

SAMI 2007 Final Program

January 25, Thursday

8:00 – 9:00 Registration Hour

	CONROOM	MEETROOM
9:00 – 9:20	Opening Ceremony	
9:20 – 10:00	Plenary Session <u>Session Chair:</u> Imre J. Rudas Geometric Theory and Control of Linear Parameter Varying Systems József Bokor	
10:00 – 10:40	Plenary Session <u>Session Chair:</u> Peter Sincák Nano Drive Control for Stepping Motors and its Application to 'Mascot Robot' Project Kaoru Hirota	
10:40 – 11:00	Coffee break	
11:00 – 12:00	Special Session Information Aggregation in Intelligent Systems <u>Session Chair:</u> Imre J. Rudas	Morning Session <u>Session Chair:</u> Liberios Vokorokos
11:00 – 11:20	New Operator Classes in Information Aggregation Imre J. Rudas, János Fodor	Expressing Dynamics of Mobile Programs by Typing Martin Tomášek
11:20 – 11:40	Uninorms and Related Operators in Image Processing János Fodor, Imre J. Rudas, Barnabás Bede	Virtual Master Device Gábor Sziebig, Béla Takarics, Viliam Fedak, Péter Korondi
11:40 – 12:00	Absorbing Norms in the Family of Fuzzy Operators Márta Takács, Katalin Lőrincz	Fault Tolerant Computer System Based on TMR Architecture Liberios Vokorokos, Branislav Madoš, Jan Perháč
12:00 – 13:50	Lunch	
13:50 – 15:50	Afternoon Session I A <u>Session Chair:</u> János Fodor	Afternoon Session I B <u>Session Chair:</u> Marek Paralič
13:50 – 14:10	Coalition Representation in Ontology Using Various Type of Logic Viktor Oravec, Ivana Budinská, Baltazár Frankovič	A New Formalism Technique for OCL Gergely Mezei, Tihamér Levendovszky, Hassan Charaf

14:10 – 14:30	Intelligent 3D Deformation Modeling in Vehicle System Dynamics Annamária R. Várkonyi-Kóczy, András Rövid	The A-Shaped Model of Software Life Cycle Csaba Szabó, Ladislav Samuelis
14:30 – 14:50	Navigation of Mobile Robots by Computational Intelligence Means Ján Vaščák	Optimal Control of the Three Tank System in H ₂ /H _∞ Space Levente Kovács, Endre Borbély, Zoltán Benyó
14:50 – 15:10	Generalized Geometric Error Correction in Coordinate Measurement Gyula Hermann	Composed Classifiers in Decision Processes Výrostková Jana, Ocelíková Eva, Klimešová Dana
15:10 – 15:30	Data Visualization in Parallel Environment Based on the OpenGL Standard Liberios Vokorokos, Jan Perhač, Branislav Madoš	Programmable Analogue Circuit in Reconfigurable Systems György Györök
15:30 – 15:50	All Possible Path in a Credit Network András Bakó, István Szűts, Lajos Tóth	Modelling and Control the Reliability of the Multiagent Control Systems Ladislav Takáč, Ján Galdun, Peter Kica, Ján Sarnovský
15:50 – 16:10	Coffee break	
16:10 – 16:50	Plenary Session <u>Session Chair</u> : Peter Sinčák Potential of IT collaboration between Hungary and Slovakia – view of Bay-Logi Institute Hungary Lajos Tóth, Zoltán Hoffman	
16:50 – 17:30	Invited Speech <u>Session Chair</u> : Baltazár Frankovič Perspective Methods and Tools for the Design of Distributed Software Systems Based on Services Marek Paralič	
18:00	Banquet	
19:30 – 22:00	AquaCity visit	

January 26, Friday

	CONROOM	MEETROOM
9:00 – 10:40	Morning Session I A <u>Session Chair:</u> Jan Vascák	Morning Session I B <u>Session Chair:</u> Szilveszter Kovács
9:00 – 9:20	Using Agents and Aspects for Improving of Reliability in Open Design Architecture Miroslav Beličák, Marcel Tóth	Intelligent Modeling Method for Development of Shape Centered Products in Collaborative Engineering László Horváth, Imre J. Rudas
9:20 – 9:40	Vague Environment-based Two-Step Fuzzy Rule Interpolation Method Zsolt Csaba Johanyák, Szilveszter Kovács	Outline of the Access-eGov Architecture Marek Skokan, Peter Bednár, Martin Tomášek
9:40 – 10:00	Static and Dynamic Approaches to Weaving Michal Forgáč, Ján Kollár	Scheduling the Generation of Renewable Power Sources Péter Kádár
10:00 – 10:20	New Developments on the HUNVEYOR-4 Educational Space Probe György Hudoba, Zoltán Balogh, Szaniszló Bérczi	Grid-enabled Support for Classification and Clustering of Textual Documents Martin Sarnovsky, Peter Butka
10:20 – 10:40	Multiparadigm Approach to Software System Evolution Jana Bandáková	The Use of a Knowledge Based System in the Investigation of Decision Making based on the Use of the Classical and Fuzzy Sets Theories Ágnes Szeghegyi
10:40 – 11:00	Coffee break	
11:00 – 12:20	Morning Session II A <u>Session Chair:</u> Annamária R. Várkonyi-Kóczy	Morning Session II B <u>Session Chair:</u> László Horváth
11:00 – 11:20	Modeling and Control of Distributed Processes on the Base of Multi-Agent Systems Jolana Sebestyénová	Multi-Agent Fuzzy Control of the Robotic Soccer Daniel Hladek
11:20 – 11:40	Edge Detection Model Based on Involuntary Eye Movements of the Eye-Retina System Barna Reskó, András Róka, Ádám Csapó, Péter Baranyi	Movement Analyses by Pattern Correlation György Györök, Margit Makó
11:40 – 12:00	Active Contours and their Utilization at Image Segmentation Marián Bakoš	Open Design Architecture and Artificial Intelligence Agent Application in Information Systems Practice Miroslav Beličák
12:00 – 12:20	PAL-based Environment Mapping for Mobile Robot Navigation Zoltán Vámosy	Application of Problem-Based Learning in Classroom Activities and Multimedia Andrea Tick

12:20 – 14:00	Lunch	
14:00 – 15:40	Afternoon Session I A Session Chair: Jan Sarnovský	Afternoon Session I B Session Chair: Márta Takács
14:00 – 14:20	Testing Implementation of SeaFM Facility System Márta Seebauer, Zoltán Balogh, Gréta Sifter, Andrásné Kovács	Color Content-based Image Classification Szabolcs Sergyán
14:20 – 14:40	Identification of Robot's Dynamic Model by Means of Neural Network Ondrej Šimko, Ján Fetyko	Statistical Methods in Key Words Generation from Text Documents Kristína Machová, Andrea Szaboová
14:40 – 15:00	Simple Procedure for Minimum Zone Evaluation of Straightness and Flatness Gyula Hermann	Tree Automata in the Mathematical Theory Viliam Slodičák, Valerie Novitzká, Daniel Mihályi
15:00 – 15:20	Combinations of Gradient and Evolutionary Methods for Neural Network Weights Adaptation Pavol Maliňák, Rudolf Jakša	Dynamic Restructuralization of Software Systems Using Aspect-oriented Programming Marcel Tóth, Miroslav Beličák
15:20 – 15:40	Workflow Modelling Based on Process Graph József Tick	Utilization of Essential Object Description Capabilities for the Management of Virtual Higher University Processes József Gáti, Gyula Kártyás, Attila L. Bencsik
15:40 – 16:00	Coffee break	
16:00 – 18:00	Afternoon Session II A Session Chair: Marcel Tóth	
16:00 – 16:20	Categorical Type Analysis for Parsing Algebras Daniel Mihályi, Valerie Novitzká, Viliam Slodičák	
16:20 – 16:40	Control of Four-wheeled Vehicle on Ice Surface Using Attention-gated Reinforcement Learning (AGREL) Marek Lapko, Rudolf Jakša	
16:40 – 17:00	Knowledge-Based Approach in Information Systems Life Cycle and Information Systems Architecture Zdeněk Havlice, Ondrej Pločica	
17:00 – 17:20	Electrical Drive Fuzzy Model Design Daniela Perduková, Pavol Fedor	
17:20 – 17:40	Deterioration-based Maintenance Management Algorithm Kornélia Ambrus-Somogyi	
17:40 – 18:00	Neuro-Fuzzy Approaches to Natural Language Data Processing Ulrich H. Langanke	
18:00	Closing Ceremony	

January 27, Saturday

Workshop

Organized by Technical University of Kosice

	CONROOM
9:00 – 10:30	Panel discussion 1 Artificial Life: Dream or Reality Moderators: Imre J. Rudas, Baltazár Frankovic
10:30 – 10:45	Coffee break
10:45 – 12:00	Panel discussion 2 Quo Vadis: Computational Intelligence Moderators: Peter Sincák, Péter Baranyi, Liberios Vokorokos
12:00 – 13:30	Lunch
13:30 – 14:30	Invited lecture 1 Anytime Information Processing – A Possibility for Handling Data, Time and Resource Shortages Annamária R. Várkonyi-Kóczy
14:30 – 15:30	Invited lecture 2 New Trends in Intelligent Modeling Using a New Branch of Computational Cybernetics László Horváth
15:30	Closing Workshop