

ICMMI 2011 Conference Programme

Thursday 06.10.2011

12:00 Registration starts

13:00 Lunch

15:00 Welcome session

15:15 Keynote lecture 1

The Future of Human-Machine Interaction: Implant Technology

p. 11

Kevin Warwick

16:15 Coffee break

16:30 Session A: Robot Control and Navigation Systems

Remote Control and Monitoring of AX-12 Robotic Arm Based on Windows Communication Foundation

p. 77

Michał A. Mikulski, Tadeusz Szkodny

Solution Algorithm of Inverse Kinematics Problem for Kuka KRC3 Robots

p. 67

Tadeusz Szkodny, Michał A. Mikulski

Influence of Receiver Parameters on GPS Navigation Accuracy

p. 85

Krzysztof Tokarz, Jarosław Paduch, Łukasz Herb

Integrity Events Analysis at OLEG GNSS Station in EGNOS Data Collection Network

p. 95

Oleg Antemijczuk, Bartłomiej Szady, Krzysztof A. Cyran

Rapid Threat Detection for Stereovision Mobility Aid System

p. 115

Rafał Kozik

The Mobile Personal Augmented Reality Navigation System

p. 105

18:00 *Jakub Krolewski, Piotr Gawrysiak*

18:30 Diner in Skalite Highlander Cottage with live folklore music

Friday 07.10.2011	
08:00	Breakfast
09:15	Keynote lecture 2
	Human Centered Interfaces for Assisted Living p. 3 <i>Anastasios Tefas, Ioannis Pitas</i>
10:15	Session B: Man-Machine Interfaces
	Multimedia Interface Using Head Movements Tracking p. 41 <i>Lukasz Kosikowski, Piotr Dalka, Piotr Ody, Andrzej Czyżewski</i>
	Eigengestures for Natural Human Computer Interface p. 49 <i>Piotr Gawron, Przemysław Głomb, Jarosław A. Miszczak, Zbigniew Puchala</i>
	On Possibility of Stimulus Parameter Selection for SSVEP-Based Brain-Computer Interface p. 57 <i>Marcin Byczuk, Paweł Poryzala, Andrzej Materka</i>
11:00	Coffee break
11:15	Session C: Bio-Data Analysis and Mining
	Biomedical Sensor Analysis Using Mobile Technologies for Cardiovascular Disease Identification—A Case Study p. 127 <i>Mariusz Chmielewski, Krzysztof Wilkos, Marcin Wilkos, Jarosław Lewandowski, Piotr Stapor</i>
	A Deceiving Charm of Feature Selection: The Microarray Case Study p. 145 <i>Miron B. Kursa, Witold R. Rudnicki</i>
	Correlation of Genes Similarity Measures Based on GO Terms Similarity and Gene Expression Values p. 137 <i>Aleksandra Gruca, Michał Kozielski</i>
	Branching Processes in the Compartment Model of RNA World p. 153 <i>Dariusz Myszor, Krzysztof A. Cyran</i>
	Biomass Specific Growth Rate Utilization for Model-Based Process Control and Supervision p. 161 <i>Tomasz Strzepak</i>
	The Robust Models of Retention for Thin Layer Chromatography p. 169 <i>Miron B. Kursa, Lukasz Komsta, Witold R. Rudnicki</i>
12:45	
13:00	Lunch
15:00	Session D: Data Management Systems
	Data Replication Methods in Distributed Sale Systems p. 403 <i>Piotr Kowalski, Katarzyna Hareźlak</i>
	Architecture of the Multiagent System for Replicated Data Management p. 415 <i>Lukasz Kulisz, Katarzyna Hareźlak</i>
	Replicated Data Synchronization in the Agent System p. 425 <i>Lukasz Kulisz, Katarzyna Hareźlak</i>
	Verification of the Search Space Exploration Strategy Based on the Solutions of the Join Ordering Problem p. 447 <i>Daniel Kostrzewa, Henryk Josiński</i>
	Merging Adjacency Lists for Efficient Web Graph Compression p. 385 <i>Szymon Grabowski, Wojciech Bieniecki</i>
16:15	Coffee break
16:30	Session E: Sound and Text Processing, Design and Decision Support
	An Approach to Determining Tinnitus Acoustical Characteristic p. 221 <i>Piotr Suchomski, Piotr Ody, Józef Kotus, Andrzej Czyżewski</i>
	Recognition of Author Gender for Literary Texts p. 229 <i>Urszula Stańczyk</i>
	Home Butler Creating a Virtual Home Assistant p. 251 <i>Alexiei Dingli, Stefan Lia</i>
	Towards Intelligent Systems Supporting Conceptual Design p. 259 <i>Ewa Grabska, Grażyna Ślusarczyk</i>
	Graph Similarity Measure in Automatic Evaluation of Designs p. 267 <i>Barbara Strug</i>
17:45	
18:00	Diner
20:00	Photo Competition Session

Saturday 08.10.2011

08:00 Breakfast

09:15 Tutorial Part 1

Content-Based Image Retrieval: Some Basics

p. 21

Gerald Schaefer

11:00 Coffee break

11:15 Tutorial Part 2

Content-Based Image Retrieval: Advanced Topics

p. 31

12:45 *Gerald Schaefer*

13:00 Lunch

15:00 Session F: Clustering, Rough and Fuzzy Investigations

Multiobjective Differential Crisp Clustering for Evaluation of Clusters Dynamically

p. 307

Indrajit Saha, Ujjwal Maulik, Dariusz Plewczynski

A Distributed Genetic Algorithm for Graph-Based Clustering

p. 323

Krisztian Buza, Antal Buza, Piroska B. Kis

Fuzzification Operator for Rough Sets in Image Segmentation

p. 287

Dariusz Malyszko, Jaroslaw Stepaniuk

Neuro-Fuzzy System for Large Data Sets

p. 297

Krzysztof Simiński

Semantic Data Selections and Mining in Decision Tables

p. 279

Krzysztof Czajkowski, Mieczyslaw Drabowski

16:15 Coffee break

16:30 Session G: Pattern Recognition and Medical Applications

Nutrition Assistance Based on Skin Color Segmentation and Support Vector Machines

p. 179

Ermioni Marami, Anastasios Tefas, Ioannis Pitas

An Application of Fuzzy Clustering Method to Cardiotocographic Signals Classification

p. 315

Michał Jeżewski, Jacek Łęski

Automatic System for Classification of Melanocytic Skin Lesions Based on Images Recognition

p. 189

Pawel Cudek, Wiesław Paja, Mariusz Wrzesień

A Virtual Anatomical 3D Head, Oral Cavity and Teeth Model for Dental and Medical Applications

p. 197

Georgios Moschos, Nikolaos Nikolaidis, Ioannis Pitas, Kleoniki Lyroudia

3D Hand Shape Modeling for Automatic Assessing Motor Performance in Parkinson's Disease

p. 207

Katarzyna Kaszuba, Bożena Kostek

17:45 Free time

20:00 Banquet in Skalite Night Club

Sunday 09.10.2011

08:00 Breakfast

09:15 Session H: Algorithms and Optimisation

A Parallel GPU-Designed Algorithm for the Constrained Multiple Sequence Alignment Problem <i>Adam Gudyś, Sebastian Deorowicz</i>	p. 361
Using the Artificial Bee Colony Algorithm for Determining the Heat Transfer Coefficient <i>Adam Zielonka, Edyta Hetmaniok, Damian Słota</i>	p. 369
Parallel Independent Simulated Annealing Searches to Solve the VRPTW <i>Bożena Wieczorek</i>	p. 377
Efficient Representation of Transition Matrix in the Markov Process Modeling of Computer Networks <i>Piotr Pecka, Sebastian Deorowicz, Mateusz Nowak</i>	p. 457
AdaBoost Ranking Results Improvement by Pairwise Classifiers for Web Page Classification <i>Tomasz Gąciarz, Krzysztof Czajkowski, Maciej Niebylski</i>	p. 293

10:30 Coffee break

10:45 Session I: Prediction and Regression

The Forecasting Model Based on Wavelet Support Vector Machine and Multi-Elitist PSO <i>Jerzy Martyna</i>	p. 335
Correcting Streaming Predictions of an Electricity Load Forecast System Using a Prediction Reliability Estimate <i>Zoran Bosnič, Pedro Pereira Rodrigues, Igor Kononenko, João Gama</i>	p. 343
Support Vector Regression as a Classification Problem with a Priori Knowledge in the Form of Detractors <i>Marcin Orchel</i>	p. 351

11:30 Farewell session

12:00 Checking out

13:00 Lunch