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FINAL PROGRAM

SUN, 19 JULY (./SUNDAY) | MON, 20 JULY (./MONDAY) | TUE, 21 JULY (./TUESDAY) | WED, 22 JULY | THU, 23 JULY (./THURSDAY)
| FRI, 24 JULY (./FRIDAY)

The times indicated are in "Central European Summer Time - CEST (Copenhagen)"

11:00 – 13:00 (wednesday#2224)

13:30 – 15:30 (wednesday#45)

11:00 – 13:00 (CEST - Copenhagen)

Human-Computer Interaction

S182: xR in Medical Science and Physical Therapy

Chair(s): Hiroshi Noborio, *Japan*

- **Deadlock-Free and Collision-Free Liver Surgical Navigation by Switching Potential-Based and Sensor-Based Functions**
Hiroshi Noborio, Kiyomi Kawai, Kaoru Watanabe, Katsunori Tachibana, Takahiro Kunii, Kiminori Mizushino, *Japan*
- **Stability Maintenance of Depth-Depth Matching of Steepest Descent Method using an Incision Shape of an Occluded Organ**
Miho Asano, Tomohiro Kuroda, Satoshi Numata, Tsuneo Jozen, Tomoki Yoshikawa, Hiroshi Noborio, *Japan*
- **The Current Status and Challenges in Augmented-Reality Navigation System for Robot-Assisted Laparoscopic Partial Nephrectomy**
Akihiro Hamada, Atsuro Sawada, Jin Kono, Masanao Koeda, Katsuhiko Onishi, Takashi Kobayashi, Toshinari Yamasaki, Takahiro Inoue, Hiroshi Noborio, Osamu Ogawa, *Japan*
- **A Hashing Algorithm of Depth Image Matching for Liver Surgery**
Satoshi Numata, Masanao Koeda, Katsuhiko Onishi, Kaoru Watanabe, Hiroshi Noborio, *Japan*
- **The Efficacy of Virtual Reality Exposure Therapy for Fear of Falling (FOF) in the Elderly**
Morihiro Tsujishita, Hiroshi Noborio, Yashuhiro Masutani, Masanao Koeda, Katsuhiko Onishi, *Japan*
- **Study on the Development of Augmented-Reality Navigation System for Transsphenoidal Surgery**
Katsuhiko Onishi, Seiyu Fumiyama, Yohei Miki, Masahiro Nonaka, Masanao Koeda, Hiroshi Noborio, *Japan*

S183: Human Robot Interaction - I

Chair(s): Midori Sugaya, *Japan*





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- **Emotion Synchronization Method for Robot Facial Expression**
Yushun Kajihara, Peeraya Sripian, *Japan*; Chen Feng, *P.R. China*; Midori Sugaya, *Japan*
- **AuDimo: A Musical Companion Robot to Switching Audio Tracks by Recognizing the Users Engagement**
W. K. N. Hansika, Lakindu Yasassri Nanayakkara, Adhisha Gammanpila, P. Ravindra S. De Silva, *Sri Lanka*
- **On positive effect on humans by poor operability of robot**
Mitsuharu Matsumoto, *Japan*
- **A Portable Measurement System for Spatially-varying Reflectance using Two Handheld Cameras**
Zar Zar Tun, Seiji Tsunozaki, Takashi Komuro, Shoji Yamamoto, Norimichi Tsumura, *Japan*
- **User Expectations of Social Robots in Different Applications: An Online User Study**
Xiao Dou, *P.R. China*; Chih-Fu Wu, *Taiwan*; Xi Wang, Jin Niu, *P.R. China*

S184: Interaction Design and Evaluation Methods - I

Chair(s): Martin Maguire, *United Kingdom*

- **Reviewing and Predicting Human-Machine Cooperation Based on knowledge Graph Analysis**
Yujia Liu, *P.R. China*
- **Single Image Contrast Enhancement by Training the HDR Camera data**
Kenji Iwata, Ryota Suzuki, Yue Qiu, Yutaka Satoh, *Japan*
- **Play to Improve: Gamifying Usability Evaluations in Virtual Reality**
Abhijai Miglani, Sairam Kidambi, Praveen Mareguddi, *India*
- **Human Factors Evaluation Principals for Civil Aircraft Flight Deck Controls Design and Integration**
Fei Li, Kaiwen Chen, Pu Hong, Yuan Wang, *P.R. China*
- **Usability Evaluation of Smartphone Keyboard Design from an Approach of Structural Equation Model**
Yincheng Wang, Junyu Huo, Yuqi Huang, Ke Wang, Di Wu, Jibo He, *P.R. China*
- **Research on Method of Acquiring and Screening of Personalized Functional Requirements of Smart Watches for the Elderly based on Kano Model**
Shengqing Huang, Quan Gu, Jie Zhang, Chaoxiang Yang, *P.R. China*

Human Interface and the Management of Information

S185: Data, Semantics and Interaction

Chair(s): Yumi Asahi, Ken Fukuda, *Japan*





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- **Feature Analysis of Customers Purchasing Cars in Japan**
Kenta Hara, Yumi Asahi, *Japan*
- **Creating New Strategies for the Changing Sports Business ~ The Case of Nippon Professional Baseball~**
Masaru Kondo, Yumi Asahi, *Japan*
- **Ontology Construction for Annotating Skill and Situation of Airline Services to Multi-Modal Data**
Satoshi Nishimura, Yuichi Oota, Ken Fukuda, *Japan*
- **A Validation of Textual Expression about Disaster Information to Induce Evacuation**
Tomonori Yasui, Takayoshi Kitamura, Tomoko Izumi, Yoshio Nakatani, *Japan*
- **Effective Disaster Prevention Map Creation Using Road Network Analysis**
Kaname Takenouchi, Ikuro Choh, *Japan*

Engineering Psychology and Cognitive Ergonomics

S186: Harmonized Interaction with Complex Systems

Chair(s): Shan Fu, *P.R. China*

- **A Visual-based Approach for Manual Operation Evaluation**
Yiyao Zhao, Zhen Wang, Yanyu Lu, Shan Fu, *P.R. China*
 - **Usability Evaluation of Car Cockpit Based on Multiple Objective Measures**
Chuanxiang Wei, Zhen Wang, Shan Fu, *P.R. China*
 - **An Object Distance Detection Method for Driving Performance Evaluation**
Yang Gao, Zhen Wang, Shan Fu, *P.R. China*
 - **Multidimensional Risk Dynamics Modeling on Operator Errors of Nuclear Power Plant**
Guanyin Wu, Yi Lu, Ming Jia, Zhen Wang, Caifang Peng, Yanyu Lu, Shan Fu, *P.R. China*
 - **Design and Research of Civil Aircraft Flap/Flap Control Lever Based on Ergonomics**
Fang Zhang, Xianchao Ma, Yinbo Zhang, Ruijie Fan, *P.R. China*
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S187: Cognition and Design - II

Chair(s): To be announced

- **Research on BIM and Mobile Equipment in Substation Construction Schedule Management**
Rui Liu, Fan Liu, *P.R. China*
- **Shared Mental Model Processing in Visualization Technologies: A Review of Fundamental Concepts and a Guide to Future Research in Human-Computer Interaction**
Nor'ain Mohd Yusoff, Siti Salwah Salim, *Malaysia*
- **Influence of Visual Symbol's User Background and Symbol Semantic Abstraction Level on User's Cognition in AR Auxiliary Assembly Environment**
Lei Wu, Yao Su, Junfeng Wang, *P.R. China*
- **New Production Development and Research Based on Interactive Evolution Design and Emotional Need**
Tianxiong Wang, Meiyu Zhou, *P.R. China*
- **The Effect and the Efficiency Balance of Font Size and Font Color Change on the Human Memory in Chinese Vocabulary**
Tse-Wei Fu, Jui-Wen Peng, *Taiwan*





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Chair(s): João Barroso, *Portugal*; Leontios Hadjileontiadis, *United Arab Emirates*

- **Tech-inclusion Research: An Iconographic Browser Extension Solution**
Tânia Rocha, Hugo Paredes, Paulo Martins, João Barroso, *Portugal*
- **Process Modelling (BPM) in Healthcare – Breast Cancer Screening**
Inês Terras Marques, Carolina Santos, Vitor Santos, *Portugal*
- **Individual's Neutral Emotional Expression Tracking For Physical Exercise Monitoring**
Salik Ram Khanal, Jaime Sampaio, João Barroso, Vítor Filipe, *Portugal*
- **Single Image-Based Food Volume Estimation Using Monocular Depth-Prediction Networks**
Alexandros Graikos, Vasileios Charisis, Dimitrios Iakovakis, Stelios Hadjidimitriou, *Greece*; Leontios Hadjileontiadis, *United Arab Emirates*
- **HoloPrognosis - An AR-based Serious Exercise Game for Early Stage Parkinson's Disease Patients**
Marios Thomos, Vasileios Charisis, Stelios Hadjidimitriou, Dimitrios Iakovakis, Sevasti Bostantzopoulou, *Greece*;
Leontios Hadjileontiadis, *United Arab Emirates*

S189: Applications and Games for Children with ASD

Chair(s): Asterios Leonidis, *Greece*

- **Using Augmented Reality Technology with Serial Learning Framework to Develop a Serial Social Story Situation Board Game System for Children with Autism to Improve Social Situation Understanding and Social Reciprocity Skills**
Hsiu Ting Hsu, I-Jui Lee, *Taiwan*
- **Social intervention strategy of AR combined with theater-based games to improve the performance of autistic children in symbolic play and social skills**
Wei-Zhen Wang, I-Jui Lee, *Taiwan*
- **Using Augmented Reality and Concept Mapping to Improve Ability to Master Social Relationships and Social Reciprocity for Children with Autism Spectrum Disorder**
Yu-Chen Huang, I-Jui Lee, *Taiwan*
- **The Influence of Traits Associated with Autism Spectrum Disorder (ASD) on the Detection of Fake News**
Jacqui Taylor-Jackson, *Australia*; Sophie Matthews, *United Kingdom*
- **Applying the Game mode and Teaching strategies of Computational Thinking to the Improvement of Social skills Training for Children with Autism Spectrum Disorders**
I-Jui Lee, *Taiwan*

Virtual, Augmented and Mixed Reality

S190: User Experience in VAMR - II

Chair(s): Vasilis Kouroumalis, *Greece*





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- **Contrast and Parameter Research of Augmented Reality Indoor Navigation Scheme**
Wen-jun Hou, Lixing Tang, *P.R. China*
- **Study on User-centered Usability Elements of User Interface Designs in an Augmented Reality Environment**
Un Kim, Yaxi Wang, Wenhao Yuan, *P.R. China*
- **Effect of Motion Cues on Simulator Sickness in a Flight Simulator**
Jiwon Kim, Jihong Hwang, Taezoon Park, *Korea*
- **Research on the Perceptual Interaction Model of Virtual Reality Films**
Yunpeng Jia, Ziyue Liu, Chuning Wang, Lei Xu, *P.R. China*

Cross-Cultural Design

S191: Learning, Design and Technology for the 8000 Days

Chair(s): Pei-Lee Teh, *Malaysia*

- **Developing Empathy Towards Older Adults Through Emotional and Cognitive Enhancement**
Pei-Lee Teh, Motoki Watabe, Annereena Ravichandran, Kristel Tan, *Malaysia*
- **Say-It & Learn: Interactive Application for Children with ADHD**
Sabeel Butt, Fazal E Hannan, Mujahid Rafiq, Ibrar Hussain, C.M. Nadeem Faisal, Waleed Younas, *Pakistan*
- **Design as Mediation for Social Connection Against Loneliness of Older People**
Yumei Dong, Haoxin Weng, *P.R. China*; Hua Dong, *United Kingdom*; Long Liu, *P.R. China*
- **An Intelligent Platform for Offline Learners Based on Model-driven Crowdsensing over Intermittent Networks**
Shin'ichi Konomi, *Japan*; Lulu Gao, *P.R. China*; Doreen Mushi, *Tanzania*
- **Study on Innovative Gestures Applicable to the Elderly**
Ming-Hong Wang, Shuo-Fang Liu, *Taiwan*

S192: Design for Engagement and Communication - I

Chair(s): Yuan-Chi Tseng, *Taiwan*

- **Developing the Interaction for Family Reacting with Care to Elderly**
Yi-Sin Wu, Teng-Wen Chang, *Taiwan*; Sambit Datta, *Australia*
- **Service Design for Proposing an Innovative Intergenerational Interaction Platform**
Sheng-Ming Wang, *Taiwan*; Sara Sanchez, *Guatemala*; Yu-Chen Wang, *Taiwan*; Wei-Jie Pan, *P.R. China*; Cheng-Yen Lin, *Taiwan*
- **Cocreating Value with Customers: A Case Study of a Technology-Based Startup**
Fang-Wu Tung, Shuo-De Lin, *Taiwan*
- **Design of Vibrotactile Direction Feedbacks on Wrist for Three-Dimensional Spatial Guidance**
Jo-Hsi Tang, *Taiwan*; Giuseppe Raffa, *United States*; Liwei Chan, *Taiwan*
- **Usability Evaluation on Intuitive Interaction between Product Interfaces and Older Adults with Dementia**
Li-Hao Chen, Yi-Chien Liu, Pei-Jung Cheng, *Taiwan*

S193: User Behavior Research

Chair(s): Hsiu-Ping Yueh, *Taiwan*





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- **Study on Acceptance of Social Robots by Aging Adults Living Alone**
Na Chen, Xiaoyu Liu, Yue Sun, *P.R. China*
- **A Hybrid Conversational Agent with Semantic Association of Autobiographic Memories for the Elderly**
Yu-Ting Hsiao, Edwinn Gamborino, Li-Chen Fu, *Taiwan*
- **Designing and Developing a Sandbox-style Tangible AR for Geoscience Learning**
Chia Yu Hsu, Weijane Lin, Hsiu-Ping Yueh, *Taiwan*
- **Can older adults' acceptance toward robots be enhanced by observational learning?**
Sung-En Chien, Ching-Ju Yu, Yueh-Yi Lai, Jen-Chi Liu, Li-Chen Fu, Su-Ling Yeh, *Taiwan*

S194: Design for Cross-Culture - VChair(s): Rungtai Lin, *Taiwan*

- **Research on Social Service Education System from the Perspective of Chinese Welfare Culture**
Jinze Li, Mingming Zong, Yu Wang, *P.R. China*
- **Effects of Loving Kindness Meditation on Mindfulness, Spirituality and Subjective Well-being of Flight Attendants**
Chao Liu, Hao Chen, *P.R. China*; Chia-Yi Liu, Rungtai Lin, Wen-Ko Chiou, *Taiwan*
- **Visual Data Storytelling: A Case Study of Turning Big Data into Chinese Painting**
Yanru Lyu, *P.R. China*; Tuck Fai Cheng, *Malaysia*; Rungtai Lin, *Taiwan*
- **An Exploration of the Development of Visual Design in Taiwan - A Case Study of the Cover Design of Industrial Design Magazine**
Po-Hsien Lin, *Taiwan*; Jianping Huang, *P.R. China*; Rungtai Lin, Mo-Li Yeh, *Taiwan*
- **New digital media technologies put forth cross-domain design**
Jie Tang, ChengYao Cai, LiuYing Huang, Xing Ji, *P.R. China*

Social Computing and Social Media**S195: The World of Consumers in Social Media: People and Organizations**Chair(s): Adela Coman, *Romania*

- **The Key Role of Social Media in Identifying Consumer Opinions for Building Sustainable Competitive Advantages**
Armenia Androniceanu, Irina Alexandra Georgescu, *Romania*; Jani Kinnunen, *Finland*
- **The World of Museums and Web 2.0: Links between Social Media and the Number of Visitors in Museums**
Adela Coman, Ana-Maria Grigore, Andreea Ardelean, Robert Maracine, *Romania*
- **The Effect of Social Media based Electronic Word of Mouth on Propensity to Buy Wearable Devices**
David Ntumba, Adheesh Budree, *South Africa*
- **A Practice-Based Artificial Society Approach to Exploring the Evolution of Trust**
Michael Heidt, Andreas Bischof, *Germany*

S196: Consumer Behavior from the Viewpoint of Data ScienceChair(s): Kohei Otake, Takashi Namatame, *Japan*



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- **Analysis of the Exposing Media Pattern that Affect Accessing Own Website**
Yuho Katagiri, Kohei Otake, Takashi Namatame, *Japan*
- **A Study on the Similarity of Fashion Brands Using Consumer Relationship and Consumer Sense**
Yuzuki Kitajima, Kohei Otake, Takashi Namatame, *Japan*
- **Analysis of Fashion Market Trend Using Advertising Data of Shopping Information Site**
Retsuya Saito, Kohei Otake, Takashi Namatame, *Japan*
- **Analysis of Consumer Community Structure and Characteristic within Social Media**
Shin Miyake, Kohei Otake, Takashi Namatame, *Japan*

Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management

S197: Robots, Agents, and Bots for Super Smart Society - III

Chair(s): Masahide Nakamura, *Japan*

- **Fine-Grained Map Coloring Web Service for JavaScript**
Tetsuya Nakai, Sachio Saiki, Masahide Nakamura, *Japan*
- **Partner Agent Showing Continuous and Preceding Daily Activities for Users' Behavior Modification**
Tomoko Yonezawa, Naoto Yoshida, Keiichiro Nagao, Xin Wan, *Japan*
- **Investigations on Monitoring Sensor Usage and Decision-Making: A Case Study in an Elderly Care Facility**
Isamu Kajitani, Keiko Homma, Yoshio Matsumoto, *Japan*
- **Basic Study of Wall-projected Humanlike Agent for Pre-care Multimodal Interaction**
Xin Wan, Tomoko Yonezawa, *Japan*
- **Regulated Body-Sharing Virtual Trips for Pleasure and Business**
Reem Elkhoully, Shin Fukui, Emi Tamaki, *Japan*
- **Extracting and Structuring Latent Knowledge for Risk Recognition from Eyes and Utterances of Field Overseers**
Noriyuki Kushiro, Yusuke Aoyama, Toshihiro Mega, *Japan*

Design, User Experience, and Usability

S198: User Experience and Usability Driven Design: Emerging Theory and Practice - III

Chair(s): Zhen Liu, *P.R. China*





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- **User Experience and Usability Design Centered Smart Application Design to Waste Sorting for Citizens Living in Smart City in China**
Ziyuan Chi, Zhen Liu, *P.R. China*
- **Usability Oriented New Baren Product Design and Test Practice**
Ke Zhang, Zhen Liu, Yan Wang, Xiaoli Dong, *P.R. China*
- **Usability Design Study of University Website: A Case of Normal University in China**
Yu Tian, Zhen Liu, *P.R. China*
- **Financial shared course design based on human-computer interaction**
Xiaoyan Niu, Bin Wang, *P.R. China*
- **Research on the service design of smart campus based on Sustainable Strategy -- taking smart canteen as an example**
Ruiqian An, Tao Xi, *P.R. China*

Distributed, Ambient and Pervasive Interactions

S199: Design with Digital Media

Chair(s): Jun Hu, *Netherlands*

- **A Novel Context for the Expression of Art through Interactive Multimedia Electronic Music Installation—Taking the Work of Rainbow Cliff and Dusk as an Example**
Xiaoni Zhuang, *P.R. China*
- **Research on Interaction Models of Interactive Digital Art and Its Application in Designing User Control**
Suyuan Pan, *P.R. China*
- **Interactive Relationships in Animation Art Ecology**
Yue Zhou, *P.R. China*
- **Interactive Visualization of the Thoughts in Traditional Chinese Culture**
Jin Sheng, *P.R. China*
- **Simplicity and Interaction in “Buddhist-style” Chinese Ink Animation Short Films**
Aihua Cao, *P.R. China*
- **Applying Deep Learning in Creative Re-creation of Changsha Kiln Cultural Relics**
Wen Lu, *P.R. China*

HCI in Business, Government and Organizations

S200: HCI Issues in Digital Fashion Communication - I

Chair(s): Lorenzo Cantoni, Nadzeya Kalbaska, *Switzerland*





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- **Localization and Cultural Adaptation on the Web: An Explorative Study in the Fashion Domain**
Alice Noris, *Italy*; Patricia SanMiguel, *Spain*; Lorenzo Cantoni, *Switzerland*
- **The Evolution of Marketing in the Context of Voice Commerce: A Managerial Perspective**
Alex Mari, Andreina Mandelli, René Algesheimer, *Switzerland*
- **Cultural Appropriation in the Digital Context: A Comparative Study between two Fashion Cases**
Teresa Sadaba, Valeria LaFata, Andrea Torres, *Spain*

Learning and Collaboration Technologies

S201: Novel Approaches to Learning - II

Chair(s): Shinobu Hasegawa, *Japan*

- **Web-based Teleoperation System for Learning of 3D Prototype Designing and Printing**
Siam Charoenseang, Poonsiri Jailungka, Chaowwalit Thammatinno, *Thailand*
- **Abstract Thinking Description System for Programming Education Facilitation**
Yasutsuna Matayoshi, Satoshi Nakamura, *Japan*
- **Proposal of a Training Method for Beat Count Ability**
Kazuhiro Minami, Takayoshi Kitamura, Tomoko Izumi, Yoshio Nakatani, *Japan*
- **Learners' Mental State Estimation with PC built-in Camera**
Shinobu Hasegawa, Atsushi Hirako, Xianwen Zheng, Shofiyati Nur Karimah, Koichi Ota, Teruhiko Unoki, *Japan*
- **Compare Differences of Communication and Creativity Between different Team Composition and Using Different Conceptual Analysis Integrational Tools**
Yi Chi Fu, Chao Yang Yang, *Taiwan*
- **Research on the Design of Intelligent Interactive Toys Based on Marker Education**
Yi Lu, Wei Pang, *P.R. China*

Human Aspects of IT for the Aged Population

S202: ICT for Elders Eudaimonia and Social Inclusion

Chair(s): Yuxiang (Chris) Zhao, *P.R. China*





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- **Research on Smart Care System for Elder Sojourners**
Feng Liu, *P.R. China*
- **Persuasive Design Strategy of Online Health Education for Elderly Adults Based on TAM Model**
Yongyan Guo, *P.R. China*
- **Understanding the Influence of AI Voice Technology on Visually Impaired Elders' Psychological Well-Being: an Affordance Perspective**
Jie Gu, Xiaolun Wang, Xinlin Yao, Anan Hu, *P.R. China*
- **A Study on the Preference of Elderly Diabetic Patients to Blood Glucose Meters**
Yixiang Wu, *P.R. China*
- **The Effect of Social Media Use on Older Adults' Loneliness-The Moderating Role of Self-Disclosure**
Xiaoting Xu, Yuxiang (Chris) Zhao, Qinghua Zhu, *P.R. China*

S203: ICT for Care and Support of Elderly People in Hyper Aged Societies

Chair(s): Hirokazu Kato, *Japan*

- **Effect of Display Location on Finger Motor Skill Training with Music-based Gamification**
Naoki Inoue, Yuichiro Fujimoto, *Japan*; Alexander Plopski, *New Zealand*; Sayaka Okahashi, Masayuki Kanbara, *Japan*; Hsiu-Yun Hsu, Li-Chieh Kuo, Fong-Chin Su, *Taiwan*; Hirokazu Kato, *Japan*
- **Virtual Kayaking: A Local Culture-Based Virtual Reality Paddling Experience**
Kao-Hua Liu, *Taiwan*; Tomoya Sasaki, Hiroyuki Kajihara, Atsushi Hiyama, Masahiko Inami, *Japan*; Chien-Hsu Chen, *Taiwan*
- **Comparison of Gaze Skills between Expert and Novice in Elderly Care**
Miyuki Iwamoto, Atsushi Nakazawa, *Japan*
- **Supporting Information Recall for Elderly People in Hyper Aged Societies**
Tatsuya Ishigaki, Jingyi You, Hiroki Takimoto, Manabu Okumura, *Japan*
- **Tablet-based Comprehensive Cognitive Rehabilitation in Daily Life Using Virtual and Augmented Reality Technology**
Sayaka Okahashi, Saori Sawada, Ayae Kinoshita, *Japan*

S204: Elder's User Experiences - I

Chair(s): To be announced

- **Wearable Technologies: Acceptance Model for Smartwatch Adoption among Older Adults**
May Jorella Lazaro, Jaeseo Lim, Sung Ho Kim, Myung Hwan Yun, *Korea*
- **Contextual Design of Intergenerational Innovative Service for Aging in Place**
Suphichaya Suppipat, *Thailand*; Wei-Ming Cheng, Sheng-Ming Wang, *Taiwan*
- **How to Beautify the Elderly?: A Study on the Facial Preference of Senior Citizens**
Weiwei Zhang, Yuankun Li, *P.R. China*; Jihong Jeung, *Korea*
- **Chronic Health Problems of Older Workers and Their Occupational Safety: A meta-analysis**
Lu Peng, *P.R. China*; Rita W.L. Yu, Alan H.S. Chan, Hin Piu Yim, *Hong Kong*
- **A study on the effect of Gamification on alleviation anxiety levels of the elderly in China**
Fumie Muroi, *Japan*; Xinyi Tao, Ting Han, *P.R. China*





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- **Cybersecurity in the Interest of HCI, Occupational Safety & Health and Standardization**
Sebastian Korfmacher, *Germany*
- **Cyber Security Threats and Incidents in Industrial Control Systems**
Jens Mehrfeld, *Germany*
- **Smart Assistants in IT-Security – An Approach to Addressing the Challenge by Leveraging Assistants' Specific Features**
Michael Kubach, Heiko Roßnagel, *Germany*
- **Building Connections for a Secure User Experience**
David Blank, Ravi Kanth Kosuru, *Germany*
- **A New Hope: Human-Centric Cybersecurity Research Embedded within Organizations**
Phillip L. Morgan, Phoebe M. Asquith, Laura M. Bishop, George Raywood-Burke, Adam Wedgbury, Kevin Jones, *United Kingdom*
- **"Trust Me, You Will Need It": Cybersecurity as Extracurricular Subject at Estonian Schools**
Birgy Lorenz, Kaido Kikkas, *Estonia*

HCI in Games

S206: Impact of Game Play

Chair(s): Xiaocen Liu, *P.R. China*


- **Relationship between Young Children's Problematic Behaviors, Videogaming Status, and Parenting Styles**
Fangbing Qu, Changwei Gu, Heqing Huang, Aozhi Zhang, Meng Sun, Xiaocen Liu, *P.R. China*
- **Can Video Game Training Improve the Two-Dimensional Mental Rotation Ability of Young Children? A Randomized Controlled Trial**
Xiaocen Liu, Heqing Huang, Kai Yu, Donghui Dou, *P.R. China*
- **The Role of Parenting Styles and Parents' Involvement in Young Children's Videogames Use**
Heqing Huang, You Zhou, Fangbing Qu, Xiaocen Liu, *P.R. China*
- **The Relation between Video Game Experience and Children's Attentional Networks**
Hui Li, Muyun Long, *P.R. China*; Kaveri Subrahmanyam, *United States*
- **A Systematic Review of Game Learning Research in China**
Jingying Wang, Qianru Song, Shoubao Gao, Yuhong Tao, *P.R. China*

HCI in Mobility, Transport and Automotive Systems

S207: UI/UX for Vehicle Information and Assistance Systems

Chair(s): Lutz Krauss, *Germany*





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Germany

- **Shut Up and Drive? User Requirements for Communication Services in Autonomous Driving**
Hannah Biermann, Ralf Philipsen, Teresa Brell, Martina Ziefle, *Germany*
- **Conflict Situations and Driving Behavior in Road Traffic – an Analysis using Eyetracking and Stress Measurement on Car Drivers**
Swenja Sawilla, Christine Keller, Thomas Schlegel, *Germany*
- **Measures for Well-being in Highly Automated Vehicles: The Effect of Prior Experience**
Vanessa Sauer, Alexander Mertens, Alexander Heyden, Stefan Groß, Verena Nitsch, *Germany*
- **Potentializing on haptic feedback mechanism on developing interactive components for driver seat**
Mannan Ghanizadehgrayli, Hoda Eskandar Nia, Sahar Asgari, Mahdi Najafi, Nashid Nabian, *Iran*

Culture and Computing

S208: Intangible Cultural Heritage as Immersive Experience - I

Chair(s): Elke Reinhuber, Benjamin Seide, *Singapore*

- **Prakempa: The Colour Music of the Balinese Calendar**
Vibeke Sørensen, *Singapore*; J. Stephen Lansing, *United States*
- **Virtual Cinematic Heritage for the Lost Singaporean Film Pontianak (1957)**
Benjamin Seide, Ben Slater, *Singapore*
- **Redefining Visual Storytelling for Adaptation of Classic Literature in Immersive Environments: Hölderlin's Echo VR**
Hannes Rall, *Singapore*
- **Research on Cultural Tourism Experience Design Based on Augmented Reality**
Meiyu Lv, Lei Wang, Ke Yan, *P.R. China*

Artificial Intelligence in HCI

S209: AI in the Design Process

Chair(s): Chaehan So, *Korea*

- **A Method for Quickly Establishing Personas**
Wen-jun Hou, Xiang-yuan Yan, Jia-xin Liu, *P.R. China*
- **EasySketchDesign: Product Sketch Design Assisted with Interactive Sketch Retrieval**
Yukun Hu, Suihuai Yu, Jianjie Chu, Yichen Yang, Chen Chen, Fangmin Cheng, *P.R. China*
- **Human-in-the-Loop Design Cycles – A Process Framework that Integrates Design Sprints, Agile Processes, and Machine Learning with Humans**
Chaehan So, *Korea*
- **A Paradigm Shift in Design driven by AI**
Qiong Wu, Cun Jun Zhang, *P.R. China*
- **Rethinking Personas for Fairness: Algorithmic Transparency and Accountability in Data-Driven Personas**
Joni Salminen, *Qatar*; Soon-gyo Jung, *Korea*; Shammur A. Chowdhury, Bernard J. Jansen, *Qatar*





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S210: The Rise of the e-Coach

Chair(s): Maurizio Caon, *Switzerland*

- **Designing An AI-Companion to Support the Driver in Highly Autonomous Cars**
Emmanuel De Salis, Marine Capallera, Quentin Meteier, Leonardo Angelini, Omar Abou Khaled, Elena Mugellini, Marino Widmer, Stefano Carrino, *Switzerland*
- **Design of digital coaches for health and wellness in the workplace**
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