington, III, M. Jeelani, USA, and L. Curling and P. Armbrister, The Bahamas</p> <p>Reducing ergonomic injuries for librarians using a participatory approach L. Yuan, USA</p>

CCDM	<p>SESSION 162: Social Media and Culture CO-CHAIRS: D. Ungvarsky and D. Patton, USA</p>
13:30-15:30 CONTINENTAL 2	<p>Twitter to the times: Measuring and modeling the coupling of social media to mainstream media E. MacKerrow, USA</p> <p>Inferring demographic attributes and extracting political discourse from Nigerian social media C. Fink, J. Kopecky and N. Bos, USA</p> <p>The use of microworlds in the study of dynamic decision making across cultures J. Evans and C. Güss, USA</p> <p>#prayforlondon: An exploration of social media during the 2011 London riots K. Glasgow, J. Spitaletta and C. Fink, USA</p> <p>Network discovery: Measuring cause and effect behind event and social networks P. Walker, T. Anglero and I. Davidson, USA</p> <p>Cultural analytics through image features extraction and exploration P. Naeimi and E. Stroulia, Canada</p>
HSSE	<p>SESSION 163: The Human Aspects of Change When Applying Lean 6 Sigma Methods and Tools CHAIR: S. Furterer, USA</p>
13:30-15:30 CONTINENTAL 3	<p>A comparative analysis of lean techniques B. Cudney, USA</p> <p>An analysis of the impact of lean on safety E. Cudney, S. Murray and P. Pai, USA</p> <p>Designing the infrastructure for lean six sigma performance excellence programs S. Furterer, USA</p> <p>Applying systems engineering business architecture techniques to design a quality management system S. Furterer, USA</p> <p>Nursing process optimization using analysis of time variance method with electronic medical record system T. Matsumoto, M. Okada, T. Nishimura and Y. Motomura, Japan</p>
HSSE	<p>SESSION 164: The Impact of Service Network Configuration on Customer Experience CO-CHAIRS: J. Min and Y. Kim, Korea</p>
13:30-15:30 CONTINENTAL 4	<p>The effects of the extension of service-network configuration in airline industry J. Song and S. Lee, USA</p> <p>The effect of service network configuration on firm performance Y. J. Kim, Korea</p> <p>Serendipity service generation for smart phone user K. J. Lee, Korea</p> <p>The importance of planning service network configuration for different anchor points to increase service satisfaction: The role of service expectations, wants, and normative ideals W. Chin, USA</p> <p>Co-creating value to increase service productivity – impacts of outputs and inputs for the product-supporting service value chain A. Rößner, F. Kicherer and R. Nägele, Germany</p> <p>Flexible service chain management for hyper variety industrial structure H. Deguchi, Japan</p>

R&R	SESSION 165: Methods and Standards CHAIR: N. Stanton, UK
CONTINENTAL 5 13:30-15:30	<p>The influence of presentation mode and hazard ambiguity on the domain specificity of hazard perception tasks S. Malone, A. Biermann and R. Brünken, Germany</p> <p>An attempt to predict drowsiness by Bayesian estimation A. Murata, T. Hayami, Y. Matsuda and M. Moriwaka, Japan</p> <p>Normative influences across cultures: Conceptual differences and potential confounders among drivers in Australia and China J. Fleiter, B. Watson, A. Lennon and M. King, Australia, and K. Shi, China</p> <p>Evaluating pre-driver education programmes delivered in year 12 in Irish secondary schools M. Ryan and M. Gormley, Ireland</p> <p>Fuzzy Bayesian based classification of call center agent activity S. -C. Lin, Taiwan, M. Lehto and S. Leman, USA</p>
APD	SESSION 166: Design and Development Methodology CHAIR: I. Lee, Korea
CONTINENTAL 7 13:30-15:30	<p>Applying microblogs to be an online design group: A case study with human-centered methods J. -P. Ma and R. Lin, Taiwan</p> <p>Design guidelines to keep users positive A. Nakane, M. Nakatani and T. Ohno, Japan</p> <p>The effect of web page complexity and use occasion on user preference evaluation S. -Y. Chiang and C. -H. Chen, Taiwan</p> <p>Effects of unity of form on visual aesthetics of website design A. Altaboli, USA/Libya and Y. Lin, USA</p> <p>Design principles for sustainable social-oriented bike applications D. Lee, C.-L. Lee, Y.-M. Cheng, L.-C. Chen and S.-C. Sheng, Taiwan, F. Sandness, Norway, and C. Johnson, UK</p>
AVIATION	SESSION 167: Pilot and Controller Performance and Behavior CHAIR: S. Verma, USA
CONTINENTAL 8 13:30-15:30	<p>Measuring team cooperation in ATC: Towards new methodology for evaluating new ATC systems S. Corver and G. Grote, Switzerland</p> <p>Air traffic controllers' control strategies in the terminal area under off-nominal conditions L. Martin, J. Mercer, T. Callantine, M. Kupfer and C. Cabrall, USA</p> <p>Assessing the impact of NextGen trajectory based operations on human performance K. Berry and M. Sawyer, USA</p> <p>An integrated experimental platform for the crew workload measurement D. Dong and S. Fu, China</p> <p>I did something against all regulations: Critical decision making in critical incidents K. Plant and N. Stanton, UK</p> <p>Awareness of need for immediate communication predicts situation-awareness and performance in an ATC training course Z. Roberts, H. Silva, T. Vo, R. Boles, N. Gomes, M. Iwan, L. Sturre, D. Chiappe and T. Strybel, USA</p>

AVIATION	SESSION 168: Human Factors Experiments, Case Studies, and Management CHAIR: H. Davison-Reynolds, USA
13:30-15:30 CONTINENTAL 9	<p>Automation in ATM: Future directions F. Nieto and R. Valdés, Spain</p> <p>Dimensionality effects on weather avoidance V. Lim, The Netherlands, and W. Johnson, USA</p> <p>An experimental investigation on air quality inside WindJet aircraft D. Catalisano, C. Giaconia, C. Grillo and F. Montano, Italy</p> <p>Fatigue risk management: The case for a low cost carrier S. Derbyshire and A. Majumdar, UK</p> <p>Cognitive component of aircraft pilots' professional performance and solar physics factors A. Tsaric and A. Burov, Ukraine</p>
ADHM	SESSION 169: Future Human Modeling and Applications: I CO-CHAIRS: R. Feyen and V. Duffy, USA
13:30-15:30 FRANCISCAN A	<p>Diagrammatic user interfaces R. Nakatsu, USA</p> <p>A study on effect of coloration balance on operation efficiency and accuracy, based on visual attractiveness of color A. Yokomizo, T. Ikegami and S. Fukuzumi, Japan</p> <p>The integration of ethnography and movement analysis in disabled workplace development G. Andreoni, F. Costa, C. Frigo, E. Gruppioni, E. Pavan, M. Romero, B. Saldutto, L. Scapini and G. Verni, Italy</p> <p>Generating cognitive activity logs from brainwave patterns: Preliminary work R. Feyen, USA</p> <p>Spatial semantic analysis of a large number of "infrequent" accidents by free-form-deformed data mining Y. Nishida, K. Kitamura and T. Ishikawa, Japan</p> <p>Multi-source community pulse dashboard T. Darr, S. Ramachandran, P. Benjamin, A. Winchell and B. Gopal, USA</p>
HC	SESSION 170: Organizational Aspects in Healthcare: I CO-CHAIRS: A. Parush, Canada, and N. Lightner, USA
13:30-15:30 FRANCISCAN B	<p>Interdisciplinary interactions in cross-functional collaborative prototyping at a pediatric hospital C. Campbell, A. Parush and T. Garvey, Canada</p> <p>Incorporating human system integration into the evacuation of individuals with disabilities M. Boyce and J. Smither, USA</p> <p>Management of medical equipment reprocessing procedures: A human factors/system reliability perspective R. Ellis, M. Fard, K. Yang, W. Jordan, N. Lightner and S. Yee, USA</p> <p>Measuring employee safety culture in rural nursing home settings: A literature review Y. Wang and B. Millet, USA</p>

EMU&SP	<p>SESSION 171: Ergonomics in Design: Miscellanea in Ergonomics in Design CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
<p>FRANCISCAN C 13:30-15:30</p>	<p>The use of reverse engineering development of cranial prosthesis for thermal spray M. Catapan, M. Okimoto and R. Paredes, Brazil</p> <p>Usability evaluation of touchscreen phone in emergency context F. Pozza, V. Roncalio, C. Miranda and M. Okimoto, Brazil</p> <p>Ergonomics and Kaizen as strategies for competitiveness: A theoretical and practical research in an automotive industry L. Vieira, G. Balbinotti and L. Gontijo, Brazil</p> <p>The inter-relationship between socio-technical systems and the principles of environmental sustainability in the pursuit of quality of work life, productivity and pollution prevention L. Vieira, G. Balbinotti, G. Coutinho and L. Wiemes, Brazil</p> <p>Benefits in the production process through the acquisition of competence in ergonomics: Case study of an automotive industry A. Varasquin, G. Balbinotti and L. Vieira, Brazil</p> <p>Ergonomics and its importance in logistics operations for an automotive industry: A theoretical and practical research on the topic A. Vieira, G. Balbinotti and L. Vieira, Brazil</p> <p>iPad2 integration into a company-wide ergonomics risk prevention program G. Perez, USA</p>
PE&S	<p>SESSION 172: Systems Safety CHAIR: C. Guimaraes, Brazil</p>
<p>FRANCISCAN D 13:30-15:30</p>	<p>Enhancement of workers' capability to analyze the latent factors in troubles T. Maeda, T. Akasaka and Y. Okada, Japan</p> <p>Development of prototype system on workers' awareness information assessment for safety management in petroleum facilities S. Tanuma, T. Akasaka and Y. Okada, Japan</p> <p>Ergonomic work analysis applied to maintenance activities at a pilot plant of oil and gas industry M. Zamberlan, C. Guimaraes, G. Cid, A. Paranhos and J. Oliveira, Brazil</p> <p>A design proposal of confirmation/check task to ensure workers' active will R. Ikeda, N. Tsuji, T. Akasaka and Y. Okada, Japan</p> <p>Prediction of drowsiness using multivariate analysis of biological information and driving performance A. Murata, Y. Okubo, T. Hayami and M. Moriwaka, Japan</p> <p>A Bayesian based model application to the prediction of task accuracy - Case study on call center's agents dialog E. Darmaningrat and S. -C. Lin, China</p>
EMU&SP	<p>SESSION 173: Human-Centered Design CHAIR: D. Coelho, Portugal</p>
<p>PLAZA ROOM B 13:30-15:30</p>	<p>Usability verification of operation method for web browsing on TV K. Matsubara, A. Murata and T. Hayami, Japan</p> <p>Anthropometric lot sizing of garments D. Coelho and I. Nunes, Portugal</p> <p>An attempt to model three-dimensional arm movement time - effects of movement distance, approach angle to target and movement direction A. Murata, T. Akiyama and T. Hayami, Japan</p> <p>UX embodying and systematizing method to improve user experience in system development: Applying to planning and proposing phase R. Okubo, Y. Tanikawa and S. Fukuzumi, Japan</p> <p>Proposal of human-centered design process support environment for system design and development Y. Tanikawa, R. Ookubo and S. Fukuzumi, Japan</p> <p>Effects of automotive switch type and location on usability and visual time off road A. Murata, M. Moriwaka and T. Hayami, Japan</p> <p>Ergonomic study on the information capacity of isolating language without Kanji characters M. Ikeda and T. Konosu, Japan</p>

S&O	<p>SESSION 174: New Ways of Work: II CO-CHAIRS: P. Vink and E. de Korte, The Netherlands, and M. Robertson, USA</p>
13:30-15:30 PLAZA ROOM A	<p>Some differences and overlaps between new ways of work in the Netherlands and the USA M. Robertson, USA, and P. Vink, The Netherlands</p> <p>Towards an adaptive office environment: Effects of sound and color of light on performance and wellbeing E. de Korte and L. Kuijt-Evers, The Netherlands</p> <p>New ways of working in a notebook manufacturing S. Miguez, The Netherlands, C. Pires and J. Domingues, Brazil</p> <p>The influence of expectations and pre-experiences on comfort at work C. Bazley, P. Vink and A. De Jong, The Netherlands, and A. Hedge, USA</p> <p>A new way to establish ergonomics expertise in manufacturing locations without ergonomists N. Larson and H. Wick, USA</p> <p>Humanistic dimension of Management By Values (MBV) A. Herman, Poland</p> <p>Optimizing job design for older adult workers M. Sanders, USA</p>
S&O	<p>SESSION 175: Safety and Organizational Dynamics CO-CHAIRS: R. Challenger, UK, and L. Paschoarelli, Brazil</p>
13:30-15:30 CONTINENTAL 6	<p>Benefits of combining social influence and ergonomics to improve the use of personal protective equipments (PPE) E. Brangier and J. Barcenilla, France</p> <p>Human factors analysis of the minimum staff complement at a nuclear generating station L. Shoukas, A. Vieira and J. Phyland, Canada</p> <p>Objects from prehistory, a study from the point of view of ergonomics – A reference in Brazil M. Menin, J. da Silva and L. Paschoarelli, Brazil</p> <p>Understanding crowd-related disasters: Can a systems perspective help? R. Challenger, UK</p> <p>Development of risk sensitivity of workers T. Nakata, Japan</p> <p>Effect of yogic breathing exercises on lung functions of normal subjects L. Singh and G. Dhaliwal, India</p>
<p>15:30 - 16:00 Refreshments will be provided in the Golden Gate Ballroom</p>	
CCDM	<p>SESSION 176: Social Science and Culture CO-CHAIRS: M. Gregory and J. Murray, USA</p>
16:00-18:00 CONTINENTAL 1	<p>Cultural critique of human behavior models M. Gregory and P. Whitney, USA</p> <p>What is cross-culture? A. Löfström, Sweden</p> <p>Exploring interpersonal trust: A cross-cultural study J. Murray and G. Myers, USA</p> <p>Socio-cultural modeling through decision-theoretic agents with theory of mind D. Pynadath and S. Marsella, USA</p>

CCDM	<p>SESSION 177: Understanding Diverse Populations CO-CHAIRS: L. Rasmussen and A. Caglayan, USA</p>
16:00-18:00 CONTINENTAL 2	<p>Predictive societal indicators of radicalism – Forecasting political violence S. Bell, A. Caglayan, L. Cassani and A. Murdie, USA Population sentiment modeling in support of ISAF Joint Command L. Cassani, A. Caglayan, J. Alavedra, S. Das, W. Morgan and L. Mooney, USA Semantic integration of socio-cultural knowledge for complex operations L. Cassani, A. Caglayan, W. Morgan, L. Mooney, A. Boyles and B. Weiss, USA Assessing UN peacekeeping training using the Peace Support Operations Model J. Appleget, USA Developing measures of effectiveness for AFRICOM assessments J. Appleget and J. Maddux, USA Computational methods for measuring the cognitive characteristics of cultural groups from web resources W. Sieck, P. Smart, A. Penta, B. Simpkins and N. Shadbolt, UK Analyst-centric techniques for understanding heterogeneous networks D. Koelle, W. Thornton, B. Prue, J. Pfautz and W. Salter, USA</p>
R&R	<p>SESSION 178: Socio-Technical Systems/Automotive Human Factors and Safety CO-CHAIRS: P. Salmon, Australia, and R. Happee, The Netherlands</p>
16:00-18:00 CONTINENTAL 3	<p>The impact of an integrated transport system: An ethnographic case study of the experiences of Metrocable users in Medellin-Colombia A. Roa-Atkinson, P. Atkinson, J. Osmond and A. Woodcock, UK Accessibility in public transport - A psychosocial approach F. Nickpour and P. Jordan, UK Development of a safety audit tool to assess fleet safety management practices R. Mitchell, R. Friswell and L. Mooren, Australia Assessing work tasks of tyre service personnel within the Australian mining industry M. McDonald, Australia Towards a stochastic model of driving behavior under adverse conditions R. Hoogendoorn, B. van Arem, S. Hoogendoorn, K. Brookhuis and R. Happee, The Netherlands Haptic steering support in high speed cornering D. Katzourakis, The Netherlands, E. Velenis, UK, E. Holweg and R. Happee, The Netherlands Traffic safety effect when overtaking 30 meter trucks J. Andersson, J. Sandin, L. Renner, C. Fors, N. Strand, M. Hjort, J. Hultgren and S. Almqvist, Sweden The effect on passenger cars' meeting margins when overtaking 30 meter trucks on real roads J. Sandin, L. Renner and J. Andersson, Sweden</p>
APD	<p>SESSION 179: Information Visualization and Augmented Reality CO-CHAIR: S. Moon, Singapore</p>
16:00-18:00 CONTINENTAL 4	<p>Making electronic infographics enjoyable: Design guidelines based on eye tracking L. Scolere, B. Reid, C. Pardo, G. Meron, J. Licero and A. Hedge, USA Verbalization in search: Implication for the need of adaptive visualizations K. Nazemi and O. Christ, Germany Learning to use a new product: Augmented reality as a new method D. Albertazzi, M. Okimoto and M. Ferreira, Brazil Visualizations encourage uncertain users to high effectiveness M. Breyer, J. Birkenbusch, D. Burkhardt, C. Schwarz, C. Stab, K. Nazemi and O. Christ, Germany Exploring low-glance input interfaces for use with augmented reality heads-up display GPS E. Cupps, P. Finley, B. Mennecke and S. Kang, USA Change blindness when viewing web pages D. Steffner and B. Schenkman, Sweden</p>

HSSE	SESSION 180: HSSE Closing Session/2014 Planning Panel Members CO-CHAIRS: J. Spohrer and L. Freund, USA
	16:00-18:00 FRANCISCAN D
AVIATION	SESSION 181: Human Factors on the Road to NextGen CHAIR: B. Willems, USA
CONTINENTAL 6 16:00-18:00	<p>Human factors in the terminal air traffic domain K. Allendoerfer, USA</p> <p>Working towards NextGen in traffic flow management T. Yuditsky-Mittendorf and B. Brickman, USA</p> <p>Human factors implications of NextGen concepts in high altitude airspace A. Koros and K. Bender, USA</p> <p>Future air traffic concepts for NextGen R. Aquilina, USA</p> <p>Human factors in the terminal air traffic domain E. Smith, USA</p> <p>Cognitive component of aircraft pilots' professional performance and solar physics factors A. Tsaric, A. Burov and A. Skrypets, Ukraine</p>
ADHM	SESSION 182: Future Human Modeling and Applications: II CO-CHAIRS: T. Alexander, Germany, and V. Duffy, USA
CONTINENTAL 7 16:00-18:00	<p>Development of a 3-D kinematic model for analysis of ergonomic risk for rotator cuff injury in aircraft mechanics E. Irwin and K. Streilein, USA</p> <p>Analysis of a procedural system for automatic scenario generation G. Martin, C. Hughes and J. Moshell, USA</p> <p>Ambulatory heart rate variability and mood in daily life K. Yoshino and K. Matsuoka, Japan</p> <p>Motion synthesizer platform for moving manikins A. Keyvani, H. Johansson and M. Ericsson, Sweden</p> <p>The procedures for capturing digital images of hands F. Olle Da Luz, M. Okimoto and L. Lima Edmilson, Brazil</p> <p>Human engineering modeling and performance: Capturing humans and opportunities K. Stelges and B. Lawrence, UA</p>
HC	SESSION 183: Medical Devices and Special Populations CHAIR: M. Wang, Taiwan
CONTINENTAL 8 16:00-18:00	<p>Anthropometric and scoliosis survey for children with physical and mental disabilities C. -Y. Wu, T.-H. Chen and M. -J. Wang, Taiwan</p> <p>Adaptable mobile user interface for healthcare applications in radiology E. Mitreska, D. Davcev and K. Mitreski, Macedonia</p> <p>Human factors evaluation of medical equipment reprocessing instructions R. Ellis, S. Yee, N. Lightner, K. Yang and W. Jordan, USA</p> <p>A proposal of the database schema of a drug composition database to generate drug package inserts R. Okuya, H. Ishida, K. Nabeta, M. Kimura, M. Ohkura and F. Tsuchiya, Japan</p> <p>Sensors as an evaluative tool for independent living K. Woo, V. Ganev, E. Stroulia, I. Nikolaidis, L. Liu and R. Lederer, Canada</p>

HC	<p>SESSION 184: Organizational Aspects in Healthcare: II CO-CHAIRS: G. Yücel Höge, Turkey, and A. Gramopadhye, USA</p>
<p>CONTINENTAL 9 16:00-18:00</p>	<p>Ergonomics and occupational health and safety: A cost-benefit analysis model D. Ramos, P. Arezes and P. Afonso, Portugal</p> <p>Handover process in multidisciplinary health care: Information transfer and common ground construction G. Toccafondi, R. Tartaglia, S. Albolino and S. Guidi, Italy</p> <p>Developing interactive and emergency response devices for people with disabilities and their canine assistants C. Kussalanant, J. Takamura, D. Shin and W. Burlison, USA</p> <p>Knowledge management of healthcare team using Clinical-Pathway Case study in hospital of Miyazaki University T. Yamazaki, M. Suzuki, K. Araki, and Y. Kai, Japan</p> <p>How to bring your doctor home. User-centered design of a telemedical consultation service with special focus on trust building S. Beul, M. Ziefle and E. -M. Jakobs, Germany</p> <p>Human factors applied to the development of a state-wide electronic consenting system: A healthcare information technology case study R. Koikkara, K. Madathil, K. Fryar, J. Moskowitz, I. Sanderson, J. Greenstein and A. Gramopadhye, USA</p>
MFG	<p>SESSION 185: Ergonomics in Manufacturing: II CHAIR: L. Singh, India</p>
<p>FRANCISCAN A 16:00-18:00</p>	<p>Hybrid meta-heuristic based occupational health management system for Indian workers exposed to risk of heat stress Y. Anand, S. Srivastava and K. Srivastava, India</p> <p>A calculation model for ergonomics cost-benefit analyses in early product development stages A. -C. Falck and M. Rosenqvist, Sweden</p> <p>Biomechanical analysis of "Kyo-Gashi" techniques and skills for Japanese sweets experts A. Goto, Y. Takai and H. Hamada, Japan</p> <p>Highly cultured brush manufactured by traditional brush mixing technique "KEMOMI" S. Kawabata, T. Kamada, M. Nasu, K. Nakahara, H. Tsukuda, A. Goto and H. Hamada, Japan</p> <p>Real-time measuring system of eye-gaze location and writing pressure in calligraphy A. Murata, K. Inoue, T. Hayami and M. Moriwaka, Japan</p> <p>Ergonomic intervention plan for machinery operators M. Drzewiecka, B. Mrugalska and L. Pacholski, Poland</p> <p>Kitting as an information source in manual assembly A. Brolin, Sweden/UK, G. Bäckstrand, P. Thorvald and D. Högberg, Sweden, and K. Case, Sweden/UK</p>
EMU&SP	<p>SESSION 186: Ergonomics in Design: Ergonomics and Virtual Reality CO-CHAIRS: M. Soares, Brazil, and F. Rebelo, Portugal</p>
<p>FRANCISCAN B 16:00-18:00</p>	<p>Ergonomics, usability and virtual reality: A review applied to consumer product C. Falcão and M. Soares, Brazil</p> <p>Comparing Likert and Pictorial scales to assess user feedback F. Campos, R. Belfort and W. Correia, Brazil</p> <p>Can virtual reality methodologies improve the quality of life of people with disabilities? L. Bracciali, F. Rebelo and L. Pereira, Portugal</p> <p>Using space exploration matrices to evaluate interaction with virtual environments L. Teixeira, E. Duarte, J. Teles, M. Vital, F. Febelo and F. Moreira da Silva, Portugal</p> <p>Eye movement and environmental affordances in a emergency egress task: A pilot study P. Noriega, E. Vilar, F. Rebelo, L. Pereira and I. Santos, Portugal</p> <p>Evaluation human computer interaction using an ecological and systemic method E. Filgueiras, F. Rebelo, J. Teles and F. M. da Silva, Portugal</p> <p>The influence of design in the development of exergames: A practical study in the control of obesity M. Barros, A. Neves, W. Correia and M. Soares, Brazil</p>

EMU&SP	<p>SESSION 187: Evaluation of Co-Adaptive Interactions: HCI, Accessibility, and Rehabilitation CHAIR: D. Feathers, USA</p>
16:00-18:00 PLAZA ROOM A	<p>The game is afoot: Q&A systems and the future of HCI S. Keates, UK and P. Varker, USA</p> <p>Usability evaluation of a virtual reality system for motor skill training W. Jeon, M. Clamann, B. Zhu, G.-H. Gil and D. Kaber, USA</p> <p>The design and evaluation of a radio frequency identification (RFID) enabled inpatient safety management system T. -W. Chu and C. -J. Jun Su, Taiwan</p> <p>An evaluation tool the subject / the pointing device pair F. Vella, D. Sauzi and N. Vigouroux, France</p> <p>Usage problems and improvement needs of the clinical upper extremity rehabilitation devices in Taiwan: A pilot study L. -L. Huang, C.-F. Lee and M. -H. Chen, Taiwan</p> <p>Work posture assessment of computer users using CARULA (Computer Aided Rapid Upper Limb Assessment) L. Singh, A. Singh and S. Kaur, India</p>
S&O	<p>SESSION 188: Social Ergonomics CHAIR: P. Vink, The Netherlands</p>
16:00-18:00 PLAZA ROOM B	<p>Mapping the trajectories of military intervention and occupation M. Bloom and P. Sullivan, USA</p> <p>Human cooperation assessment methodology V. Santos and M. Zamberlan, Brazil</p> <p>Planning, scheduling and control as a distributed decision-making process T. Waefler, D. Fischer, A. Specker, Z. Oroszlan and S. Schori, Germany</p> <p>Paradise ambiance in interactive art: A case study of the National Palace Museum in Taipei H. -Y. Yen and R. Lin, Taiwan</p> <p>Household work: An ergonomic perspective H. Bhatt, M. Sidhu, R. Bakhshi and P. Sandhu, India</p>
S&O	<p>SESSION 189: Social Aspects of Ergonomics Design CO-CHAIRS: J. Park, South Korea, and E. Fallon, Ireland</p>
16:00-18:00 FRANCISCAN C	<p>Assessment of product developed with emphasis on emotional design" R. De Oliveira Queiroz Silva, C. Silva, W. Medeiros and M. Okimoto, Brazil</p> <p>Representing traditional culture - Poetry applying elements on product design C. -H. Hsu, M.-L. Yeh, P.-H. Lin and R. Lin, Taiwan</p> <p>Using mental models and ergonomics to analyze Chinese opera performing skills T. -J. Wang and R. -T. Lin, Taiwan</p> <p>A study of applying Saisait Tribe's Tabaa Sang (buttocks bell) into cultural creative industry from a cross-disciplinary perspective P. -H. Lin, J.-H. Tseng and C. -Y. Tsou, Taiwan,</p> <p>Emotional video scene detection from lifelong videos using facial feature selection H. Nomiya, A. Morikuni and T. Hochin, Japan</p> <p>An exploration about interior ambiance based on user-centered design approach C. -Y. Leung and K. -J. Chen, Taiwan</p> <p>Research of the application according to user's experience in 2011 IDA Congress Taipei - Light of fashion design M. -T. Lin and R. Lin, Taiwan</p>

Human Factors and Ergonomics in Manufacturing & Service Industries

Edited by:

Waldemar Karwowski
Gavriel Salvendy



Special Edition of
Human Factors and Ergonomics
in Manufacturing & Service Industries
now available for AHFE delegates only!

The Human-Side of Service Engineering

Special Issue Editors: James Spohrer and Louis Freund
Volume 23, Issue 1

Service Systems Design: an Intentional Agent Perspective

Describing Service Systems

The Human Side of Organizational Change: Compliance and Management Control Systems in Italian Public Utilities

Service Systems and the Social Enterprise

Characterizing Organizations as Service Systems

Municipal Service Delivery: a Multi-Stakeholder Framework

Designing a Web-based Behavior Motivation Tool for Healthcare Compliance

The Human-Side of Service Engineering

Go to

<http://wileyonlinelibrary.com/journal/hfm/specialissue>

to read this special issue through August 26th.

 **WILEY-BLACKWELL**

Interactive Poster Presentations

Different posters will be presented on each of the two days: 23rd and 24th July 2012. Poster authors will be present at the posters during mid-morning and mid-afternoon refreshment breaks. No posters will be presented on 25th July 2012.

POSTER PRESENTATIONS MONDAY, JULY 23, 2012

- A study on systematizing GUI design patterns for the embedded system products
I. Hirata, K. Mitsutani and T. Yamaoka, Japan
- Aviation decision making issues and challenges: Evidence from ASRS reports
K. Mosier, U. Fischer, K. Cunningham, A. Munc, K. Reich and L. Tomko, USA
- The effect on physiology from different LED lighting
C. -L. Huang, C.-W. Lu, C.-Y. Yang, H.-W. Tu, C.-H. Lee, Y.-H. Chiang
and H. -L. Hu, Taiwan
- Joint community and topic discovery
E. Jones and N. Sandell, USA
- Exploring resilient team processes in control room teams of a nuclear power plant
C. Kleindienst, J. Brüngger and F. Ritz, Switzerland
- The development of a modular automatic physical workload assessment tool
T. Bosch, G. van Rhijn and R. Könemann, The Netherlands, A. Kolu
and N. Philippon, Finland, and H. Patel, UK
- Tracell: A catalyst for learning for children with special needs
D. Nicolas, R. Manago and A. Angeles, Philippines
- A motion-capturing system to aid in recognition skills of students with special
needs
A. Angeles, J. dela Cruz, K. Joven and D. Moncada, Philippines
- A computerized signal detection model - Can you see it?
H. Maliko-Abraham and J. Livings, USA
- Remote target detection using an unmanned vehicle: Contribution of telepresence
features
C. Jansen, The Netherlands, L. Elliott, USA, L. van Breda, The Netherlands,
E. Redden and M. Barnes, USA
- Tactical scenarios for user-based performance evaluation
L. Elliott, E. Redden, E. Schmeisser and A. Rupert, USA
- Resource consumption and simulator driving performance using adaptive controls
D. Fekety, M. Boyce and J. Smither, USA
- The effects of ergonomic intervention for the prevention of upper extremity
work-related musculoskeletal disorders among Turkish computer users: A cluster
randomized controlled trial
S. Esmailzadeh, E. Ozcan and N. Capan, Turkey
- The prevalence and risk factors of upper extremity work-related musculoskeletal
disorders among computer users in Turkey
E. Ozcan, S. Esmailzadeh, I. Ozcan and T. Baysak, Turkey
- Explorative web development for using ICF as patient classification tool on the
rare disease of ALS
R. Elze, C. Zinke and K. -P. Fähnrich Germany
- Development of educational method for safe bicycle riding to evaluate actual
cycling behaviors
H. Kosaka, Japan
- What is simple is usable: Is beauty truly a predictor of perceived usability?
W. Miner, USA
- Implementation of a VA patient-centered prescription label
K. Trettin and E. Narus, USA
- Physical and mental burden of caregivers in providing bathing assistance
A. Yamamoto, M. Matsuyama, H. Kamoi, R. Yamamoto, N. Kuwahara
and N. Kida, Japan

Interactive Poster Presentations

POSTER PRESENTATIONS MONDAY, JULY 23, 2012

- Driving in tunnel and the effect on sleepiness
A. Anund and C. Fors, Sweden
- Input interface for remote controller using fingertips
T. Hase, R. Wada, Y. Mukai and S. Mikami, Japan
- Pointing device operated by two fingertips using acceleration sensor and gyro sensor
T. Hase, S. Mikami and R. Wada, Japan
- GUI for AV remote controllers based on analytical hierarchy process in consideration of human error
T. Hase, T. Nonaka, M. Ogawa and S. Yamada, Japan
- Input interface of remote controller for home electric appliances through use of ad-hoc wireless communication
T. Hase and H. Sawada, Japan
- Slip, trip, and fall prevention for health workers in the operation room
K. Shinohara, Japan
- An ergonomic risk assessment of manual work
H. Bhatt and P. Sharma, India
- Power relations and safety in commercial aviation: Professional identity and occupational clashes
M. Papanikou and U. Veersma, UK
- The importance of iterative user feedback in ergonomic system design: An example using the XM806 . 50 caliber machinegun
G. Larkin and K. Bernier, USA
- The impact of hearing loss on the interaction between speech recognition and performance in an independent walking navigation task
R. Weatherless, USA
- Cognitive ergonomics: The user and brand in an informational relationship
S. Oliveira, A. Heemann and M. Okimoto, Brazil
- Characteristics of work-related musculoskeletal disorders of waste collectors in Korea
H. -H. Kim, J.-H. Kim, D.-Y. Cho and M. -S. Jung, Korea
- Moving site marking out of the pre-operative bay into the operating room
K. Bell, USA
- Friction measurements on floors with solid and liquid contaminants
L. Liu, K. Li, C.-Y. Chen and C. Chen, Taiwan
- Exploring the impact of mobile device use on pedestrian navigation
B. Bellows, D. Comerford and R. Youmans, USA
- Research on a decision support system for addressing emotional factors of product design
P. -Y. Chu, L.-C. Chen, W.-S. Yu and Y. -W. Huang, Taiwan
- A validation method for ergonomic risk assessment methods
G. Szabó and K. Koloszá, Hungary
- An analysis to determine the design weight limits for MOS 13B Soldiers while employing the Digitized M119A2 105mm Towed Howitzer
K. Gunn, USA
- NAVAIR human systems 4.6 digital human modeling project update
L. Brattin, C. Mattingly, M. Warren and B. Shender, USA

Interactive Poster Presentations

POSTER PRESENTATIONS TUESDAY, JULY 24, 2012

- Muscle coactivation patterns in the neck and shoulders: An empirical study in the dental profession
R. Pope-Ford and Z. Jiang, USA
- A serious games-driven clinician-centered user interface for a pneumatically powered portable ankle-foot orthosis
Z. Jiang, D. Stajsic, R. Delpish and B. Benedict, USA
- Viability of natural user interfaces
A. Animashaun, USA
- Binocular fusion as a function of luminance difference between aided and unaided eyes
S. Wallace, USA
- A founding model of applying universal design to product development process-hand tool as an example
K. -C. Lin, C.-H. Huang, C.-H. Lin and C. -F. Wu, Taiwan
- User-centered development of an occupational health and safety knowledge and learning management system
S. Shalloe, G. Lawson, M. D’Cruz and R. Eastgate, UK
- Older adults’ comprehension of warning symbols: Effects of contextual cues
M. Lesch, W. Powell, W. Horrey and M. Wogalter, USA
- Future of humanoid: Beating uncanny valley for a profound decision making
A. Verma, USA
- Evolution of HMI metrics to diagnose HMI quality
H. Urokohara and N. Hirasawa, Japan
- Subjective evaluation of a new box design by experienced and inexperienced handlers
H. Nogueira, L. Silva, H. Coury and A. Oliveira, Brazil
- Near miss accidents on farm. The preliminary analysis
J. Cie , Poland
- Objective and subjective evaluation of new box designs
L. Silva, H. Nogueira, D. Silva, L. Paschoarelli, A. Oliveira and H. Coury, Brazil
- Exploring decision quality in human performance models of military operations
S. Henry, USA
- Designing medical instruments to improve physicians’ routine, communication with patients and adoption of new technologies: a human factors and person-environment congruence approach
S. De Brum, C. Steggell and K. Funk, USA
- The effects of similarity between players and avatars on avatars’ behaviors
Y. -C. Hsu, Taiwan
- Safer driving in different contexts: Metric versus beep auditory cue in navigation
H. Kang, M. Kim, B. Kim and K. -H. Han, Korea
- Intersection Assistance: A safe solution for older drivers?
M. Dotzauer and W. Brouwer, The Netherlands
- A robust, affordable, open source gaze tracker
K. Lukander, S. Jagadeesan, A. Meriläinen and H. Chi, Finland
- Tangible interface for 3D medical imaging datasets
K. Lukander, T. Valtonen and K. Müller, Finland
- How you hide matters: The effect of background context on camouflage capacity
W. Cho, S. Lee, H. Kim and K. -H. Han, Korea
- A method for analyzing business drivers affecting ubiquitous services
N. Hirasawa, Y. Takada, T. Kanbara and R. Ogura, Korea

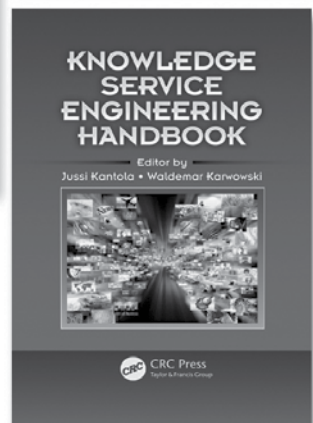
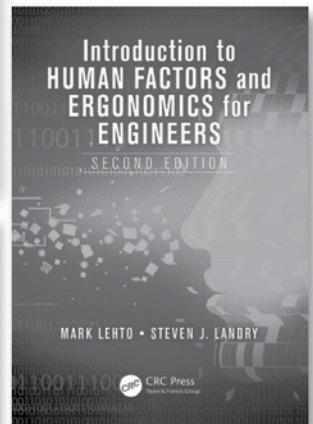
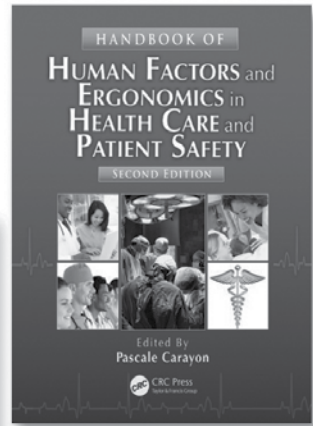
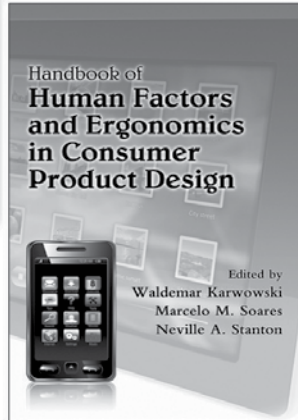
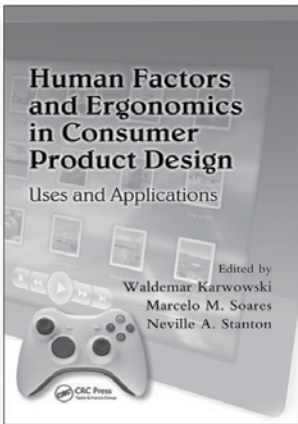
Interactive Poster Presentations

POSTER PRESENTATIONS TUESDAY, JULY 24, 2012

- Positive emotion makes touch device user waiting longer: Emotional response differences and waiting time between input devices
B. Kim, J. Kwon and K. -H. Han, Korea
- "Old habits DON'T die hard" - Mitigating visual distraction by a visual distraction alert system
C. Wege and T. Victor, Sweden
- Development of dynamic visual artifacts for resilient human-automation collaboration
R. Stark, M. Voshell, S. Mahoney and M. Farry, USA
- Older adults' perceptions of, and preferences for, warning symbols: Familiarity, complexity, and comprehensibility
M. Lesch, W. Powell, W. Horrey and M. Wogalter, USA
- Study on the effective m-learning design: screen size and working memory capacity
M. Kim and K. -H. Han, Korea
- Head, upper back and upper arms postural exposure in practical nurses during a workday
L. Carnaz, C. Castro, R. Moreira and H. Coury, Brazil
- Modeling technique in surgical procedures: A descriptive taxonomy for quantifying variations in surgical methods
D. Yu, A. Frischknecht, T. Armstrong, R. Minter and S. Kasten, USA
- Training for an information operations officer with rich social models
R. Pokorny, USA
- Is there association between muscle strength and perceived work ability index among nursing aides?
R. Carreira Moreira, L. Carnaz, L. Bueno Silva, C. Castro, F. Foltran, A. Machado and H. Coury, Brazil
- Performance of tracking task and mental workload under dual task conditions
N. Sato, Japan
- Effects of chronic sleep deficit on executive neural network
M. Fafrowicz, T. Marek, E. Beldzik, S. Domagalik and H. Oginska, Poland
- Systematic evaluation of a portable situation management system
G. Dube, J.-F. Gagnon, S. Tremblay, B. Lebel, B. Curry and P. Romano, Canada
- Collaborative geospatial visualizations to improve sociocultural understanding
M. Kierstead, K. Robinson and D. Koelle, USA
- The effects of map coordinate system, viewpoint, and terrain rendering on user performance and subjective experience during navigation in unfamiliar environments
S. Kim, R. Li, A. Yilmaz and M. Banks, USA
- Human factors considerations for persistent wearable health monitoring
A. Pepe and T. Judkins, USA
- Fun music composition system using Kansei adjective
H. Shiizuka, Japan
- What is important aspect of mobile phone for senior users?
A. Hashizume, Japan
- A study on the gesture-based interaction using a handheld device
S. - A. Lee, J.- W. Kim, D.-J. Kim and S. Lee, Korea
- A sociability study of Facebook games: The perspectives of group member roles and interpersonal relationship types
J. Lee and T. Lin, Taiwan

Visit the CRC Press Booth to Get Your Copies of the AHFE 2012 Conference Books

Special Savings
of up to
50%!



- Top-notch references that cover an unmatched range of topics
- Must-read resources on applied human factors and ergonomics
- Tried-and-true handbooks that give you insight from experts

So Come By and See Us at Booth #304



CRC Press
Taylor & Francis Group

Technical Program Boards

DYLAN SCHMORROW,
AHFE 2012 Scientific and Technical Advisor

PHYSICAL ERGONOMICS & SAFETY

W. Karwowski

wkarwowski@ahfe.org

F. Aghazadeh, USA
M. Boockock, New Zealand
E. Cadavid, Colombia
J. Callaghan, Canada
P. Dempsey, USA
R. Feyen, USA
R. Goonetilleke, Hong Kong
J. Grobelny, Poland
J. James, South Africa
R. Jang, Taiwan
Y. Kwon, Korea
M. Lehto, USA
L. Ma, China
S. Maly, Czech Republic
J. Niu, China
I. Noy, USA
E. Occhipinti, Italy
Y. Okada, Japan
H. Pacaiova, Slovak Republic
Z. Roja, Latvia
K. Saarela, Finland
L. Saenz, Colombia
J. Sinay, Slovak Republic
H. Strasser, Germany
S. Vlkova, Czech Republic
T. Waters, USA

COGNITIVE & NEUROERGONOMICS

K. Stanney

kay@designinteractive.net

H. Adeli, USA
G. Bedny, USA
A. Burov, Ukraine
P. Choe, China
M. Fafrowicz, Poland
X. Fang, USA
Q. Gao, China
Y. Guo, USA
P. Hancock, USA
K. Itoh, Japan
D. Kaber, USA
W. Karwowski, USA
H. Liao, USA
S.-Y. Lee, Korea
Y. Liu, USA
T. Marek, Poland
J. Murray, USA
A. Ozok, USA
O. Parlangei, Italy
R. Proctor, USA
P. Rau, China
A. Santamaria, USA
A. Savoy, USA
D. Schmorow, USA
N. Stanton, UK
K. Vu, USA
T. Waldmann, Ireland
L. Zeng, USA

HUMAN FACTORS AND ERGONOMICS IN HEALTHCARE

V. Duffy

duffy@purdue.edu

A. Andre, USA
J. Bagian, USA
S. Bogner, USA
D. Büchel, Germany
B. Caldwell, USA
F. Calisir, Turkey
A. Elfering, Switzerland
T. Fairbanks, USA
W. Friesdorf, Germany
C. Garg, USA
A. Gramopadhye, USA
G. Grote, Switzerland
S. Hignett, UK
B. Hoegel, Germany
J. Jacko, USA
W. Karwowski, USA
Y. Liu, USA
M. Ohkura, Japan
C. Or, Hong Kong
A. Ozok, Turkey
T. van der Schaaf, Belgium
S. Wu, USA
J. S. Yi, USA
G. Yucel, Germany

Technical Program Boards

CROSS-CULTURAL DECISION MAKING: FOCUS 2012

D. Schmorrow
schmorrow@yahoo.com
D. Nicholson
dnicholson@dsci.com

A. Abbe, USA
S. Bagnara, Italy
J. Boiney, USA
S. Burke, USA
A. Chan, Hong Kong
C. Clegg, UK
J. Cohn, USA
B. Costa, USA
P. Davis, USA
E. Eldridge, USA
I. Estabrooke, USA
C. Fidopiastis, USA
J. Fowler, USA
J. George, USA
M. Hail, USA
H. Hawkins, USA
J. Johnson, USA
M. Kenney, USA
G. Klein, USA
M. Kruger, USA
J. Lincoln, USA
E. Lyon, USA
N. Marmaras, Greece
K. May, USA
S. Miller, USA
J. Morrison, USA
S. Nelson, USA
D. Nicholson, USA
M. Rauterberg, The Netherlands
E. Salas, USA
D. Scapin, France
D. Schmorrow, USA
H. Schulze, Germany
R. Stripling, USA
R. Swisher, USA
G. Zacharias, USA
S. Zotti, USA

APPLIED DIGITAL HUMAN MODELING

V. Duffy
duffy@purdue.edu

T. Ahram, USA
T. Alexander, Germany
G. Andreoni, Italy
R. Bhatt, USA
J. Charland, Canada
Z. Cheng, USA
B. Corner, USA
O. Ersoy, USA
R. Goonetilleke, Hong Kong
B. Gore, USA
R. Green, USA
D. Högberg, Sweden
H. Hsiao, USA
J. Lee, USA
Z. Li, China
J. F. Lockett, III, USA
A. Luximon, Hong Kong
C. Moebus, Germany
Y. Motomura, Japan
J. Park, Korea
S. Rajulu, USA
M. Reed, USA
X. Wang, France
J. Yang, USA
W. Zhang, China

HUMAN SIDE OF SERVICE ENGINEERING

J. Spohrer
spohrer@us.ibm.com
L. Freund
louis.freund@sjsu.edu

S. Alter, USA
M. Baba, USA
C. Bassano, Italy
J. Blomberg, USA
C. Chang, USA
C. Darrah, USA
B. Edvardsson, Sweden
S. Furterer, USA
W. Ganz, Germany
R. Glushko, USA
C. Hsu, USA
Y. J. Kim, Korea
V. Kuppelwieser, Germany
S. Kwan, USA
K. Lyons, Canada
P. Maglio, USA
C. Mele, Italy
J. Min, Korea
K.-S. Paloheimo, Finland
S. Parikh, India
L. Patricio, Portugal
P. Piciocchi, Italy
C. S. Pinhanez, Brazil
Y. Rankin, USA
Y. Sawatani, Japan
A. Seffah, France
M. Shute, Usa
S. Spraragen, USA
V. K. Tuunainen, Finland
Y. Yahya, Malaysia
T. Young, England
S.-T. Yuan, Taiwan
H. Zadeh, Australia

Technical Program Boards

AFFECTIVE AND PLEASURABLE DESIGN

Y. G. Ji

yongguji@gmail.com

A. Aoussat, France
A. Chan, Hong Kong
S. B. Chang, Korea
L. L. Chen, Taiwan
Y. C. Chiuan, Singapore
G. S. Cho, Korea
S. J. Chung, Korea
D. A. Coelho, Portugal
O. Demirbilek, Australia
Q. Gao, China
R. Goonetilleke, Hong Kong
B. Henson, UK
W. Hwang, Korea
C. Jun, China
M. C. Jung, Korea
S. R. Kang, USA
H. Khalid, Malaysia
H. Kim, Korea
J. Kim, Germany
Y. K. Kong, Korea
K. Kotani, Japan
O. Kwon, Korea
G. Kyung, Korea
H. Lee, Korea
I. Lee, Korea
Y. K. Lim, Korea
K. Morimoto, Japan
M. Ohkura, Japan
Y. W. Pan, Korea
P-L. P. Rau, China
S. Schutte, Sweden
H. Umemuro, Japan
A. Warell, Sweden
M. H. Yun, Korea

HUMAN FACTORS IN TRANSPORTATION

Road and Rail

N. Stanton

n.stanton@soton.ac.uk

K. Bengler, Germany
G. Burnett, UK
P. Chapman, UK
F. Chen, Sweden
L. Dorn, UK
I. Glendon, Australia
J. Groeger, Ireland
R. Happee, The Netherlands
S. Jamson, UK
D. Kaber, USA
J. F. Krems, Germany
F. Mars, France
D. S. McAvoy, USA
R. Risser, Austria
P. Salmon, Australia
S. Sharples, UK
G. Walker, UK
K. Young, Australia

Aviation

S. Landry

slandry@purdue.edu

A. Alexander, USA
H. Davison Reynolds, USA
M. Draper, USA
M. Feary, USA
B. Gore, USA
B. Hooey, USA
D. Kaber, USA
M. Kupfer, USA
K. Latorella, USA
A. Majumdar, UK
N. McDonald, Ireland
J. Mercer, USA
E. Rantanen, USA
C. Samms, USA
A. Sebok, USA
S. Verma, USA
T. von Thaden, USA
K. Vu, USA
B. Willems, USA

HUMAN ASPECTS OF ADVANCED MANUFACTURING

S. Trzcielinski

Stefan.Trzcielinski@put.poznan.pl

S. Bagnara, Italy
T. Bikson, USA
A. Chan, Hong Kong
Y. S. Chang, Korea
F. Daniellou, France
P. Dawson, UK/Australia
C. Drury, USA
E. Fallon, Ireland
E. Gorska, Poland
A. Gramopadhye, USA
W. Grudzewski, Poland
I. Hejduk, Poland
M. Helander, Singapore
A. Herman, Poland
S. Hsiang, USA
R. Lifshitz, Israel
A. Madni, USA
N. Marmaras, Greece
A. Matias, Philippines
P. Ordonez de Pablos, Spain
A. Polak-Sopinska, Poland
A. Sage, USA
C. Schlick, Germany
H. Schulze, Switzerland
M. Soares, Brazil
J. Stahre, Sweden
J. Wilson, UK
K. Zink, Germany

Technical Program Boards

SOCIAL AND ORGANIZATIONAL ERGONOMICS

P. Vink

peter.vink@tno.nl

J. Charytonowicz, Poland
P. Hasle, Denmark
D. Horn, USA
S.-L. Hwang, Taiwan
J. Kantola, Korea/Finland
B. Kleiner, USA
L. Pacholski, Poland
M. Robertson, USA
S. Saito, Japan
M. Smith, USA
H. Vanharanta, Finland
Z. Wisniewski, Poland
R. Yu, China

ERGONOMICS MODELING, USABILITY & SPECIAL POPULATIONS

M. Soares

marcelo2@nlink.com.br

B. Amaba USA
D. Feathers, USA
W. Friesdorf, Germany
S. Hignett, UK
W. Hwang, S. Korea
Y. Ji, Korea
B. Jiang, Taiwan
S. Landry, USA
Z. Li, China
A. Moallem, USA
F. Rebelo, Portugal
V. Rice, USA
C. Stephanidis, Greece
A. Yeo, Malaysia
W. Zhang, PR China

Conference Organization

GENERAL CONFERENCE CHAIR

Gavriel Salvendy

salvendy@purdue.edu

GENERAL PROGRAM CHAIR

Waldemar Karwowski

wkarwowski@ahfe.org

AHFE 2012 SCIENTIFIC AND TECHNICAL ADVISOR

Dylan Schmorrow

schmorrow@yahoo.com

COMMUNICATION & EXHIBITION CHAIR

Abbas Moallem

exhibits@ahfe.org

CONFERENCE ADMINISTRATOR

Laura Abell

aeiadmin@insightbb.com

STUDENT VOLUNTEER CHAIR

Tareq Ahram








volunteer@ahfe.org

ART DIRECTOR

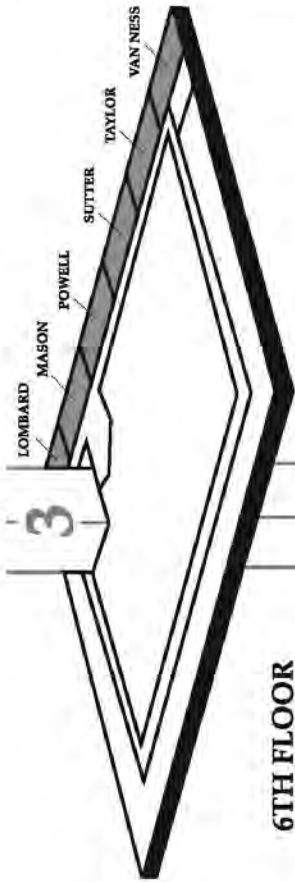
Branka Wedell

branka@branka.us

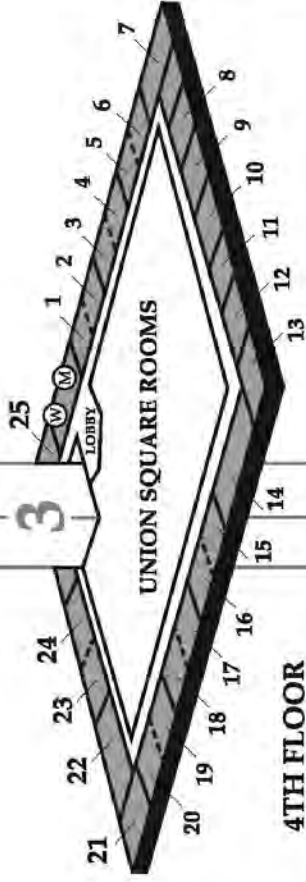
COLOR KEY

-  Escalators and Stairs to Ballroom Levels
-  Lobby Level Meeting Space
Golden Gate, Urban Tavern, Starbucks, FedEx Kinko's, Plaza A/B and Executive Conference Center (Seaciff, Presidio, Sunset, Marina)
-  Ballroom Level Meeting Space
Continental, Imperial, Yosemite, Franciscan, Executive Boardroom
-  Grand Ballroom Level
Grand Ballroom and Green Room
-  Union Square Rooms (4th Floor)
Rooms 1-25
-  Sixth Floor Meeting Rooms
Lombard, Mason, Powell, Sutter, Taylor, Van Ness
-  Accessible Facilities
Accessible restrooms are located on the following levels: L (Lobby), B (Ballroom), M (Grand Ballroom, Mezzanine)

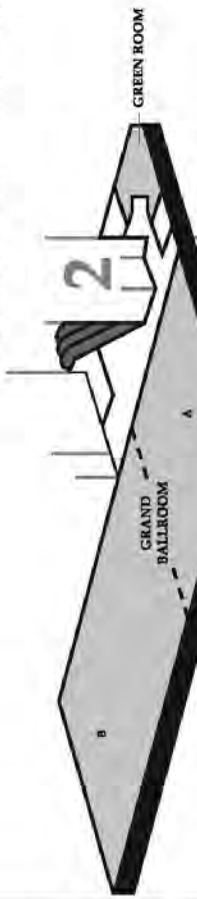
* Package Express located in Tower 3, Garage Level
 * Pool located in Tower 3, 16th Floor
 * Spa and Health Club located in Tower 1, Lower Level



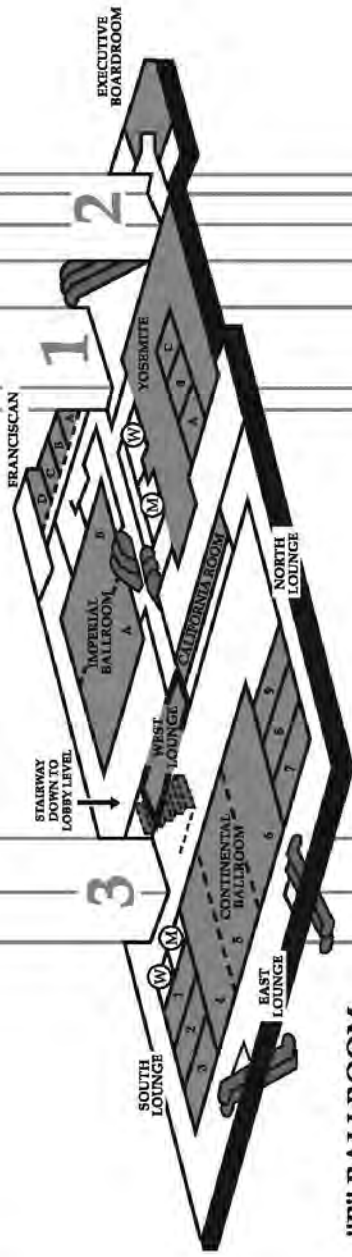
**6TH FLOOR
TOWER 3**



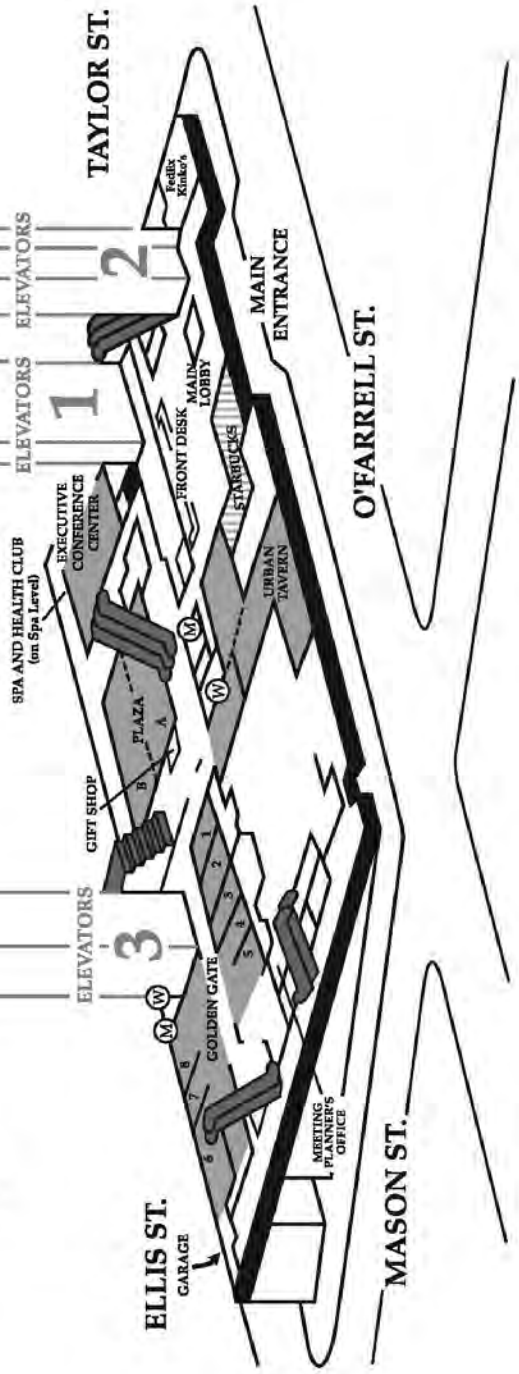
**4TH FLOOR
TOWER 3**



**GRAND BALLROOM
"GB" LEVEL**



"B" BALLROOM LEVEL



Conference Books

PUBLISHED BY CRC PRESS - TAYLOR & FRANCIS GROUP

Submitted full papers are included as chapters in a series of 14 books published by CRC Press - Taylor & Francis Group. Each edited book covers a specific subject area. Books can be ordered by visiting CRC Press - Taylor & Francis Group's website directly at: www.crcpress.com

- **ADVANCES IN THE HUMAN SIDE OF SERVICE ENGINEERING**
Jim Spohrer and Lou Freund
- **ADVANCES IN HUMAN ASPECTS OF HEALTHCARE**
Vince Duffy
- **ADVANCES IN APPLIED HUMAN MODELING AND SIMULATION**
Vince Duffy
- **ADVANCES IN DESIGN FOR CROSS-CULTURAL ACTIVITIES: PART I**
Dylan Schmorow and Denise Nicholson
- **ADVANCES IN DESIGN FOR CROSS-CULTURAL ACTIVITIES: PART II**
Denise Nicholson and Dylan Schmorow
- **ADVANCES IN HUMAN ASPECTS OF ROAD AND RAIL TRANSPORTATION**
Neville Stanton
- **ADVANCES IN HUMAN ASPECTS OF AVIATION**
Steve Landry
- **ADVANCES IN COGNITIVE ENGINEERING AND NEUROERGONOMICS**
Kay Stanney and Kelly S. Hale
- **ADVANCES IN SOCIAL AND ORGANIZATIONAL FACTORS**
Peter Vink
- **ADVANCES IN ERGONOMICS IN MANUFACTURING**
Stefan Trzcielinski and Waldemar Karwowski
- **ADVANCES IN PHYSICAL ERGONOMICS AND SAFETY**
Tareq Ahram and Waldemar Karwowski
- **ADVANCES IN USABILITY EVALUATION: PART I**
Marcelo Soares and Francisco Rebelo
- **ADVANCES IN USABILITY EVALUATION: PART II**
Francisco Rebelo and Marcelo Soares
- **ADVANCES IN AFFECTIVE AND PLEASURABLE DESIGN**
Yong Gu Ji

Links for the books can be found at: www.ahfe2012.org/books.html

A Special Issue of "Human Factors and Ergonomics in Manufacturing and Service Industries" (HFEM&SI), edited by Jim Spohrer and Lou Freund, is available to AHFE 2012 conference participants through August 26, 2012.

Please go to: www.ahfe2012.org for information about access to this Special Issue.

Conference Contacts

GENERAL CONFERENCE CHAIR

Gavriel Salvendy

salvendy@purdue.edu

GENERAL PROGRAM CHAIR

Waldemar Karwowski

wkarwowski@ahfe.org

SCIENTIFIC AND TECHNICAL ADVISOR

Dylan Schmorrow

schmorrow@yahoo.com

COMMUNICATION &

EXHIBITION CHAIR

Abbas Moallem

exhibits@ahfe.org

CONFERENCE ADMINISTRATOR

Laura Abell

aeiadmin@insightbb.com

AHFE 2012 Conference Administrator

P.O. Box 99712

Louisville, KY 40269, USA

STUDENT VOLUNTEER CHAIR

Tareq Ahram

volunteer@ahfe.org

ART DIRECTOR

Branka Wedell

branka@branka.us

2ND INTERNATIONAL CONFERENCE ON CROSS-CULTURAL DECISION MAKING: FOCUS 2012

Dylan Schmorrow, Co-Chair

schmorrow@yahoo.com

Denise Nicholson, Co-Chair

dnicholson@dsci.com

2ND INTERNATIONAL CONFERENCE ON HUMAN FACTORS AND ERGONOMICS IN HEALTHCARE

Vincent Duffy, Chair

duffy@purdue.edu

2ND INTERNATIONAL CONFERENCE ON APPLIED DIGITAL HUMAN MODELING

Vincent Duffy, Chair

duffy@purdue.edu

1ST INTERNATIONAL CONFERENCE ON AFFECTIVE AND PLEASURABLE DESIGN

Y. G. Ji, Chair

yongguji@gmail.com

1ST INTERNATIONAL CONFERENCE ON HUMAN SIDE OF SERVICE ENGINEERING

J. Spohrer, Co-Chair

spohrer@us.ibm.com

L. Freund, Co-Chair

louis.freund@sjsu.edu

1ST INTERNATIONAL CONFERENCE ON HUMAN FACTORS IN TRANSPORTATION

Road and Rail

N. Stanton, Co-Chair

n.stanton@soton.ac.uk

Aviation

S. Landry, Co-Chair

slandry@purdue.edu

AHFE International 2014

5th International Conference on Applied Human Factors and Ergonomics July 19-23, 2014
Jagiellonian University, Kraków, Poland

jointly with
**3rd International Conference
on Human Factors and Ergonomics in Healthcare**

**3rd International Conference
on Cross-Cultural Decision Making:
Focus 2014**

**3rd International Conference
on Applied Digital Human Modeling**

**2nd International Conference
on Human Side of Service Engineering**

**2nd International Conference
on Affective and Pleasurable Design**

**2nd International Conference
on Human Factors in Transportation**

**2nd International Conference
on Ergonomics in Design**

**2nd International Conference
on Science, Technology, Higher Education,
and Society in the Conceptual Age: STHESCA 2014**

and
**15th International Conference
on Human Aspects of Advanced
Manufacturing (HAAMAHA):
Manufacturing Enterprises
in a Digital World**

www.ahfe2014.org