
SACI 2006 FINAL PROGRAM

Thursday, May 25

9:00 – 9:15 *Opening Ceremony* *Conference Room A106*

9:15 – 10:00 *Plenary Session* *Conference Room A106*

Session Chair: **László Szeidl**, Budapest Tech, Hungary

Geometric Theory and Control of Linear Parameter Varying Systems

József Bokor, Hungarian Academy of Sciences

10:00 – 11:10 *Special Session* *Room A106*

Information Aggregation in Intelligent Systems

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

10:00 – 10:10 Introduction

Imre J. Rudas, Hungary

10:10 – 10:30 New Concepts and Methods in Information Aggregation

János Fodor, Imre J. Rudas, Hungary

10:30 – 10:50 Fuzzy Logic Control Problems Simulation Based on Parametrized Operators

Márta Takács, Sándor Szénási, Ágnes Szeghegyi, Hungary

10:50 – 11:10 Uninorms and Absorbing Norms in Image Processing

Imre J. Rudas, János Fodor, Barnabás Bede, Hungary

11:10 – 11:30 *Coffee Break*

11:30 – 12:50 *Morning Session* *Room A115*

Session Chair: **Octavian Prostean**, “Politehnica” University of Timisoara, Romania

11:30 – 11:50 On the Use of Iterative Feedback Tuning Algorithms in Fuzzy Control System Design

Stefan Preitl, Radu-Emil Precup, Romania, **János Fodor, Barnabás Bede**, Hungary

11:50 – 12:00 Clustering Sequences with a Statistical Content Evaluation Method

Alina Bogan-Marta, Nicolae Robu, Romania

12:10 – 12:30 Identification of Car Body Deformation Applying Tensor Product Models

István Harmati, András Rövid, László Szeidl, Péter Várlaki, Hungary

12:30 – 12:50 Considerations Regarding the Flux Estimation in Induction Generator with Application at the Control of Unconventional Energetic Conversion Systems

Iosif Szeidert, Octavian Prostean, Ioan Filip, Vasar Cristian, Romania

12:50 – 14:00 Lunch	
14:00 – 15:40 Parallel Session I	Room A109
<u>Session Chair:</u> János Fodor , Budapest Tech, Budapest, Hungary	
14:00 – 14:20	Opportunities of Emerging Technologies for Smart Houses – City-wide Energy, Gas and Water Measurement Networks Lehel Nagy-Kulcsar, Petru Dobra, Daniel Moga, Mihai Dumitrescu, Nicoleta Stroia , Romania
14:20 – 14:40	Experiments in Multi-parametric Quadratic Programming Zsuzsa Preitl, Radu-Emil Precup , Romania, József K. Tar, Márta Takács , Hungary
14:40 – 15:00	Model Transformer Plugin Generation Ákos Horváth, Endre Borbély , Hungary
15:00 – 15:20	An Algorithm for Stability of Takagi–Sugeno Fuzzy Logic Controller Marius L. Tomescu , Romania
15:20 – 15:40	Tracking Control of Mechatronic Systems based on Precise Friction Compensation Lőrinc Márton , Romania, Béla Lantos , Hungary
14:00 – 15:40 Parallel Session II	Room A115
<u>Session Chair:</u> Radu-Emil Precup , “Politehnica” University of Timisoara, Romania	
14:00 – 14:20	About the Behavior of Fixation Devices on the Fractured Mandible Doina Dragulescu, Lucian Rusu, Mirela Toth Tascu , Romania
14:20 – 14:40	Adaptive Fuzzy Controller for Synchronous Generator Ioan Filip, Octavian Proștean, Cristian Vașar, Iosif Szeidert , Romania
14:40 – 15:00	Comparison of Elementary Fuzzy Sequential Digital Units based on Various Popular T-norms and Co-norms Rita Lovassy, László T. Kóczy , Hungary
15:00 – 15:20	On Chained Cryptographic Puzzles Bogdan Groza, Dorina Petrica , Romania
15:20 – 15:40	Aspects of TGS 813 Gas Sensor’s Use Ioan Silea, Dorina Petrica , Romania
15:40 – 16:00 Coffee Break	

16:00 – 18:00		Parallel Session III	Room A109
<u>Session Chair:</u> Stoicu-Tivadar Lăcrămioara , “Politehnica” University of Timisoara, Romania			
16:00 – 16:20	Using Fuzzy Logic for the Specification and Retrieval of Software Components	Ioana Şora, Doru Todinca , Romania	
16:20 – 16:40	A Genetic Algorithm for the Two-dimensional Single Large Object Placement Problem	László Pál , Romania	
16:40 – 17:00	Integrated Modeling for Data Integrity in Product Change Management	László Horváth, Imre J. Rudas , Hungary	
17:00 – 17:20	On the Use of Robust Servo Control in Diabetes under Intensive Care	Levente Kovács, Balázs Kulcsár, Zoltán Benyó , Hungary	
17:20 – 17:40	Hardware-software Solutions to Surveillance an Objective	Emil Voisan, Daniel Iercan, Florin Dragan, Onut Lungu , Romania	
17:40 – 18:00	Robust H_∞ Blood - Glucose Control with Mathematica	Levente Kovács, Béla Paláncz, Zoltán Benyó , Hungary	
16:00 – 18:00		Parallel Session IV	Room A115
<u>Session Chair:</u> Ştefan Holban , “Politehnica” University of Timisoara, Romania			
16:00 – 16:20	Genericity, and Customisation in a Lotus-based Solution for Communication between Local Public Institutions	Vasile Stoicu-Tivadar , Romania	
16:20 – 16:40	Robust Potential Limited Control for Systems of Unmodeled Internal Degrees of Freedom	József K. Tar, Imre J. Rudas , Hungary Stefan Preitl, Radu-Emil Precup , Romania	
16:40 – 17:00	A Particular Multi-Agent Framework for Execution of Application and Resource Management	Alexandru Cicortas, Victoria Iordan , Romania	
17:00 – 17:20	Improved Slope Identification Techniques in Extremum Control	Eva Dulf, Rodica Festila, Clement Festila , Romania	
17:20 – 17:40	SeaFM Facility Management Project. Integrated Management Methodology for the Property and Facility of Companies	Márta Seebauer, Zsolt Viniczay , Hungary	
17:40 – 18:00	Evaluation of Soil-Parameters with Diffusion-Neural-Network	Zoltán Makó, Szilárd Máté , Romania	
18:30	Welcome Reception		

Friday, May 26

9:00 – 10:40 *Parallel Session V* *Room A109*

Session Chair: **László Horváth**, Budapest Tech, Hungary

9:00 – 9:20 Performance Aspects of Fuzzy Logic Controlers with Improved Architecture

Doru Todinca, Radu-Emil Precup, Romania

9:20 – 9:40 Energy on the Roof

Péter Kádár, Hungary

9:40 – 10:00 Routing and Topology Extraction Protocol for a Wireless Sensor Network using Video Information

Madalin Cosma, Dan Pescaru, Bogdan Ciubotaru, Doru Todinca, Romania

10:00 – 10:20 Towards a Reengineering Tool for Java based on Reverse Inheritance

Ciprian-Bogdan Chirila, Monica Ruzsilla, Pierre Crescenzo, Philippe Lahire, Dan Pescaru, Emanuel Țundrea, Romania

10:20 – 10:40 Contribution of the Computer Science at Debts Registering in Accountancy

Mihaela Tulvinschi, Eugenia Iancu, Romania

9:00 – 10:40 *Parallel Session VI* *Room A115*

Session Chair: **Doina Drăgulescu**, “Politehnica” University of Timisoara, Romania

9:00 – 9:20 Wireless Solutions for Telemetry in Civil Equipment and Infrastructure Monitoring

Bogdan Ciubotaru-Petrescu, Dan Chiciudean, Razvan Cioarga, Daniela Stanescu, Romania

9:20 – 9:40 Serial Bus Monitoring Software for Microcontrollers Embedded in Mechatronic Systems

Mircea Popa, Marian Vasile, Sebastian Fuicu, Romania

9:40 – 10:00 Multimedia Streaming of MP3 Audio Content Based on FM Stereo Radio Transmitter

Andrei Novak, Mircea Stratulat, Daniela Stanescu, Dan Chiciudean, Bogdan Ciubotaru, Razvan Cioarga, Romania

10:00 – 10:20 Database Management Systems Comparative Study: Performances of Microsoft SQL Server Versus Oracle

Cătălin Tudose, Carmen Odubășteanu, Romania

10:20 – 10:40 The Comparative Study of the Cross Displacement Fields for a Kinematical Element Thin Plane Plate with Linear-Elastic Behavior, respectively, with Linear-Viscoelastic Behavior

Dan Gheorghe Băgnaru, Adina Cătăneanu, Romania

10:40 – 11:00 Coffee Break	
11:00 – 12:20 Parallel Session VII	Room A109
<u>Session Chair:</u> Barnabás Bede , Budapest Tech, Hungary	
11:00 – 11:20	Prognosis and Diagnosis in Hepatitis C using Expert Systems and Statistical Analyses Andreea Drăgulescu, Adriana Albu, Cătălin Gavriliuță, Ștefan Filip, Karoly Menyhardt , Romania
11:20 – 11:40	The ACC Mobile Robot Control Program Claudiu Pozna , Romania, Fritz Troester , Germany
11:40 – 12:00	The Dynamic Study of the Palm-Middle Finger System Loredana Ungureanu, Doina Drăgulescu, Antonius Stanciu, Marcel Șodincă , Romania
12:00 – 12:20	Diversity Enhancing Mechanisms for Evolutionary Optimization in Static and Dynamic Environments Daniela Zaharie, Flavia Zamfirache , Romania
11:00 – 12:20 Parallel Session VIII	Room A109
<u>Session Chair:</u> Marius Crișan , “Politehnica” University of Timisoara, Romania	
11:00 – 11:20	Extension of the Results of a Prevention Guides for Cardiovascular Diseases Using Interpolation Dorin Berian, Toma L. Dragomir , Romania
11:20 – 11:40	Method for Automatic Diagnosis Used in Real-Time Control Systems Gianina Gabor, Doina Zmaranda , Romania
11:40 – 12:00	CORE-TX: Collective Robotic Environment – the Timisoara Experiment Razvan-Dorel Cioarga, Mihai V. Micea, Bogdan Ciubotaru, Dan Chiuciudean, Daniela Stanescu , Romania
12:00 – 12:20	Hardware Neural Network with MC431 DSP Board Cosmin Cernăzanu, Ștefan Holban , Romania
12:20 – 13:00 Lunch	
13:00 – 15:20 Parallel Session IX	Room A109
<u>Session Chair:</u> József K. Tar , Budapest Tech, Hungary	
13:00 – 13:20	Computer Controlled Automatic Calibration System for Dial Gauges Gyula Hermann , Hungary
13:20 – 13:40	Enhanced Mixed Campus and Distance Higher Education Ștefan Preitl, Radu-Emil Precup, Romania, József Gáti, Gyula Kártyás, Sándor Szénási , Hungary

13:40 – 14:00	Fuzzy Differential Equations in Modeling Hydraulic Differential Servo Cylinders Attila L. Bencsik, Barnabás Bede, József K. Tar, János Fodor, Hungary
14:00 – 14:20	Algorithmic Design of a Fuzzy-Neural Method William Franklin, USA
14:20 – 14:40	Supervisor Control of a Flexible Manufacturing System Used in Spinning Mills Dan Ungureanu-Anghel, Dan Lucian Mihaescu, Romania
14:40 – 15:00	Acoustic Noise Elimination by FPAA György Györök, Margit Makó, Hungary
15:00 – 15:20	Cellular Automaton: ‘The Roulette Wheel’ and the Landscape Effect Ioan Hălălae, Romania
13:00 – 15:20 Parallel Session X Room A115	
<u>Session Chair:</u> Vasile Stoicu-Tivadar, “Politehnica” University of Timisoara, Romania	
13:00 – 13:20	Function Monitoring of Human Body by 3D g-sensor György Györök, Hungary
13:20 – 13:40	Mobile Agents versus Multicasting for Military Applications William Franklin, USA
13:40 – 14:00	Modelling Control Systems by Autonomous Mini Robot József Tick, Hungary
14:00 – 14:20	Meaning as Differentiated-Cognition Marius Crisan, Romania
14:20 – 14:40	Comparative Study Regarding Control of Wind Energy Conversion Systems Based on the Usage of Classical and Adaptive Neuro Fuzzy Controllers Iosif Szeidert, Romania
14:40 – 15:00	A Web-based E-learning Application of Self Study Multimedia Programme in Military English Andrea Tick, Hungary
15:00 – 15:20	Virtual Reality Laboratory for Robotic Systems Daniel Cioi, Steliana Vatau, Inocentiu Maniu, Romania
15:30	Closing Ceremony