

SAMI 2006

FINAL PROGRAM

**4th Slovakian-Hungarian Joint
Symposium
on
Applied Machine Intelligence**

January 20-21, 2006
Herl'any, Slovakia

General Information	General Information
General Information	<p>Date and Place</p> <p>SAMI 2006 will be held in Herl'any, Slovakia, from January 20th till 21st, 2006.</p>
General Information	<p>Social Events</p> <p>Banquet will be held at 18:00 on Friday, January 20, 2006.</p>
General Information	<p>Accomodation</p> <p>All attendees stay in University Resident in Herl'any.</p>
General Information	<p>Official Language</p> <p>The official language of the symposium is English. All presentations, including discussions and submissions, must be made in the official language. No translation will be provided.</p>
General Information	<p>Breakfast and Lunch</p> <p>Breakfasts and lunches are available during the symposium.</p>
General Information	<p>Proceedings</p> <p>Each accepted paper reaching us in time will be published in the Volume of Proceedings that will be distributed at the conference registration desk.</p>
General Information	<p>Opening Hours of the Registration Desk</p> <p>The registration desk will be open during the symposium.</p>
General Information	<p>Presentation</p> <p>All the presentations can be made by using data projector (Power Point presentation). Authors are kindly asked not to use their own laptop. Please bring your presentation on CD or USB with you.</p>

Herl'any

Herl'any is situated 27 km away from Košice in the direction of Michalovce. There is a cold geyser, which is a rarity in the Europe. There are similar geysers only in Iceland. It was first discovered in 1870 during drilling for sources of mineral water, for baths. The eruption of geyser is from a depth 351 m to a height 20-30 m and interval between eruptions is 32-34 hours. The duration of the spout is around 25-30 minutes.



SAMI 2006 Technical Program

January 20, 2006 (Friday)

9:00 – 9:20 OPENING CEREMONY

Today Sessions
Computational Intelligence – Theory and Applications

9:20 – 10:00 INVITED TALKS

Session chair: *János Fodor*
 Budapest Tech, Hungary

**9:20 – 9:40 The Role of Ontology in Building of Knowledge
 Systems for Industrial Applications**

Baltazár Frankovič, Ivana Budinská
 Slovak Academy of Sciences, Slovakia

9:40 – 10:00 Integrated Application Systems for Manufacturing

Ferenc Erdélyi, Tibor Tóth
 University of Miskolc, Hungary

10:00 – 10:45 MORNING SESSION I

Session chair: *Imre J. Rudas*
 Budapest Tech, Hungary

10:00 – 10:15 Quo Vadis Center for Intelligent Technologies???
(Discussion about Research Interest of CIT)

Peter Sinčák
 Technical University of Košice, Slovakia

**10:15 – 10:30 Arithmetics with Fuzzy Numbers: a Comparative
 Overview**

János Fodor, Barnabás Bede
 Budapest Tech, Hungary

10:30 – 10:45 Intelligent Control in Robotic Soccer

Ján Vaščák, Martin Evin
 Technical University of Košice, Slovakia

10:45 – 11:00 COFFEE BREAK

SAMI 2006 Technical Program

- 11:00 – 12:15 MORNING SESSION II**
Session chair: *Peter Sinčák*
 Technical University of Košice, Slovakia
- 11:00 – 11:15 Fuzzy Clustering of the Earth Screen Data**
Jana Výrostková, Eva Ocelíková
 Technical University of Košice, Slovakia
Dana Klimešová
 Czech University of Agriculture, Prague
- 11:15 – 11:30 Reconfiguration Flexibility Offered by Output State Feedback in Fault-Tolerant Control System**
Dušan Krokavec, Anna Filasová
 Technical University of Košice, Slovakia
- 11:30 – 11:45 Diagnostic-purpose Research of Biological Signals**
Zoltán Benyó, Balázs Benyó, Levente Kovács, György Várallyay Jr., László Török, Attila Reiss
 Budapest University of Technology and Economics, Hungary
- 11:45 – 12:00 Centralized Network Security Model Using Dynamic Vlan and Client Authentication**
Liberios Vokorokos, Martin Chovanec, Ondrej Látka, Juraj Halász
 Technical University of Košice, Slovakia
- 12:00 – 12:15 Fuzzy Control System Training for Engineers**
Márta Takács, Ágnes Szeghegyi
 Budapest Tech, Hungary
Gizella Csikos Pajor
 Polytechnical Engineering College, Serbia and Montenegro
- 12:15 – 13:30 LUNCH**

SAMI 2006 Technical Program	
SAMI 2006 Technical Program	13:30 – 14:45 AFTERNOON SESSION I Session chair: <i>Baltazár Frankovič</i> Slovak Academy of Sciences, Slovakia
	13:30 – 13:45 Overview of New Scopes and Approaches in Situational Control of Complex Systems <i>Rudolf Andoga, Ladislav Madarász, Juraj Gierl</i> Technical University of Košice, Slovakia
	13:45 – 14:00 Development of Neuro-Fuzzy Control for Load Distribution in Transformer Substations Based on Thom's Catastrophe Theory <i>László Ormos</i> College of Nyíregyháza, Hungary <i>Gábor Halász</i> Israeli Electric Corporation, Haifa, Israel
	14:00 – 14:15 Image Segmentation Using Fuzzy C-Means <i>Juraj Horváth</i> Technical University of Košice, Slovakia
	14:15 – 14:30 Balanced Job Bounds Calculation for Approximating ASP.NET Performance Factors <i>Ágnes Bogárdi-Mészöly, Zoltán Sztás, Tihamér Levendovszky, Hassan Charaf</i> Budapest University of Technology and Economics, Hungary
	14:30 – 14:45 Automata Construct with Genetic Algorithm <i>Vít Fábera, Vlastimil Jáneš</i> Czech Technical University, Czech Republic
	14:45 – 15:00 COFFEE BREAK

SAMI 2006 Technical Program	
SAMI 2006 Technical Program	15:00 – 16:15 AFTERNOON SESSION II Session chair: <i>László Horváth</i> Budapest Tech, Hungary
	15:00 – 15:15 Mobile 3D Visualization <i>Balázs Tukora</i> University of Pécs, Hungary
	15:15 – 15:30 Defining Ontologies in a Multi Agent Scenario Using the JADE Framework <i>Dominik Fabrici</i> Technical Univesity of Košice, Slovakia
	15:30 – 15:45 A New Corner Detector Supporting Feature Extraction for Automatic 3D Reconstruction <i>Annamária R. Várkonyi-Kóczy, András Rövid, Péter Várlaki</i> Budapest University of Technology and Economics, Hungary
	15:45 – 16:00 Towards Generic Implementation of Software Architectures <i>Jana Bandáková, Ján Kollár</i> Technical University of Košice, Slovakia
	16:00 – 16:15 Fuzzy Set Approximation Using Polar Co-ordinates and Linguistic Term Shifting <i>Zsolt Csaba Johanyák</i> Kecskemét College, Hungary <i>Szilveszter Kovács</i> University of Miskolc, Hungary
	16:15 – 16:30 COFFEE BREAK

SAMI 2006 Technical Program		
SAMI 2006 Technical Program	16:30 – 17:45	AFTERNOON SESSION III Session chair: <i>Juraj Horváth</i> Technical University of Košice, Slovakia
	16:30 – 16:45	Active Learning of SVM and Decision Tree Classifiers for Text Categorization <i>Peter Bednár</i> Technical University of Košice, Slovakia
	16:45 – 17:00	Seeking for the Optimal Market <i>Péter Kádár</i> Budapest Tech, Hungary
	17:00 – 17:15	Intelligent Control of Heating Processes <i>Ivana Polanecká, Tomáš Saloky</i> Technical University of Košice, Slovakia
	17:15 – 17:30	MYRA - Face Detection and Face Recognition System <i>Tibor Kövér, Dénes Vigh, Zoltán Vámosy</i> Budapest Tech, Hungary
	17:30 – 17:45	Usability of GPS systems for Mobile Robots Navigation <i>Kamil Židek, Tomáš Saloky, Ivana Polanecká</i> Technical University of Košice, Slovakia
SAMI 2006 Technical Program	18:00	BANQUET

SAMI 2006 Technical Program	
January 21, 2006 (Saturday)	
Today Sessions	
Intelligent Technologies – Theory and Applications	
9:00 – 9:15	KEYNOTE TALK Session chair: <i>Imre J. Rudas</i> Budapest Tech, Hungary
9:00 – 9:15	Advanced Virtual Spaces for Collaboration in Product Modeling <i>László Horváth</i> Budapest Tech, Hungary
9:15 – 10:30	MORNING SESSION I Session chair: <i>Liberios Vokorokos</i> Technical University of Košice, Slovakia
9:15 – 9:30	SSDDM: Distance Metric for Graph-based Semi-structured Data <i>István Soós, Tihamér Levendovszky, Hassan Charaf</i> Budapest University of Technology and Economics, HU
9:30 – 9:45	Secure Connection of Database Systems to the Applications made by a Standard MVC <i>Liberios Vokorokos, Ondrej Látka, Martin Chovanec, Alžbeta Kleinová</i> Technical University of Košice, Slovakia
9:45 – 10:00	Double Clustering in Latent Semantic Indexing <i>Kristóf Csorba, István Vajk</i> Budapest University of Technology and Economics, HU
10:00 – 10:15	A Note on Integral Equivalence <i>Alexander Haščák, Jozef Kondáš</i> Technical University of Košice, Slovakia
10:15 – 10:30	Features and Improvement of Non-Linear Robot-Controllers by Simulation <i>István Szénásy</i> Széchenyi István University, Győr, Hungary
10:30 – 10:45	COFFEE BREAK

SAMI 2006 Technical Program		
SAMI 2006 Technical Program	10:45 – 12:15	MORNING SESSION II A Session chair: Szilveszter Kovács University of Miskolc, Hungary
	10:45 – 11:00	SmartWeb – Web Content Adaptation for Mobile Devices <i>Péter Cserkúti, Zoltán Szabó, Tamás Eppel, János Pál</i> Budapest University of Technology and Economics, Hungary
	11:00 – 11:15	Simulation of Chosen Electronical Systems of Aero Turbosupercharged Engine <i>Ondrej Líška, Radoslav Makovník</i> Technical University of Košice, Slovakia
	11:15 – 11:30	Execution Properties of a Visual Control Flow Language <i>László Lengyel, Tihamér Levendovszky, Gergely Mezei, Hassan Charaf</i> Budapest University of Technology and Economics, Hungary
	11:30 – 11:45	Content Based Image Retrieval in Database of Segmented Images <i>Szabolcs Sergyán</i> Budapest Tech, Hungary
	11:45 – 12:00	Graceful Labelling of Special Halin Graph <i>Marcel Kudláč, Štefan Schrötter</i> Technical University of Košice, Slovakia
	12:00 – 12:15	Constructing HUNVEYOR-4, the Educational Space Probe <i>György Hudoba, Zoltán Balogh, Attila Sáfár</i> Budapest Tech, Hungary <i>Szaniszló Bérczi</i> Eötvös Loránd University, Hungary
	12:15 – 13:30	LUNCH

SAMI 2006 Technical Program		
SAMI 2006 Technical Program	10:45 – 12:15	MORNING SESSION II B Session chair: <i>József K. Tar</i> Budapest Tech, Hungary
	10:45 – 11:00	Object Oriented Software Development in Embedded System Environment <i>József Tick</i> Budapest Tech, Hungary
	11:00 – 11:15	Adaptive Control of a Polymerization Process <i>József K. Tar, Imre J. Rudas</i> Budapest Tech, Hungary <i>Kazuhiro Kosuge</i> Tohoku University, Japan
	11:15 – 11:30	Neuro-fuzzy Speed Controller for DC Drives Using Low Precision Shaft Encoder <i>Ferenc Farkas, Sándor Halász, István Kádár</i> Budapest University of Technology and Economics, Hungary
	11:30 – 11:45	About Developing Curriculum Driven Modeling of Degree Program Content <i>József Gáti, Gyula Kártyás</i> Budapest Tech, Hungary
	11:45 – 12:00	From Computer Assisted Language Learning to Computer Mediated Language Learning <i>Andrea Tick</i> Budapest Business School, Hungary
	12:00 – 12:15	Bivariate Spline Approximation of Fuzzy Functions and Its Use in Digital Terrain Modeling <i>Ágnes Szeghegyi, Barnabás Bede</i> Budapest Tech, Hungary
	12:15 – 13:30	LUNCH

SAMI 2006 Technical Program		
SAMI 2006 Technical Program	13:30 – 14:45	AFTERNOON SESSION I Session chair: <i>Ján Vaščák</i> Technical University of Košice, Slovakia
	13:30 – 13:45	Measuring and Modelling the Effect of Application Server Tuning Parameters on Performance <i>Gábor Imre, Ágnes Bogárdi-Mészöly, Hassan Charaf</i> Budapest University of Technology and Economics, Hungary
	13:45 – 14:00	The role of the Clustering in the Field of Information Retrieval <i>Kristína Machová, Valentín Maták, Peter Bednár</i> Technical University of Košice, Slovakia
	14:00 – 14:15	Construction of an Active Triangulation 3D Scanner for Testing a Line Following Strategy <i>Tibor Kovács</i> Budapest University of Technology and Economics, Hungary
	14:15 – 14:30	Measuring Platform Architecture Based on the IPFIX Standard <i>Alžbeta Kleinová, Anton Baláž, Jana Trelová, Norbert Ádám</i> Technical University of Košice, Slovakia
	14:30 – 14:45	Self Configuration Analog Circuit by FPAA <i>György Györök, Margit Makó</i> Budapest Tech, Hungary
	14:45 – 15:00	COFFEE BREAK

SAMI 2006 Technical Program	
SAMI 2006 Technical Program	15:00 – 16:15 AFTERNOON SESSION II Session chair: Márta Takács Budapest Tech, Hungary
	15:00 – 15:15 Colour-balanced Networks <i>Emília Draženská, Jozef Kondáš, Štefan Schrotter</i> Technical University of Košice, Slovakia
	15:15 – 15:30 Brushless DC Motor Drive Control <i>Krisztián Lamár, Endre Borbély</i> Budapest Tech, Hungary
	15:30 – 15:45 On the Asymptotic Behavior of Solutions of Neurodynamical Systems <i>Ivan Daňo, Anna Grinčová, Daniela Kravecová</i> Technical University of Košice, Slovakia
	15:45 – 16:00 Implementing an OCL 2.0 Compiler for Metamodeling Environments <i>Gergely Mezei, Tihamér Levendovszky, Hassan Charaf</i> Budapest University of Technology and Economics, Hungary
	16:00 – 16:15 Error Analysis and Correction in a 2D Virtual Measuring Frame <i>Gyula Hermann</i> Budapest Tech, Hungary
	16:30 CLOSING CEREMONY

