

# IADIS International Interfaces and Human Computer Interaction 2011

## CONFERENCE PROGRAM

**Sunday 24<sup>th</sup>, July 2011**

**08:30-19:00 Welcome Desk**

**09:45-10:00 Session O – Opening Session  
(Room Auditorium)**

**OPENING SESSION**

*Prof. Katherine Blashki and Prof. Pedro Isaías*

**10:00-11:00 Session KL1 – Keynote Presentation  
(Room Auditorium)**

**INTERACTING WITH INFORMATION: CHALLENGES IN HUMAN – COMPUTER INTERACTION AND INFORMATION RETRIEVAL**

*By Professor Andreas Holzinger, Head of Research Unit Human-Computer Interaction, Institute of Medical Informatics, Medical University Graz, Austria*

**11:00-11:30 Coffee Break**

**11:30-13:10 Session FP 24.1  
Eliciting User Requirements  
(Room Auditorium)**

**Chair: Andreas Holzinger**

**A COMPARISON OF IN-LAB AND SYNCHRONOUS REMOTE USABILITY TESTING METHODS: EFFECTIVENESS PERSPECTIVE (F050)**

*Obead Alhadreti, Pam Mayhew and Majed Alshamari*

**A SEMIOTIC PERSPECTIVE TO WEB USABILITY: AN EMPIRICAL CASE STUDY (F053)**

*Muhammad Nazrul Islam*

**DEVELOPING USER INTERFACES FOR MONITORING SYSTEMS IN BUILDINGS (F155)**

*Szu-Cheng Chien, Robert Zach and Ardeshir Mahdavi*

**READING AS PLAYING: A NEW TUTORING MULTIMEDIA TOOL FOR CHILDREN WITH TEXT COMPREHENSION PROBLEMS (F061)**

*Michela Carlini, Tania Di Mascio and Rosella Gennari*

**13:00-14:30 Lunch Break**

**14:30-16:45 Session FSP 24.2**

**Emotional Design issues / methods / experiences for novel interfaces // HCI and Design education**

**(Room Auditorium)**

**Chair: Majed Alshamari**

**PERSONIFICATION OF TOPICS WITH CONVERSATIONAL AGENTS (F110)**

*Jean-Paul Sansonnet, François Bouchet and William A. Turner*

**EVALUATION OF GESTURAL INTERACTION WITH AND WITHOUT VOICE COMMANDS (F137)**

*Joana Neca and Carlos Duarte*

**MULTIMODAL INTERACTION FOR USERS WITH AUTISM IN A 3D EDUCATIONAL ENVIRONMENT (F142)**

*Alessandro Trivilini, Licia Sbattella and Roberto Tedesco*

**TESTING NEW SCENARIOS FOR DISTANCE LEARNING, BASED ON THE INTRODUCTION OF NEW DEVICES (S095)**

*Victor Ximenes and Gabriel Pontual*

**USING VITAL-SENSOR IN TRACKING USER EMOTION AS A CONTEXTUAL INPUT FOR MUSIC RECOMMENDATION SYSTEM (S079)**

*Nguyen Thuy Le, Jin Nakazawa, Kazunori Takashio and Hideyuki Tokuda*

**CULTURA: A TWO CULTURAL MODEL FOR UNDERSTANDING HUMAN BEHAVIOR ON THE INTERNET (S124)**

*Santosh Kumar Kalwar*

**ENHANCING ZONE OF PRODUCT DESIGN WITH WIKI PRACTICE (S098)**

*Nikolay Yaremko*

**14:30-16:25 Session FRP 24.3**

**Supporting user populations with Physical Disabilities // Supporting user populations with Intellectual Disabilities  
(Room Space 100)**

**Chair: Oliver Burmeister**

**INTERACTIVE ART SYSTEM FOR MULTIPLE USERS BASED ON TRACKING HAND MOVEMENTS (F054)**

*Byunghyung Kim, Danna Gurari, Hough O'Donnell, Margrit Betke*

**FEATURE EXTRACTION BASED ON EMPIRICAL MODE DECOMPOSITION AND BAND POWER APPROACHES FOR MOTOR IMAGERY TASKS CLASSIFICATION (F132)**

*Dalila Trad, Tarik Al-ani, Eric Monacelli, Stéphane Delaplace and Mohamed Jemni*

**TOWARDS AN ONTOLOGY-BASED COMMUNITY OF AGENTS FOR PERSONALISATION OF SERVICES FOR DISABLED STUDENTS (F138)**

*Julius T. Nganji and Mike Brayshaw*

**SUPPORTING DOWN PEOPLE IN CUTTING OPERATIONS THROUGH HAPTIC TECHNOLOGY (F187)**

*Mario Covarrubias, Monica Bordegoni and Umberto Cugini*

**PLAYING LIKE A GIRL: GENDERED GAMING AND GIRL GAMERS (R152)**

*Pirita Ihamäki*

**16:30-17:00 Coffee Break**

17:00-19:10 Session FSP 24.4

Usability

(Room Auditorium)

Chair: Katherine Blashki

**INTERACTION ERROR BASED VIEWPOINT ESTIMATION FOR CONTINUOUS PARALLAX ERROR CORRECTION ON INTERACTIVE SCREENS (F186)**

*Bastian Migge, Andreas Kunz and Tim Schmidt*

**EXTENDING A USER OBSERVATION PROTOCOL TO ACCOUNT FOR PSYCHOLOGICAL TRAITS (F146)**

*Yuska P. C. Aguiar, Maria de F.O. Vieira, Edith Galy, Jean-Marc Mercantini and Charles Santoni*

**GENERAL AND AUTOMATIC EFFICIENCY TESTING FRAMEWORK FOR JAVA (F162)**

*Narin Işık and Kerem Önal*

**LAYOUT TEMPLATES - LET USERS RULE USER INTERFACES (F130)**

*Florian Haag, Christiane Taras and Thomas Ertl*

**VISUALIZING THE IMPACT OF CONTENT-BASED SIMILARITY AND SPATIAL DISTANCE ON BOOK RECOMMENDATIONS (S141)**

*Sönke Knoch and Alexander Kröner*

**A FACIAL ANIMATION FRAMEWORK WITH EMOTIVE/EXPRESSIVE CAPABILITIES (S145)**

*G.Riccardo Leone and Piero Cosi*

17:00-19:00 Session FSRP 24.5

User studies and fieldwork

(Room Space 100)

Chair: Panagiotis Germanakos

**INTERPRETATION OF AMBIGUOUS IMAGES INSPECTED BY THE STICKGRIP DEVICE (F159)**

*Tatiana V. Evreinova, Grigori Evreinov and Roope Raisamo*

**A SYSTEMATIC EVALUATION OF MOBILE SPREADSHEET APPS (F085)**

*Derek Flood, Rachel Harrison, Clare Martin and Kevin McDaid*

**TOWARDS EVALUATING HUMAN-INSTRUCTABLE SOFTWARE AGENTS (F118)**

*Robert D. Grant, David DeAngelis, Dan Luu, and Dewayne E. Perry and Kathy Ryall*

**TOUCH-BASED INTERACTION: A PROPOSAL FOR AAL (S033)**

*Bravo, J., Hervás, R. and Fontecha, J.*

**INTERACTIVE SONIFICATION OF MEDICAL DATA (S069)**

*Stefan Kovar and Margit Pohl*

**SENSOR-BASED ESTIMATION OF PSYCHOLOGICAL STATES (R042)**

*Javier Eiguez Guevara and Hiroyuki Umemuro*

**Monday 25<sup>th</sup>, July 2011**

08:30-16:00 Welcome Desk

09:00-10:55 Session FSP 25.1

Usability

(Room Space 100)

Chair: Suzanne Kieffer

**USABILITY EVALUATION METHOD BY INTEGRATION VARIOUS TYPES OF EVALUATION (F093)**

*Junko Shirogane, Yuichiro Yashita, Hajime Iwata and Yoshiaki Fukazawa*

**TABLETOP USER INTERFACE FOR NAVIGATION IN VIRTUAL ENVIRONMENTS (F094)**

*Tatu Harviainen, Hanna Koskinen and Jari Laarni*

**EXPOSING REPETITIVE SCANNING IN EYE MOVEMENT SEQUENCES WITH T-PATTERN DETECTION (F096)**

*Marcus Mast and Michael Burmester*

**A USABILITY STUDY OF MICROSOFT OFFICE 2007 AND MICROSOFT OFFICE 2003 (F117)**

*Edgard Velez and Nestor J. Rodriguez*

**SELECT'N'LABEL – DYNAMIC BOUNDARY LABEL PLACEMENT FOR MOBILE TOUCH DEVICES (S184)**

*Dominik Magin and Daniel Steffen*

09:00-09:50 Session FSP 25.2

Creativity Support Systems

(Room Space 4B)

Chair: Patrick Patterson

**DESIGN CREATION SYSTEM BASED ON DESIGNER'S KANSEI AND CONSUMER'S PREFERENCE (F154)**

*Hideki Aoyama and Kentaro Ohshima*

**COUPLED MOBILE DISPLAYS FOR CREATIVITY**

**TECHNIQUE BASED PROBLEM SOLVING PROCESSES IN TABLETOP ENVIRONMENTS (F177)**

*Marc René Frieß and Martin Kleinhans*

10:00-11:00 Poster Session

(Room Space 4B)

Chair: Katherine Blashki

**NONVERBAL COMMUNICATION TOOL VIA USE OF PERCUSSION PERFORMANCES AND ITS EFFECTIVENESS (P167)**

*Yuji Kawase and Yoshio Nakatani*

**DESIGN OF A FOLDING WORKBENCH AND A VIRTUAL REALITY SIMULATION SYSTEM USING IT (P189)**

*Hyun Suk Lee, Bon-Wook Gu, Jongwon Back, and Tae-Jeong Jang*

**A STUDY ON CATEGORY TYPE OF ONLINE SHOPPING MALL (P183)**

*Kristen Koeun Nam, Kyle Kim and Sungmin Hong*

**VR INTERACTION TOOLS FOR MOTOR IMPAIRMENT SIMULATION (P185)**

*Marco Fontana and Marcello Carrozzino*

**STUDY ON DICHROMATISM'S COLOR APPEARANCE TO LED LIGHTS (P035)**

*Mamoru Takamatsu, Yoshio Nakashima, Hiroki Fujita and Kazuhiro Sawa*

**COLOR SENSITIVITY TO LED LIGHTS IN THE ELDERLY (P036)**

*Yoshio Nakashima, Mamoru Takamatsu, Hiroki Fujita, Kazuo Sendai and Santarou Nakajima*

**AN INTRODUCTORY STUDY ON PLACEMENT METHOD OF BACKGROUND MUSIC FOR SHOPPING WEBSITE (P038)**

*Chien-Jung Lai, Wen-Ming Wu, Ya-Ling Wu and You-Shyang Chen*

**PETRI NET BASED HCI SPECIFICATION AND CONTROL FOR VIRTUAL MAINTENANCE TRAINING (P040)**

*Wen-Yang Feng, Chin-Jung Chao, Feng-Yi Tseng and Tien-Lung Sun*

**VISUAL AND MANUAL PERFORMANCE OF HUMAN COMPUTER INTERACTION IN VIRTUAL ENVIRONMENT (P045)**

*Chiuhsiang Joe Lin, Hung-Jen Chen and Tien-Lung Sun*

**HUMAN PULSE WAVE MEASUREMENT BY MEMS-ECM SENSOR (P051)**

*Shusaku Nomura, Masako Hasegawa-Ohira, Yasushi Hanasaka, Tadashi Ishiguro and Hiroshi Ogawa*

**EVALUATION OF WCAG 2.0 SUCCESS CRITERIA ON LUMINANCE CONTRAST RATIO BASED ON AGE-RELATED SPECTRAL EFFICACY (P073)**

*Tetsuya Fujita, Yoshio Nakashima and Mamoru Takamatsu*

**DEVELOPMENT OF RESIDENTIAL MONITORING SYSTEM BY MEASURING FIXTURES ACCELERATION (P102)**

*Macky Kato, Yoshie Shimodaira and Takeshi Sato*

**ON THE FACTORS OF THE WEBPAGE NAVIGATIONAL PERFORMANCE (S046)**

*Wen-Te Chang, Kuo-Chen Huang and Chan-Li Lin*

**14:30-15:30 Session KL2 – Keynote Presentation (Room Space 100)**

**INTERACTIVE NUMBERS - A GRAND CHALLENGE**

*Dr. Harold Thimbleby, Professor of Computer Science at Swansea University, Wales, United Kingdom*

**15:45 Tour and Conference Dinner**

**Tuesday 26<sup>th</sup>, July 2011**

**11:00-11:30 Coffee Break**

**11:30-13:05 Session FSP 25.3**

**Eliciting User Requirements (Room Space One)**

*Chair: Grigori Evreinov*

**USING GOOGLE ANALYTICS TO EVALUATE IMPROVEMENTS IN THE USABILITY AND PERFORMANCE OF E-COMMERCE WEBSITES (F056)**

*Layla Hasan*

**TAILORABLE FLEXIBILITY: MAKING END-USERS AUTONOMOUS IN THE DESIGN OF ACTIVE INTERFACES (F140)**

*Federico Cabitza, Iade Gesso and Stefano Corna*

**TANGIBILITY AND HUMAN-COMPUTER INTERACTION: AN ALTERNATIVE APPROACH TO AFFORDANCE (S029)**

*Jean Caelen, Mélanie Becker and Anne Pellegrin*

**SHOW-AND-TELL PLAY-IN: COMBINING NATURAL LANGUAGE WITH USER INTERACTION FOR SPECIFYING BEHAVIOR (S081)**

*Michal Gordon and David Harel*

**EVALUATING EFFECTS OF VISUAL APPEARANCE OF VIRTUAL HUMANS IN E-COMMERCE (S108)**

*Rainer Blum and Malcolm Clarke*

**11:30-12:50 Session FSP 25.4**

**The Value of Affective Interfaces / Systems / Application / Interaction // Other**

**(Room: Space 4B)**

*Chair: Hideki Aoyama*

**ATTRACTIVENESS OF SOCIAL PLATFORMS: AN INVESTIGATION OF STUDIVZ (F163)**

*Waltraud Ilmberger, Martin Schrepp and Theo Held*

**TOOL SUPPORT IN INTEGRATING TASK MODELING AND ACCESS CONTROL SPECIFICATION (F143)**

*Birgit Bomsdorf and Annika Paulheim*

**ARABIC USABILITY GUIDELINES (S026)**

*Perihan Elbaz*

**COMMUNICATION SUPPORT BETWEEN PATIENTS DURING TREATMENT VIA USE OF MEMORIES (S168)**

*Takahiro Kihara and Yoshio Nakatani*

**08:30-13:45 Welcome Desk**

**09:00-11:00 Session FSP 26.1**

**Usability**

**(Room Space 100)**

*Chair: Piet Kommers*

**EVALUATION OF DIFFERENT INTERACTION TECHNIQUES FOR TOUCH DEVICES (F107)**

*Michael Raschke, Tanja Blascheck, David Bold, Dominik Muhler, Thomas Ertl and Thomas Schlegel*

**INTERACTION DECONSTRUCTION METHOD FOR USABILITY REQUIREMENTS ENGINEERING (F134)**

*Lamminen Juha, Rousi Rebekah and Saariluoma Pertti*

**COGNITIVE CHUNKS EXTRACTED FROM EYE-TRACKING RECORDS OF WEB PAGE READERS, USING ISOLATED SACCADES AS A DELIMITER (F190)**

*Noriyuki Matsuda and Haruhiko Takeuchi*

**A PROTOCOL FOR EVALUATING MOBILE APPLICATIONS (S086)**

*Clare Martin, Derek Flood and Rachel Harrison*

**TAMULATOR: A TOOL TO MANAGE TASK MODEL-BASED USABILITY EVALUATION IN DEVELOPMENT ENVIRONMENTS (S133)**

*Shah Rukh Humayoun, Yael Dubinsky, Eli Nazarov, Assaf Israel and Tiziana Catarci*

**THE EFFECT OF THE DIRECTION OF A GRADIENT ON HAPTIC POINTING IN A 2D VIRTUAL ENVIRONMENT (S158)**

*Ludovic Potier, Olivier Gapenne, Xuan Liu and Dominique Aubert*

**09:00-10:00 Doctoral Consortium Session (Room: Space 4B)**

*Chair: Katherine Blashki*

**SENSORY FEEDBACK FOR MOTOR PERFORMANCE IN VIRTUAL ENVIRONMENTS ACROSS THE LIFESPAN (D041)**

*Patrick J. Grabowski and Andrea H. Mason*

**NEURAL BASIS OF COMMUNICATION OF AUDITORY BCIs (D122)**

*Angela Riccio, Luca Simone, Donatella Mattia, Febo Cincotti and Marta Olivetti Belardinelli*

**13:00-14:30 Lunch Break**

**10:05-11:00 Session FSP 26.2**  
**Supporting user populations from specific Generati //**  
**Generational differences and technology design**  
**(Room: Space 4B)**  
**Chair: Margrit Betsche**

**A COMPARATIVE ANALYSIS OF THE MEANING OF 'LEARNABILITY' FOR CHILD AND ADULT USERS (F109)**  
*Bester Chimbo, Helene Gelderblom and Ruth de Villiers*  
**SUPPORTING THE PARTICIPATION IN SOCIAL LIFE OF FRAIL OLDER ADULTS IN A ONE-DAY CLINIC (S099)**  
*Suzanne Kieffer, Christian Swine and Benoît Macq*  
**A MULTIDISCIPLINARY REVIEW: IMPACTS ON DESIGN FOR AGE-RELATED COGNITIVE IMPAIRMENTS (S116)**  
*O. K. Burmeister*

**A COMBINED AGILE METHODOLOGY FOR THE EVALUATION OF WEB ACCESSIBILITY (S139)**  
*Firas Masri and Sergio Lujan Mora*  
**ENGINEERING ANONYMITY TO REDUCE AGGRESSION ONLINE (R070)**  
*Michail Tsikerdekis*

**13:30 Best Paper Awards Ceremony and Closing Session (Room Space 100)**

*Prof. Katherine Blashki and Prof. Pedro Isaías*

**11:00-11:30 Coffee Break**

**11:30-13:30 Session FSP 26.3**  
**Methodological implications of Emotional User Studies (Room Space 100)**  
**Chair: Katherine Blashki**

**EMOTIONAL WEB-BASED DESIGN: THE CONCEPTS OF EMOTIONAL EXPERIENCE AND EMOTIONAL EXPRESSION (F120)**  
*Zacharias Lekkas, Nikos Tsianos, Panagiotis Germanakos, Constantinos Mourlas and George Samaras*  
**A STUDY OF A NAVIGATION SYSTEM THAT INDUCES TOURISTS TO VISIT SIGHTSEEING SPOTS AGAIN VIA A FEELING OF REGRET (F166)**  
*Masaki Masuda and Yoshio Nakatani*  
**PROCESS-INDUCED DECISION COSTS ON SEQUENTIAL VALUE JUDGMENTS (F065)**  
*Mei-Chun Wu and Feng-Yang Kuo*  
**CONCURRENT STUDY ON PERCEPTION AND BEHAVIOR OF DRIVER IN SIMULATED DRIVING (S057)**  
*Hidetoshi Nakayasu, Hirokazu Aoki, Tetsuya Miyoshi and Patrick Patterson*  
**OPTIMAL POSITIONS OF ADVERTISEMENTS ON NEWS WEBSITES FOCUSING ON THREE CONFLICTING OBJECTIVES (S175)**  
*Noriyuki Muramatsu, Keiki Takadama and Maki Sakamoto*  
**IMPROVEMENT OF DETECTION PROBABILITY OF INSPECTION PANEL BY MULTIPLE MODARITIES (S059)**  
*Hidetoshi Nakayasu, Masao Nakagawa, Tetsuya Miyoshi and Patrick Patterson*

**11:30-13:05 Session FSRP 26.4**  
**Affective User-Centred Analysis, Design and Evaluation (Room Space 4B)**  
**Chair: Margit Pohl**

**MODEL-DRIVEN ENGINEERING OF BEHAVIORS FOR USER INTERFACES IN MULTIPLE CONTEXTS OF USE (F084)**  
*Efrem Mbaki Luzayisu and Jean Vanderdonckt*  
**A CONTROL AND TRAINING SYSTEM FOR REHABILITATION DEVICES (S032)**  
*Patrick Patterson and Eric Sinzinger*  
**TR-AID ADVANCED SEARCH: TAXONOMY DESIGN FOR DATA VISUALIZATION AND INFORMATION RETRIEVAL INTERFACE (S087)**  
*Massimiliano Gusmini and Anjula Garg*  
**DEVELOPING E-LEARNING SYSTEMS FOR DEAF EDUCATION: APPLICATION OF EMBODIEMENT THEORIES. (S180)**  
*Maria Tagarelli De Monte, Daniele Capuano, Maria Roccaforte and Elena Tomasuolo*