HSI 2013 Conference Programme

	1st Conference room	2nd Conference room	3rd Conference room
	6.06.2013		
9.00 - 9.15	*Opening ceremony*		
9.15 - 10.00	**Keynote lecture: Dr. Ing. habil. Ronald Schoop**, *First steps and challenges for „Googling the Factory" – how new technologies arrive at industrial applications*		
10.00 - 10.45	**Keynote lecture: Prof. Materka**, *High-speed noninvasive brain-computer interfaces*		
10.45 - 11.00	Coffe break		
11.00 - 11.15	Ghaith Manita. **Consensus Function based on Multi-layer networks technique**	Marianna Parzych, Agata Chmielewska, Tomasz Marciniak, Adam Dabrowski, Agnieszka Chrostowska, Michał Klincewicz. **Automatic people density maps generation with use of movement detection analysis**	Anna Bobkowska. **Visual dimensions of modeling languages in interdisciplinary perspective**
11.15 - 11.30	Alexander Rotshtein and Hanna Rakytyanska. **Expert Rules Refinement by Solving Fuzzy Relational Equations**	Andrzej Rutkowski, Michał Meina, Michał Chlebiej. **Human pose fusion for scalable kinetic interfaces**	Laura Ostrom, Lee Ostrom. **Technology Education Requirements for Physicians**
11.30 - 11.45	Katarzyna Grzesiak-Kopeć, Maciej Ogorzałek. **Intelligent 3D Layout Design with Shape Grammars**	Radoslaw Katarzyniak, Wojciech Lorkiewicz, Grzegorz Popek. I**ntuitive Approach to Knowledge Integration**	Nithin Vijayendra and Meiliu Lu. **A Web-based ETL Tool for Data Integration Process**
11.45 - 12.00	Jerzy Balicki, Waldemar Korłub, Henryk Krawczyk, Jacek Paluszak. **Genetic Programming with Negative Selection for Volunteer Computing System Optimization**	Marcin Jamro, Bartosz Trybus. **IEC 61131-3 Programmable Human Machine Interfaces for Control Devices**	Lidia Jackowska-Strumiłło, Paweł Strumiłło, Jacek Nowakowski, Piotr Tomczak. **Interactive question based learning technology and clickers: Fundamentals of Computer Science course case study**
12.00 - 12.15	Javier Vales-Alonso, Pablo Lopez-Matencio Perez, Juan Veiga-Goitan, Pedro Baños-Guirao and Juan José Alcaraz Espín. **An Effort Control System for Training Elite Team-Sport Athletes**		Allen Milewski, Cemile Serce, Kathy Swigger. **Quantitative and Qualitative Analysis of Globally Distributed Team Collaboration in Design and Development of Software**
12. 15 - 13.15	Lunch		
13.15 - 13.30	Miroslaw Sobotka, Antoni Grzanka. **Visual data on tongue and lips in phonemes classification**	Rogério Campos-Rebelo, Anikó Costa, Luís Gomes. **Events for modeling of Human-System Interaction with IOPT Petri net**	Jaspaljeet Singh Dhillon, Burkhard Wuensche, Christof Lutteroth. **Accessible Telehealth - Leveraging Consumer-level Technologies and Social Networking Functionalities for Senior Care**
13.30 - 13.45	Paweł Przybysz, Wlodzimierz Kasprzak. **The generation of letter-to-sound rules for grapheme-to-phoneme conversion**	Krzysztof Pancerz. How Dealing with Semantic Relationships and Approximations of Sets: **An Ontological Graph Based Approach**	Matthias Mielke, Rainer Brück. **A Concept for a Mobile Assistive Technology for Hearing-Impaired Persons**
13.45 - 14.00	Andrew Schumann. **Unconventional Logic for Massively Parallel Reasoning**	Muhammad Yusro, Kun Mean Hou, Kalamullah Ramli, Dodi Sudiana, Edwige Pissaloux, Hong Ling Shi. **SEES: Concept and Design of a Smart Environment Explorer Stick**	Suranga Kasthurirathne, Naomi Krishnarajah. **Re-Thinking Clinical Decision Support Systems Design for Rural and Resource Poor Settings**
14.00 - 14.15	Radu-Emil Precup, Mircea-Bogdan Radac, Emil Petriu, Claudia-Adina Dragos, Stefan Preitl, Alexandra-Iulia Stinean. **Data-Driven Performance Improvement of Control Systems for Three-Tank Systems**	Ali Sengül, Mohssen Hosseini, Mohamed Bouri, Zdzisław Kowalczuk, Hannes Bleuler. **Movement Perception with the use of a Motorized Delta Armrest and Virtual Reality**	Hotaka Takizawa, Shotaro Yamaguchi, Mayumi Aoyagi, Nobuo Ezaki, Shinji Mizuno. K**inect Cane : An Object Recognition Aid for the Visually Impaired**
14.15 - 14.30	Aji Prasetya Wibawa i Andrew Nafalski. **Javanese Speech Levels Machine Translation: Automatic Language Classification**	Giacomo Tartari, Daniel Stødle, John Markus Bjørndalen, Phuong Ha, Otto Anshus. **Global Interaction Space for User Interaction with a Room of Computers**	Karol Matusiak, Piotr Skulimowski, Pawel Strumillo. **Object recognition in a mobile phone application for visually impaired users**
14.30 - 14.45	Dan Petru Cristian, Constantin Barbulescu, Stefan Kilyeni, Attila Simo. **Particle Swarm Optimization Techniques. Power Systems Applications**	Anna Wróblewska, Paweł Kapłański, Paweł Zarzycki, Iwona Ługowska. **Semantic Rules Representation in Controlled Natural Language in FluentEditor**	Piotr Korbel, Piotr Skulimowski, Piotr Wasilewski. **A Radio Network for Guidance and Public Transport Assistance of the Visually Impaired**
14.45 - 15.00	Michael Pukish, Shumin Wang, Bogdan Wilamowski. **Segmentation of Cerebral Cortex MRI Images with Artificial Neural Network (ANN) Training**		Jerzy Wiciak, Bartłomiej Borkowski, Dorota Czopek. **System for identification of hazardous spots dedicated visually impaired people**
15.00 - 15.15			Hideyuki Sawada, Yu Nakamura, Yuto Takeda, Keiji Uchida. **Micro-vibration Array Using SMA actuators for the Screening of Diabetes**
15.15 - 15.30			Tomasz Kocejko, Jerzy Wtorek. **Gaze tracking in multiple-display environment**
15.30 - 18.00			
18.00 - 22.00	**Welcome Party**		

	7.06.2013		
9.00 - 9.45	**Keynote lecture: Prof. Jerzy W. Grzymala-Busse,** *Generalized probabilistic approximations*		
9.45 - 10.15	Coffe break		
10.15 - 10.30	Rimah Amami, Dorra Ben Ayed, Noureddine Ellouze. **Adaboost with SVM using GMM Supervector for Imbalanced Phoneme Data**	Daisuke Chugo, Kenji Shiotani, Yuki Sakaida, Sho Yokota, Hiroshi Hashimoto. **An Automatic Adjustable Backrest for a Posture Coordination of a Seated Patient on a Wheelchair**	Yohei Tomita, Yasue Mitsukura. **Simultaneous analysis of NIRS and EEG signals for BCI**
10.30 - 10.45	Kevin McCarty, Milos Manic, Allan Gagnon. **A Fuzzy Framework with Modeling Language for Type 1 and Type 2 Application Development**	Dumidu Wijayasekara, Milos Manic. H**uman Machine Interaction via Brain Activity Monitoring**	Hiroyuki Kobayashi, Yasuhiro Tatsukami. **A prototype design for wireless EMG capturing system with stimulation feedback**
10.45 - 11.00	Piotr Szwed. **Application of Fuzzy Ontological Reasoning in an Implementation of Medical Guidelines**	Lassaad Ben Ammar. **Early Usability Measurement in a Model Driven Development Process**	Takuya Shimazu, Keiko Kasakawa, Satoshi Suzuki. **Impression analysis for robot behavior using brain monitoring**
11.00 - 11.15	Karol Draszawka, Julian Szymański. **Thresholding strategies for Large Scale Multi-Label Text Classifier**	Steven Bruce Ferrer, Cristobal Ochoa-Luna, Mohammad Habibur Rahman, Maarouf Saad, Philippe Archambault. **HELIOS: The human machine interface for MARSE robot**	Piotr Przystup, Adam Bujnowski, Jacek Rumiński, Jerzy Wtorek. **A multisensor detector of a sleep apnea for using at home**
11.15 - 11.30	Marek Krótkiewicz, Krystian Wojtkiewicz. **Introduction to Semantic Knowledge base: Linguistic Module**	Ramon Blanco-Gonzalo, Luis Diaz-Fernandez, Oscar Miguel-Hurtado, Raul Sanchez-Reillo. **Usability Evaluation of Biometrics in Mobile Environments**	Michał Wróbel. **Emotions in the software development process**
11.30 - 11.45	Peter Nauth. **Improvement of Assistive Robot Behaviour by Experience-based Learning**	Aitzol Astigarraga, Manex Agirrezabal, Elena Lazkano, Ekaitz Jauregi and Basilio Sierra. Bertsobot: the first minstrel robot	Mariusz Szwoch. **FEEDB: a Multimodal Database of Facial Expressions and Emotions**
11.45 - 12.00		Eduardo López-Arce Vivas, Alejandro García-González, Iván Figueroa, Rita Fuentes. **Discrete Wavelet Transform and ANFIS Classifier for Brain-Machine Interface based on EEG**	Agata Kołakowska, Agnieszka Landowska, Mariusz Szwoch, Wioleta Szwoch, Michał Wróbel. **Emotion Recognition and its Application in Software Engineering**
12. 00 - 13.00	Lunch		
13.00 - 13.15	Julian Szymanski. **Evaluation of Feature Selection methods for Text Classification**	Joko Hariyono. **Detecting Face in Color Images using Skin Color Segmentation and Facial Features Matching**	Agnieszka Landowska. **Affect-awareness Framework for Intelligent Tutoring Systems**
13.15 - 13.30	Zdzislaw Hippe. **Logic of Human-System-Interaction in Planning Complex Strategies for Chemical Syntheses**	Marek Miłosz, Małgorzata Plechawska-Wojcik, Magdalena Borys, Maciej Laskowski. **Quality Improvement of ERP System GUI Using Expert Method: a Case Study**	Agata Kołakowska. **A review of emotion recognition methods based on keystroke dynamics and mouse movements**
13.30 - 13.45	Tomas Potuzak. **Feasibility Study of Optimization of a Genetic Algorithm for Traffic Network Division for Distributed Road Traffic Simulation**	Jennifer Bützler, Christina Bröhl, Nicole Jochems, Christopher M. Schlick. **Age Differentiated Usability Evaluation of Project Management Software**	Szwoch Wioleta. **Using Physiological Signals for Emotion Recognition**
13.45 - 14.00	Darya Filatova. **Estimating the time-varying parameters of stochastic differential equation by maximum principle**	Michaela Bačíková, Jaroslav Porubän. **Ergonomic vs. Domain Usability of User Interfaces**	Piotr Augustyniak. **Adaptive Architecture for Assisted Living Systems**
14.00 - 14.15	Abir Smiti, Zied Elouedi. **Soft DBSCAN: Improving DBSCAN Clustering method using fuzzy set theory**	Silke Holzmüller-Laue, Bernd Göde, Kerstin Thurow. **An Overall Process-driven Approach of Human Task Support within Life Science Automation**	P Farshid Amirabdollahian, R Op Den Akker, S Bedaf, R Bormann, H Draper, G J Gelderblom, C Gutierrez Ruiz, D Hewson, K Lee Koay, B Krose, P Marti, H Prevot-Huille, U Reiser, J Saunders, T Sorell , K Dautenhahn. **Company: Acceptable robotiCs COMPanions for AgeiNg Years - Multidimensional Aspects of Human-System Interactions**
14.15 - 14.30	Aleksander Sokołowski, T. Pardela. **Fourier transforms in melanoma image classification**	Madhat Alsoos and Ammar Joukhadar. **Posture Independent Model for Hand Detection and Tracking**	Silvia Coradeschi, Amedeo Cesta, Gabriella Cortellessa, Luca Coraci, Javier Gonzalez, Lars Karlsson, Francesco Furfari, Amy Loutfi, Andrea Orlandini, Filippo Palumbo, Federico Pecora, Stephen von Rump, Ales Štimec, Jonas Ullberg, Britt Ötslund. **GiraffPlus: Combining social interaction and long term monitoring for promoting independent living**
14.30 - 14.45	Jerzy Raszka and Lech Jamroż. **Application of genetic algorithms and max-plus system formalism in optimization of discrete system processes.**		Glenda Cook, Jeremy Ellman, Barbara Klein. **Everyday usage of home telecare services in England**
14.45 - 15.00			Leonid Kompanets, Damian Kurach, Piotr Milczarski. **Creation of the Fuzzy Three-level Adapting BrainThinker**
15.00 - 15.15			Raoul Textoris, Tullio Tanzi. **How to define and use safety indicators.**
15.15 - 19.00			
19.00 - 21.00	**Gala Diner**		

	8.06.2013		
9.00 - 9.45	**Keynote lecture: Prof. K. Krzysztofek,** *The human-machine interaction as seen from the humanist and trans-humanist perspective: an approach to socio-technology*		
9.45 - 10.15	Coffe break		
10.15 - 10.30	Van-Dung Hoang, Kang-Hyun Jo, My-Ha Le. **Ego-Motion Estimation using Omnidirectional Camera and Laser Rangefinder**	Kęstas Rimkus, Audrius Bukis, Arūnas Lipnickas, Saulius Sinkevičius. **3D Human Hand Motion Recognition System**	Barbara Klein, Sebastian Reutzel, Holger Roßberg, Glenda Cook. **Can telecare contribute to an independent life at home with 100? A glance to the UK and initial experiences of the German LOEWE field test on age appropriate sensor based assistance in real estate**
10.30 - 10.45	Justin Nguyen, Burkhard Wuensche, Patrice Delmas, Christof Lutteroth i Wannes van der Mark. **High Resolution 3D Content Creation using Unconstrained and Uncalibrated Cameras**	Pawel Czarnul. **Design of a Distributed System using Mobile Devices and Workflow Management for Measurement and Control of a Smart Home and Health**	Chris Soraghan, Sonja Hermann, Gerard Boyle. **Design and older people's real issues: Experiences of an engineer assessing technology in the user's home**
10.45 - 11.00	Takaya Oyama, Eri Yoshida, Yoshinori Kobayashi, Yoshinori Kuno. **Tracking Visitors with Sensor Poles For Robot's Museum Guide Tour**	Jakub Flotyński. **Harvesting of Semantic Metadata from Distributed 3D Web Content**	Wendy Moyle, Cindy Jones, Marie Cooke, Siobhan O'Dwyer, Billy Cho Yin Sung, Suzie Drummond. **Social Robots Helping People with Dementia to Achieve Wellbeing: Assessing Efficacy of Social Robots in the Nursing Home Enviornment**
11.00 - 11.15	Danilo Caceres Hernandez, Van-Dung Hoang, Kang-Hyun Jo. **Iterative Vanishing Point Estimation Based on DBSCAN for Omnidirectional Image**	Lee Ostrom. **Developing Risk Models for Complex Systems**	Glenda Cook, Cathy Bailey and Wendy Moyle. **The impact of ICT-based telecare technology on quality of life of people with dementia: review of the literature**
11.15 - 11.30	Yoon Suk Kwak, Soon Ki Jung. **Visual signal recognition for military training system using motion capture system**	Dorota Kamińska, Tomasz Sapiński, Adam Pelikant. **Comparison of Perceptual Features Efficiency for Automatic Identification of Emotional States from Speech**	
11.30 - 11.45		Sho Yokota, Kyousuke Nagai, Keisuke Morishita, Makoto Mori, Daisuke Chugo and Hiroshi Hashimoto. **The Assistive Walker using Hand Haptics -The Design of the Prototype.**	
11.45 - 12.00		Mariusz Oszust, Marian Wysocki. **Polish Sign Language Words Recognition with Kinect**	
12.15 - 13.00	**Keynote lecture: prof. A Czyżewski,** *Multimodal human-computer interfaces based on advanced video and audio analysis*		
13.00 - 13.30	**Poster Session**		
13.30 - 13.45	*Closing of the Conference*		
13.45	**Lunch**		

Poster session

M. Hajder, J. Kolbusz, T. Bartczak, **Models Phases of the Life Cycle of HSI**	Tomasz Golonek. **Analog Circuits Testing by Means of Walsh-Hadamard Spectrum of Supply Current Transient State Monitoring**
M. Hajder, J.Kolbusz, T. Bartczak, **Qualitative and Quantitative Measure of Design HSI**	Florin Solomonesc, Constantin Barbulescu, Stefan Kilyeni, Attila Simo. **Genetic Algorithms. Power Systems Applications**
M. Hajder, J.Kolbusz, T. Bartczak, **Algebra Consistent Untargeted Graph on Communication of Human System Information**	Wiesław Paja, Mariusz Wrzesień. **Melanoma important features selection using random forrest approach**
Paweł Cudek, Andrzej Burda, Zdzisław Hippe. **ProfileSEEKER – Early Warning System for Predicting Economic Situation of Small and Medium Enterprises**	Mohsen Shafeie, Nika Zolfaghari, Kristiina M. Valter McConville. **Abdominal Muscles Behavior and Motion Sickness During Paired Visual Input with Roll Motion**
Lukasz Adrjanowicz, Mariusz Kubanek, Janusz Bobulski. **Single Camera Based Pose Estimation with Dissimilarity Measurement**	