Table of Contents

Facilitating Robots at Home: A Framework for Understanding Robot Facilitation Rebekka Soma, Vegard Donnem Soyseth, Magnus Soyland, and Trenton Schulz	1
Storytelling at School with a Robot Playmate Patrizia Marti and Iolanda Iacono	7
This is Not You! Identity Crisis in the 21st Century Andrea Gasparini	13
Translation of Sign Language Into Text Using Kinect for Windows v2 Preeti Amatya, Kateryna Sergieieva, and Gerrit Meixner	19
Basic Study for a New Analysis Method of Biological Signals to Evaluate in Human Walking Tatsuo Hisaoka, Naoki Hashimoto, Yusuke Kobayashi, Masaya Hori, Mayu Maeda, Hiroaki Inoue, and Shunji Simizu	27
Fundamental Study for A Noise Reduction Method on Human Brain Activity Data of NIRS using AR Model Toshiya Tsubota, Tomohiko Kuroiwa, Takuya Kiryu, Yu Kikuchi, Hiroaki Inoue, Fumikazu Miwakeichi, and Shunji Shimizu	33
BrainSnake: Exploring Mode of Interaction in a Cooperative Multi-brain BCI Game Based on Alpha Activity Marc van Almkerk, Lena Brandl, Rui Li, Pietro Romeo, and Mannes Poel	39
Real-time Shape-based Sensory Substitution for Object Localization and Recognition Hossein Pourghaemi, Torkan Gholamalizadeh, Ahmad Mhaish, Gokhan Ince, and Damien Jade Duff	45
Programming in Natural Language: Building Algorithms from Human Descriptions Alexander Wachtel, Felix Eurich, and Walter F. Tichy	51
Usability Evaluation with Heuristics, Beyond Nielsen's List Toni Granollers	60
What's Hot in Interaction Design? An International Survey of Practitioners' Views on Personas Engie Bashir and Simon Attfield	66
Exploring the User Security Experience of Mobile Payment in China Jiaxin Zhang and Yan Luximon	75
Cyber Security Awareness Training Provided by the Competence Developing Game GHOST Johannes Alexander Konig and Martin R. Wolf	81

Proposal and Evaluation of Kinect-based Physical Training System for Special Needs Education Hiroki Matsuda, Hidemi Yamachi, Fumihiro Kumeno, and Kotomi Shiota	88
Fiction Design of a 3D Tutor for and with School Children Monica Landoni, Emiliana Murgia, Fabrizio Gramuglio, and Giorgio Mnafredi	94
The User-Focused Storybuilding Framework for Competence Developing Games Johannes Alexander Konig, Veronika Volker, and Martin R. Wolf	98
TeamAR – Generic Interface for Cooperation Using Augmented Reality Dawid Pacholczyk and Mariusz Trzaska	107
Real-Time Recognition of Human Postures for Human-Robot Interaction Zuhair Zafar, Rahul Venugopal, and Karsten Berns	114
Smart Home Resource Management based on Multi-Agent System Modeling Combined with SVM Machine Learning for Prediction and Decision-Making Kalthoum Zaouali, Mohamed Lassaad Ammari, Mhamed Tabka, Amine Choueib, and Ridha Bouallegue	120
Numerical Approach to Simulation of Nanoprinting Processes Tatyana Kudryashova, Sergey Polyakov, and Vistoria Podryga	128
Workflow Representations for Human and Artificial Agent Collaborations Christian Wogerer, Georg Weichhart, and Andreas Pichler	132
MMAssist_II- A Lighthouse Project for Industrial Assistance Christian Wogerer, Matthias Plasch, Manfred Tscheligi, and Sebastian Egger_Lampl	136
Approaches to a Practical Implementation of Industry 4.0 Ahmed Elkaseer, Hazem Ali, Mahmoud Salama, and Steffen Scholz	141
How Can a User-Centered Design Bring Innovation in a Business Intelligence Platform? Elodie Rival, Celine Mateev, and Nicolas Maranzana	147
How do User Experience Experts Organize Their Knowledge of User Experience Criteria? Josefina Isabel Gil Urrutia, Eric Brangier, and Laurent Cessat	153
The Impact of Visual Aesthetic Quality on User Engagement during Gameplay Uttam Kokil	159
Time Before Negative Emotions Occur While Waiting for a Reply in Text Messaging with Read Receipt Functionality Shogo Kato, Yasuyuki Ozawa, and Yuuki Kato	165

Perceived Usefulness of Features of Stickers in Text Messaging: Effects of Gender and Text-Messaging Dependency Yuuki Kato, Shogo Kato, and Yasuyuki Ozawa	168
Fear, Feedback, Familiarity How are These Connected? – Can familiarity as a design concept applied to digital feedback reduce fear? Diana Saplacan and Jo Herstad	171
A Study on Visualization of User Reviews Eric Yang	180
Moving with Style: Classifying Human and Robot Movement at Home Trenton Schulz, Jo Herstad, and Jim Torresen	188
Detection and Classification of RBCs and WBCs in Urine Analysis with Deep Network Xingguo Zhang, Guoyue Chen, Kazuki Saruta, and Yuki Terata	194
Line-Drawing Presentation Strategies with an Active-Wheel Mouse Yoshihiko Nomura, Yoshiaki Kashino, and Tokuhiro Sugiura	199
Depth Perception for Virtual Object Displayed in Optical See-Through HMD Kazutake Uehira and Masahiro Suzuki	204
Classifying Daily Activities Regardless of Wearable Motion Sensor Orientation Aras Yurtman and Billur Barshan	206
Extended Method to Alternate the Estimation of Global Purposes and Local Objectives in Multiple Human-Agent Interaction Yoshimasa Ohmoto, Takashi Suyama, and Toyoaki Nishida	212
Picking Assistance System with MS-KINECT and Projection Mapping Yuki Takehara, Yoshitoshi Murata, and Takamichi Yoshikawa	218
User Centered Design of a Knowledge Management System for Production Workers Gianni Campatelli and Sandro Mehic	224
Activity Recognition With Multiple Wearable Sensors for Industrial Applications Adrien Malaise, Pauline Maurice, Francis Colas, Francois Charpillet, and Serena Ivaldi	229
Orientation and Mobility Skills Consideration for Visually Impaired Persons Based on Brain Activity Hiroaki Inoue, Masaya Hori, Kobayashi Takuya, Takuya Kiryu, Yoshikazu Seki, and Shunji Shimizu	235