

12th IFAC, IFIP, IFORS, IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems 2013

**Las Vegas, Nevada, USA
11 – 15 August 2013**

Editors:

S. Narayanan

**ISBN: 978-1-62993-176-0
ISSN: 1474-6670**

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2013) by Elsevier Limited
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the publisher, Elsevier Limited
at the address below.

Elsevier Limited
The Boulevard, Langford Lane
Kidlington OX5 1GB, United Kingdom

Phone: +44 (0)1865 844640
Fax: +44 (0)1865 843912

Email: eurobkinfo@elsevier.com

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Content List of 12th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems

Technical Program for Monday August 12, 2013

MAT1		Ballroom 3
Model Based Design (Regular Session)		
Chair: Masuda, Shiro		Tokyo Metropolitan Univ.
Co-Chair: Morel, Gerard		Univ. de Lorraine
12:30-12:54		MAT1.1
<i>A Quantitative Evaluation Method for Plant Operation in Alarm Management Based on a Queuing Model</i> , pp. 1-7.		
Kugemoto, Hidekazu		Sumitomo Chemical Co. Ltd.
Suenaga, Osamu		SUMITOMO CHEMICAL Co.,Ltd
Masuda, Shiro		Tokyo Metropolitan Univ.
12:54-13:18		MAT1.2
<i>Platform Constraints Supporting an Ambiguous Mapping Model</i> , pp. 8-15.		
Freund, Matthias		Tech. Univ. Dresden
Martin, Christopher		Tech. Univ. Dresden
Braune, Annerose		Tech. Univ. Dresden, Electrical Engineering
13:18-13:42		MAT1.3
<i>Event-Driven Notation and Hierarchical Automata Semantics for Incremental Task Modeling</i> , pp. 16-23.		
Kim, Rockwon		ETRI
Kwon, Hyuk Tae		KAIST
Yoon, Wan Chul		KAIST
13:42-14:06		MAT1.4
<i>SmartMote: A Model-Based Architecture for Context-Sensitive User Interfaces in Future Factories</i> , pp. 24-28.		
Seissler, Marc		German Res. Center for Artificial Intelligence (DFKI)
Breiner, Kai		Fraunhofer Inst. for Experimental Software Engineering IESE
Schmitt, Mathias		DFKI Kaiserslautern
Asmelash, Samuel		Univ. of Kaiserslautern
Koelsch, Johannes		Univ. of Kaiserslautern
14:06-14:30		MAT1.5
<i>Improving Physical-Physiological Interaction Requirements for Maintenance Enabling Systems Specification</i> , pp. 29-36.		
Lieber, Romain		Univ. Lorraine
Dupont, Jean-Marc		So-innov
Bouffaron, Fabien		Lorraine Univ.
Morel, Gerard		Univ. de Lorraine
MAT2		Sterling A & B
Usability Engineering (Regular Session)		
Chair: Stahre, Johan		Chalmers Univ. of Tech.
Co-Chair: Evans, Dakota		Wright State Univ.
12:30-12:54		MAT2.1
<i>A Model-Based Framework for an Adaptive User Interface in Supervisory Control</i> , pp. 37-43.		
Evans, Dakota		Wright State Univ.
Arasu, Vignesh		Wright State Univ.
Fendley, Mary		Wright State Univ.
12:54-13:18		MAT2.2
<i>The Safest Way to Scroll a List: A Usability Study Comparing Different Ways of Scrolling through Lists on Touch Screen Devices</i> , pp. 44-51.		
Breuninger, Jurek		Tech. Univ. München
Popova-Dlugosch, Severina		Tech. Univ. München
Bengler, Klaus		Tech. Univ. München - Inst. of Ergonomics
13:18-13:42		MAT2.3
<i>Is Walking Bad for Tablet Use or Is Tablet Use Bad for Walking? an Experimental Study on the Effect of Walking on Tablet Use</i> , pp. 52-57.		
Popova-Dlugosch, Severina		Tech. Univ. München
Breuninger, Jurek		Tech. Univ. München

Lemme, Benjamin	Tech. Univ. München
Bengler, Klaus	Tech. Univ. München - Inst. of Ergonomics
13:42-14:06	MAT2.4
<i>Ergonomic 6D Interaction Technologies for a Flexible and Transportable Robot System: A Comparison</i> , pp. 58-63.	
Herbst, Uwe	Tech. Univ. München
Rühl, Steffen Wilhelm	FZI Forschungszentrum Informatik
Hermann, Andreas	Res. Center for Information Tech. (FZI)
Xue, Zhixing	FZI Forschungszentrum Informatik
Bengler, Klaus	Tech. Univ. München - Inst. of Ergonomics
14:06-14:30	MAT2.5
<i>Using Usability to Measure Interaction in Final Assembly</i> , pp. 64-69.	
Mattsson, Sandra	Chalmers Univ. of Tech.
Bligård, Lars-Ola	Chalmers Univ. of Tech.
Fast-Berglund, Aasa	Chalmers Univ. of Tech.
Stahre, Johan	Chalmers Univ. of Tech.
MAT3	Platinum
A Vision of Human-Centered Production: Concepts and Technologies to Assist Human Workers in Future Factories (Invited Session)	
Chair: Gorecky, Dominic	German Res. Center for Artificial Intelligence (DFKI)
Co-Chair: Zuehlke, Detlef	German Res. Center for Artificial Intelligence
Organizer: Gorecky, Dominic	German Res. Center for Artificial Intelligence (DFKI)
Organizer: Mura, Katharina	German Res. Center for Artificial Intelligence
Organizer: Lezama, Thomas	Volvo Group Trucks Tech.
Organizer: Zuehlke, Detlef	German Res. Center for Artificial Intelligence
12:30-12:54	MAT3.1
<i>The Warning Glove: Wearable Computing Technology for Maintenance Assistance in IPS² (I)</i> , pp. 70-75.	
Schmuntzsch, Ulrike	Tech. Univ. Berlin
Feldhaus, Lea Henrike	Tech. Univ. Berlin
12:54-13:18	MAT3.2
<i>Virtual Systems to Train and Assist Control Applications in Future Factories (I)</i> , pp. 76-81.	
Riera, Bernard	Reims Univ.
Vigário, Bruno	Real Games
13:18-13:42	MAT3.3
<i>Improving Proactive Human Behavior in Supervision of Manufacturing Systems Using Chronicles (I)</i> , pp. 82-89.	
Caulier, Patrice	Univ. of Valenciennes
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis
13:42-14:06	MAT3.4
<i>A Vision on Training and Knowledge Sharing Applications in Future Factories (I)</i> , pp. 90-97.	
Gorecky, Dominic	German Res. Center for Artificial Intelligence (DFKI)
Mura, Katharina	German Res. Center for Artificial Intelligence
Arlt, Frank	Adam Opel AG
14:06-14:30	MAT3.5
<i>Augmented Reality for Human-Based Assembly: Using Product and Process Semantics (I)</i> , pp. 98-101.	
Rentzos, Loukas	Univ. of Patras
Papanastasiou, Stergios	Univ. of Patras
Papakostas, Nikolaos	Univ. of Patras
Chryssolouris, George	Univ. of Patras
14:06-14:30	MAT3.6
<i>Online Support for Shop-Floor Operators Using Body Movements Tracking (I)</i> , pp. 102-109.	
Provost, Julien	Chalmers Univ. of Tech.
Ebrahimi, Amir Hossein	Chalmers Univ. of Tech.
Akesson, Knut	Chalmers Univ. of Tech.
MBT1	Ballroom 3
Human Centric Sensing & Applications (Invited Session)	
Chair: Boddhu, Sanjay Kumar	Qbase LLC

Co-Chair: Williams, Robert	Tec^Edge ICC, AFRL
15:00-15:24	MBT1.1
<i>Towards Building a Generic Sensor Cloud for Human-Centric Sensing Applications (I)</i> , pp. 110-117.	
Boddhu, Sanjay Kumar	Qbase LLC
Bhupathiraju Venkata, Shiva Satya	Wright State Univ.
Williams, Robert	Tec^Edge ICC, AFRL
Wasser, Ed	Qbase LLC
McCartney, Matthew	Tec^Edge Discovery Lab.
West, James	AFRL Discovery Lab.
15:24-15:48	MBT1.2
<i>Towards a Smartphone Based Multimode Sensing (I)</i> , pp. 118-125.	
Bhupathiraju Venkata, Shiva Satya	Wright State Univ.
Williams, Robert	Tec^Edge ICC, AFRL
Wendel, Christen	Wright State Univ.
15:48-16:12	MBT1.3
<i>Towards an Extensible Virtual GEOINT Center (I)</i> , pp. 126-132.	
Sainathuni, Bhanuteja	Wright State Univ.
Williams, Robert	Tec^Edge ICC, AFRL
Leslie, Monica	Wright State Univ.
16:12-16:36	MBT1.4
<i>Augmenting Situational Awareness for First Responders Using Social Media As a Sensor (I)</i> , pp. 133-140.	
Boddhu, Sanjay Kumar	Qbase LLC
Dave, Rakesh	Qbase LLC
Williams, Robert	Tec^Edge ICC, AFRL
McCartney, Matthew	Tec^Edge Discovery Lab.
West, James	AFRL Discovery Lab.
16:36-17:00	MBT1.5
<i>Towards a Collaborative Smartphone Sensing Platform (I)</i> , pp. 141-148.	
Nadella, Srikanth	Wright State Univ.
Williams, Robert	Tec^Edge ICC, AFRL
West, James	AFRL Discovery Lab.
McCartney, Matthew	Tec^Edge Discovery Lab.
MBT2	Sterling A & B
Supervisory Control (Regular Session)	
Chair: Morais, Hugo	Tech. Univ. of Denmark (DTU)
Co-Chair: Stade, Melanie Janina Christine	Tech. Univ. Berlin
15:00-15:24	MBT2.1
<i>Sociotechnical Systems Resilience: A Dissonance Engineering Point of View</i> , pp. 149-156.	
Ruault, Jean-René	AFIS
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis
Kolski, Christophe	Univ. of Valenciennes
15:24-15:48	MBT2.2
<i>Forward-Looking: Measuring Attention Allocation for Evaluating Supervisory Control in a Complex and Dynamic Lab System</i> , pp. 157-164.	
Stade, Melanie Janina Christine	Tech. Univ. Berlin
von Bernstorff, Charlotte	Engineering Psychology / Cognitive Ergonomics, Humboldt Univ.
Nachtwei, Jens	Social and Organizational Psychology, Humboldt Univ. Berli
15:48-16:12	MBT2.3
<i>Supervision Functions - Secure Operation of Sustainable Power Systems</i> , pp. 165-172.	
Morais, Hugo	Tech. Univ. of Denmark (DTU)
Zhang, Xinxin	Tech. Univ. of Denmark
Lind, Morten	Tech. Univ. of Denmark
16:12-16:36	MBT2.4
<i>A Shared Control Driving Assistance System : Interest of Using a Driver Model in Both Lane Keeping and Obstacle Avoidance Situations</i> , pp. 173-178.	
Soualmi, Boussaad	LAMIH Valenciennes Univ.
Sentouh, Chouki	Univ. of Valenciennes

MBT3	Platinum
Decision Support Systems (Regular Session)	
Chair: Mebarki, Nasser	IUT de Nantes
Co-Chair: Stahre, Johan	Chalmers Univ. of Tech.
15:00-15:24	MBT3.1
<i>Could the Use of ICT Tools Be the Way to Increase Competitiveness in Swedish Industry?</i> , pp. 179-186.	
Karlsson, Malin	Chalmers Univ. of Tech.
Mattsson, Sandra	Chalmers Univ. of Tech.
Fast-Berglund, Aasa	Chalmers Univ. of Tech.
Stahre, Johan	Chalmers Univ. of Tech.
15:24-15:48	MBT3.2
<i>Consequence Reasoning in Multilevel Flow Modelling</i> , pp. 187-194.	
Zhang, Xinxin	Tech. Univ. of Denmark
Lind, Morten	Tech. Univ. of Denmark
Ravn, Ole	Tech. Univ. of Denmark
15:48-16:12	MBT3.3
<i>An Event Procedure Management to Support Decision-Makers in Prospective and Real-Time Project Management</i> , pp. 195-202.	
Robin, Vincent	Univ. of Bordeaux
Marmier, François	Univ. de Toulouse, Mines Albi, Centre Génie Industriel
Sperandio, Severine	Univ. of Bordeaux
Gourc, Didier	Univ. de Toulouse, Mines Albi, Centre Génie Industriel
16:12-16:36	MBT3.4
<i>Driving Assist System: Shared Haptic Human System Interaction</i> , pp. 203-210.	
Takada, Yuji	Nissan Motor Co.,Ltd.
Boer, Erwin	Entropy Control, Inc.
Sawaragi, Tetsuo	Kyoto Univ.
16:36-17:00	MBT3.5
<i>Evaluation of a New Human-Machine Decision Support System for Group Scheduling</i> , pp. 211-217.	
Mebarki, Nasser	IUT de Nantes
Cardin, Olivier	IRCCyN
Guérin, Clément	Univ. Bretagne Sud, Lab. Lab. des Sciences et

Technical Program for Tuesday August 13, 2013

TAT1	Ballroom 3
Decision Support Systems II (Regular Session)	
Chair: Parker, Jason	Wright State Res. Inst.
Co-Chair: Söffker, Dirk	Univ. of Duisburg-Essen
12:30-12:54	TAT1.1
<i>Know Your Options - Interfacing Consequences and Forecasted Performance Analysis: A Concept for the Novel Type of Information System KYO-ICPA</i> , pp. 218-225.	
Söffker, Dirk	Univ. of Duisburg-Essen
Wang, Jiao	Chair of Dynamics and Control, Univ. of Duisburg-Essen
Schiffer, Sandra	Chair of Dynamics and Control, Univ. of Duisburg-Essen
Marx, Matthias	Chair of Dynamics and Control, Univ. of Duisburg-Essen
Fu, Xingguang	Chair of Dynamics and Control (Lehrstuhl SRS), Univ. of Du
12:54-13:18	TAT1.2
<i>Comparing Image Guidance Systems to Improve Complex Navigation in Medicine</i> , pp. 226-231.	
Cuijpers, Cecile Fleur	Industrial Design Engineering, Delft Univ. of Tech.
Klink, Camiel	Department of Interventional Radiology, Erasmus Medical Center
Stappers, Pieter Jan	Industrial Design Engineering, Delft Univ. of Tech.
Freudenthal, Adinda	Industrial Design Engineering, Delft Univ. of Tech.
13:18-13:42	TAT1.3
<i>Real-Time Risk Estimation for Better Situational Awareness</i> , pp. 232-239.	
Blaauwgeers, Edwin	Vitens
Dubois, Lieven K.	URReason
Ryckaert, Leen	Private
13:42-14:06	TAT1.4
<i>Benchmarking Medical Image Databases</i> , pp. 240-243.	
Kidambi, Phani	Wright State Univ.
Sherwood, Matthew	Wright State Res. Inst.
Parker, Jason	Wright State Res. Inst.
DeVelvis, Ralph	Wright State Res. Inst.
14:06-14:30	TAT1.5
<i>Toward a Cooperative Action-Driven Decision Model of an Airport Security Process</i> , pp. 244-248.	
Crévits, Igor	Univ. of Valenciennes
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis
Labour, Michel	Univ. od Valenciennes
Marechal, Ludovic	STAC
TAT2	Sterling A & B
Assistive Technology and Rehabilitation (Regular Session)	
Chair: Nomm, Sven	Inst. of Cybernetics at TUT
Co-Chair: Yano, Ken'ichi	Mie Univ.
12:30-12:54	TAT2.1
<i>Monitoring of the Human Motor Functions Rehabilitation by Neural Networks Based System with Kinect Sensor</i> , pp. 249-253.	
Nomm, Sven	Inst. of Cybernetics at TUT
Buhhalko, Kirill	Tallinn Univ. of Tech.
12:54-13:18	TAT2.2
<i>The Standardized Generation and the Robust Filtering of the Command As Tools of Optimization of the Mental Workload of the Systems Engineer</i> , pp. 254-259.	
Coupat, Raphaël	Univ. of Reims
Meslay, Marc	SNCF (National Society of French Railways)
Burette, Marc-Axel	SNCF (National Society of French Railways)
Riera, Bernard	Reims Univ.
Philippot, Alexandre	Univ. de Reims Champagne Ardenne
Annebicque, David	Univ. of Reims - URCA - IUT de Troyes
13:18-13:42	TAT2.3
<i>Drawing Assist System Considering Nonperiodic Involuntary Movements</i> , pp. 260-265.	
Nakao, Tomoyuki	Mie Univ.

Sakamoto, Ryota	Mie Univ.
Yano, Ken'ichi	Mie Univ.
13:42-14:06	TAT2.4
<i>Community-Based Co-Design for Informal Care: Bridging the Gap between Technology and Context</i> , pp. 266-273.	
Groeneveld, Bob Sander	Delft Univ. of Tech.
Boess, Stella U	Delft Univ. of Tech.
Freudenthal, Adinda	Industrial Design Engineering, Delft Univ. of Tech.
14:06-14:30	TAT2.5
<i>A Multiple Correspondence Analysis and Fuzzy Set Based Approach for the Analysis of Pathology Drivers from Healthy Drivers. a Case Study with the Steering Wheel Control</i> , pp. 274-280.	
Loslever, Pierre	Univ. de Valenciennes et du Hainaut-Cambrésis
Schiro, Jessica	LAMIH - UVHC
Gabrielli, Francois	UVHC Univ. Lille Nord de France
Pudlo, Philippe	Univ. de Valenciennes et du Hainaut Cambrésis
TBT1	Ballroom 3
Cognitive System - Human Machine Systems (Regular Session)	
Chair: Yoon, Wan Chul	KAIST
Co-Chair: Hartmann, Kim	Otto-von-Guericke Univ. Magdeburg
15:00-15:24	TBT1.1
<i>Spatial Orientation in Interventional Radiology</i> , pp. 281-287.	
Varga, Edit	Delft Univ. of Tech.
Klink, Camiel	Department of Interventional Radiology, Erasmus Medical Center
Moelker, Adriaan	Erasmus Medical Center
Freudenthal, Adinda	Industrial Design Engineering, Delft Univ. of Tech.
15:24-15:48	TBT1.2
<i>Emotion Detection in HCI: From Speech Features to Emotion Space</i> , pp. 288-295.	
Hartmann, Kim	Otto-von-Guericke Univ. Magdeburg
Siegert, Ingo	Otto von Guericke Univ. Magdeburg
Philippou-Hübner, David	OvG Univ. Magdeburg
Wendemuth, Andreas	Otto von Guericke Univ. Magdeburg
15:48-16:12	TBT1.3
<i>Alternative Action Plan Generator (A2PG) for Elaboration an Anticipated Feedback</i> , pp. 296-303.	
Ben Yahia, Wided	Univ. of Valenciennes and IRSTEA
Tricot, Nicolas	IRSTEA
Polet, Philippe	Univ. of Valenciennes
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis
16:12-16:36	TBT1.4
<i>Toward a Reverse Comic Strip Based Approach to Analyse Human Knowledge</i> , pp. 304-309.	
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis
16:36-17:00	TBT1.5
<i>Applying Activity System Model to Human-Related Accident Analysis</i> , pp. 310-316.	
Yoon, Young Sik	Korea Inst. of Nuclear Safety
Ham, Dong-Han	Dep. of Industrial Eng., Chonnam National Univ.
Yoon, Wan Chul	KAIST
TBT2	Sterling A & B
Human Computer Interaction (Regular Session)	
Chair: Dietsch, Sandra	German Aerospace Center, Inst. of Transportation Systems
Co-Chair: Sherwood, Matthew	Wright State Res. Inst.
15:00-15:24	TBT2.1
<i>Design and Implementation of an Integrated, Platform Independent 3D Visualization of Complex Process Data</i> , pp. 317-323.	
Mayer, Felix	Tech. Univ. München, Inst. of Automation and Info
Pantfoerder, Dorothea	Tech. Univ. München
Vogel-Heuser, Birgit	Tech. Univ. of Munich
15:24-15:48	TBT2.2
<i>Attention Allocation for Multi-Modal Perception of Human-Friendly Robot Partners</i> , pp. 324-329.	

Toda, Yuichiro
Kubota, Naoyuki

Tokyo Metropolitan Univ.
Tokyo Metropolitan Univ.

15:48-16:12

TBT2.3

Rail Human Factors: Human-Centred Design for Railway Systems, pp. 330-332.

Naumann, Anja
Gripenkoven, Jan
Gieseemann, Sonja
Stein, Jenny
Dietsch, Sandra

German Aerospace Center
German Aerospace Center, Inst. of Transportation Systems
German Aerospace Center (DLR)
German Aerospace Center, Inst. of Transportation Systems
German Aerospace Center, Inst. of Transportation Systems

16:12-16:36

TBT2.4

User-Oriented System for Smart City Approaches, pp. 333-340.

David, Bertrand

Ec. Centrale de Lyon, LIRIS Lab.

16:36-17:00

TBT2.5

A Real-Time Functional Magnetic Resonance Imaging (fMRI) Neurofeedback System, pp. 341-348.

Parker, Jason
Sherwood, Matthew
Kane, Jessica

Wright State Res. Inst.
Wright State Res. Inst.
Wright State Res. Inst.

Technical Program for Wednesday August 14, 2013

WAT1		Ballroom 3
Human Performance and Interaction in Virtual Environments (Invited Session)		
Chair: Narakesari, Shruti		Wright State Univ.
Co-Chair: Cowgill, Jeffrey		Wright State Univ.
Organizer: Narakesari, Shruti		Wright State Univ.
Organizer: Cowgill, Jeffrey		Wright State Univ.
Organizer: Wischgoll, Thomas		Wright State Univ.
Organizer: Rizzardo, Caitlan		Wright State Univ.
12:30-12:54		WAT1.1
<i>Touch-Enabled Input Devices for Controlling Virtual Environments (I)</i> , pp. 349-356.		
Edmiston, Taylor		Wright State Univ.
Golden, Adam		Wright State Univ.
Meily, Adam		Wright State Univ.
Wischgoll, Thomas		Wright State Univ.
12:54-13:18		WAT1.2
<i>The VERITAS Facility: A Virtual Environment Platform for Human Performance Research (I)</i> , pp. 357-362.		
Cowgill, Jeffrey		Wright State Univ.
Gilkey, Robert		Wright State Univ.
Simpson, Brian		Air Force Res. Lab.
13:18-13:42		WAT1.3
<i>Developing Advanced GPS Navigational System Designs: Sufficient Simulations (I)</i> , pp. 363-367.		
Rizzardo, Caitlan		Wright State Univ.
Colle, Herbert		Wright State Univ.
13:42-14:06		WAT1.4
<i>A Virtual World Application to Assess and Aid Human Machine Collaboration (I)</i> , pp. 368-372.		
Narakesari, Shruti		Wright State Univ.
Alakke, Ganesh		Wright State Univ.
Shebilske, Wayne		Wright State Univ.
WAT2		Sterling A & B
Risk Management in Life Critical Systems (Invited Session)		
Chair: Millot, Patrick		Univ. of Valenciennes
Co-Chair: Boy, Guy		Florida Inst. of Tech.
12:30-12:54		WAT2.1
<i>Design and Evaluation of an Exploration Assistant for Human Deep Space Risk Mitigation (I)</i> , pp. 373-380.		
Platt, Donald		Florida Inst. of Tech.
Millot, Patrick		Univ. of Valenciennes
Boy, Guy		Florida Inst. of Tech.
12:54-13:18		WAT2.2
<i>Operator Behavior Modeling: Unexpected Situations Management (I)</i> , pp. 381-386.		
Rachedi, Nedjemi Djameleddine		Univ. of Valenciennes
Berdjag, Denis		Univ. of Valenciennes
Vanderhaegen, Frédéric		Univ. of Valenciennes and Hainaut-Cambrésis
13:18-13:42		WAT2.3
<i>A Common Work Space for a Mutual Enrichment of Human-Machine Cooperation and Team-Situation Awareness (I)</i> , pp. 387-394.		
Millot, Patrick		Univ. of Valenciennes
Pacaux-Lemoine, Marie-Pierre		Univ. of Valenciennes
13:42-14:06		WAT2.4
<i>A Dissonance Management Model for Risk Analysis (I)</i> , pp. 395-401.		
Vanderhaegen, Frédéric		Univ. of Valenciennes and Hainaut-Cambrésis
14:06-14:30		WAT2.5
<i>Dealing with the Unexpected in Our Complex Socio-Technical World (I)</i> , pp. 402-409.		
Boy, Guy		Florida Inst. of Tech.

WAT3		Platinum
Cognitive System Engineering (Regular Session)		
Chair: Fendley, Mary		Wright State Univ.
Co-Chair: Horiguchi, Yukio		Kyoto Univ.
12:30-12:54		WAT3.1
<i>The Application of Cognitive Interface Design Methodology for a Digitalized Main Control Room in Nuclear Power Plant</i> , pp. 410-414.		
Cha, Woo Chang		Kumoh National Inst. of Tech.
Yoon, Wan Chul		KAIST
12:54-13:18		WAT3.2
<i>Analysis of Longitudinal Driving Behaviors During Car Following Situation by Driver's EEG Using PARAFAC</i> , pp. 415-422.		
Ikenishi, Toshihito		Tokyo Univ. of Agriculture and Tech.
Kamada, Takayoshi		Tokyo Univ. of Agriculture and Tech.
Nagai, Masao		Tokyo Univ. of Agriculture and Tech.
13:18-13:42		WAT3.3
<i>Visualization of Control Structure in Human-Automation System Based on Cognitive Work Analysis</i> , pp. 423-430.		
Horiguchi, Yukio		Kyoto Univ.
Burns, Catherine		Univ. of Waterloo
Nakanishi, Hiroaki		Kyoto Univ.
Sawaragi, Tetsuo		Kyoto Univ.
13:42-14:06		WAT3.4
<i>Modeling Analyst Process of Transforming Data into Understanding</i> , pp. 431-434.		
Hendrickson, Karl		Wright State Univ.
Fendley, Mary		Wright State Univ.
Kuperman, Gilbert		711 HPW/RHXM
14:06-14:30		WAT3.5
<i>Task Allocation in Production Systems - Measuring and Analysing Levels of Automation</i> , pp. 435-441.		
Fast-Berglund, Aasa		Chalmers Univ. of Tech.
Stahre, Johan		Chalmers Univ. of Tech.
WBT1		Ballroom 3
Adaptive Aiding (Regular Session)		
Chair: Sawaragi, Tetsuo		Kyoto Univ.
Co-Chair: Hasselberg, Andreas		German Aerospace Center (DLR)
15:00-15:24		WBT1.1
<i>A Human Cognitive Performance Measure Based on Available Options for Adaptive Aiding</i> , pp. 442-449.		
Hasselberg, Andreas		German Aerospace Center (DLR)
Söffker, Dirk		Univ. of Duisburg-Essen
15:24-15:48		WBT1.2
<i>Towards Seamless Mobility: Individual Mobility Profiles to Ease the Use of Shared Vehicles</i> , pp. 450-454.		
Kuemmerling, Moritz		German Res. Center for Artificial Intelligence (DFKI)
Heilmann, Christian		Univ. of Kaiserslautern
Meixner, Gerrit		Heilbronn Univ.
15:48-16:12		WBT1.3
<i>Multiple Correspondence Analysis of Fuzzyfied Task Performance and Psycho-Physiological Test Data: Use in Real Car Following Situations</i> , pp. 455-460.		
Dubart, D.		Renault
Loslever, Pierre		Univ. de Valenciennes et du Hainaut-Cambrésis
Popieul, Jean-Christophe		Univ. of Valenciennes/LAMIH
Moessinger, M.		Renault
16:12-16:36		WBT1.4
<i>An Empirical Investigation of the Development of Driver's Mental Model of a Lane Departure Warning System While Driving</i> , pp. 461-468.		
Aziz, Tabinda		Kyoto Univ.
Horiguchi, Yukio		Kyoto Univ.
Sawaragi, Tetsuo		Kyoto Univ.
16:36-17:00		WBT1.5
<i>Communication Technologies for the Improvement of Marine Transportation Operations</i> , pp. 469-474.		
Jakovlev, Sergej		Klaipeda Univ.

Voznak, Miroslav
 Andziulis, Arunas
 Kurmis, Mindaugas

VSU - Tech. Univ. of Ostrava, Department of Telecommuni
 Klaipeda Univ.
 Klaipeda Univ. Department of Informatics engineering

WBT2		Sterling A & B
Usability Engineering II (Regular Session)		
Chair: Enjalbert, Simon	Univ. of Valenciennes and Hainaut-Cambrésis	
Co-Chair: Abhyankar, Kushal	Wright State Univ.	
15:00-15:24		WBT2.1
<i>Development and Validation of a Work Efficiency Test Using Locomotive and Car Passenger</i> , pp. 475-482.		
Song, Yongsoo	Korea Railroad Res. Inst.	
Min, Se Dong	Soonchunhyang Univ.	
15:24-15:48		WBT2.2
<i>The Usability Engineering Repository UsER for the Development of Task and Event-Based Human-Machine-Interfaces</i> , pp. 483-490.		
Herczeg, Michael	Univ. of Luebeck	
Kammler, Marc	Univ. of Luebeck, IMIS	
Mentler, Tilo	Univ. of Luebeck, IMIS	
Roenspiess, Amelie	Univ. of Luebeck, IMIS	
15:48-16:12		WBT2.3
<i>Model Based Technology Integration in Engineering Education with Deep Dive Ethnographic Research</i> , pp. 491-496.		
Abhyankar, Kushal	Wright State Univ.	
Ganapathy, Subhashini	Wright State Univ.	
16:12-16:36		WBT2.4
<i>A User-Oriented Test Environment Based on User-Interface Evaluation Graphical Controls</i> , pp. 497-504.		
Charfi, Selem	LAMIH CNRS UMR 8201, UVHC	
Trabelsi, Abdelwahab	Univ. of Sfax	
Ezzedine, Houcine	LAMIH CNRS UMR 8201, UVHC	
Kolski, Christophe	Univ. of Valenciennes	
16:36-17:00		WBT2.5
<i>Validation of a Unified Model of Driver Behaviour for Train Domain</i> , pp. 505-512.		
Enjalbert, Simon	Univ. of Valenciennes and Hainaut-Cambrésis	
Ouedraogo, Kiswendsida Abel	Univ. of Valenciennes and Hainaut-Cambrésis	
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis	
WBT3		Platinum
Human Machine Systems (Regular Session)		
Chair: Rothrock, Ling	Industrial and Manufacturing Engineering, The Pennsylvania State Univ.	
Co-Chair: Schmitt, Mathias	DFKI Kaiserslautern	
15:00-15:24		WBT3.1
<i>Human Stability: Toward Multi-Level Control of Human Behaviour</i> , pp. 513-519.		
Richard, Philippe	LAMIH - Univ. of Valenciennes	
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis	
Benard, Vincent	IFSTTAR	
Caulier, Patrice	Univ. of Valenciennes	
15:24-15:48		WBT3.2
<i>Toward a Distributed Case-Based Reasoning for Human-Machine State Diagnosis: Application to Railway Driver State Analysis</i> , pp. 520-525.		
Polet, Philippe	Univ. of Valenciennes	
Berdjag, Denis	Univ. of Valenciennes	
Vanderhaegen, Frédéric	Univ. of Valenciennes and Hainaut-Cambrésis	
15:48-16:12		WBT3.3
<i>Personalized Interactive Storyboarding Utilizing Content Based Multimedia Retrieval</i> , pp. 526-532.		
Kidambi, Phani	Wright State Univ.	
Narayanan, S	Wright State Univ.	
16:12-16:36		WBT3.4
<i>On Man-Machine Interaction with Qualitative Data</i> , pp. 533-535.		

16:36-17:00

WBT3.5

Mobile Interaction Technologies in the Factory of the Future, pp. 536-542.

Schmitt, Mathias

DFKI Kaiserslautern

Meixner, Gerrit

Heilbronn Univ.

Gorecky, Dominic

German Res. Center for Artificial Intelligence (DFKI)

Seissler, Marc

German Res. Center for Artificial Intelligence (DFKI)

Loskyll, Matthias

German Res. Center for Artificial Intelligence (DFKI)

16:36-17:00

WBT3.6

Misalignment Effect Function for Oblique Rotation of a Teleoperations Viewpoint: Counter-Intuitive Predictions and Implications for the Basis of Fitts' Law, pp. 543-548.

Ellis, Stephen Roger

NASA Ames Res. Center

Adelstein, Bernard Dov

NASA Ames Res. Center

Yeom, Kiwon

NASA Ames Res. Center