GENERAL INFORMATION

Date and Place

SACI 2004 will take place on May 25-26, 2004, at "Politehnica" University of Timisoara.

Official Language

The official language of the conference is English. All presentations, including discussions and submissions, must be made in the official language. No translation will be provided.

Proceedings

Each accepted paper reaching us in time will be published in the Volume of Proceedings that will be distributed at the conference registration desk.

Presentation

OHP and data projector will be provided for oral presentation. Authors are asked not to use their own laptop, but bring the presentation on CD.

TECHNICAL PROGRAM

Tuesday, May 25

9:00 – 9:30 *Opening Ceremony*

9:30 – 10:50 *Morning Session I*

Session Chair: Stefan Preitl, "Politehnica" University of Timisoara, Timisoara,

Romania

1 Kinematics Aspects of Human Body Composite Motion

Doina Dragulescu, Mirela Toth Tascau, Vlad Morcovescu, Lucian Rusu, Mircea Dreucean, Romania

2 Biotechnological Processes Identification Using Dynamic Neural Networks

Marian Barbu, Sergiu Caraman, Emil Ceanga, Romania

3 Preference Relations in Decision Models

János Fodor, Hungary

4 Controller Tuning Using Genetic Algorithms

Ecaterina Emilia Vladu, Toma Leonida Dragomir, Romania

10:50 – 11:10 *Coffee Break*

11:10 – 12:30 *Morning Session II*

Session Chair: János Fodor, Szent István University, Budapest, Hungary

1 EKG Signal Recognition with Neural Network

Cosmin Cernăzanu, Dan Ciresan and Stefan Holban, Romania

2 On Shannon, Fisher, and Algorithmic Entropy in Cognitive Systems

Marius Crisan, Romania

3 Intelligent Methods for Car Deformation Modeling and Crash Speed Estimation

Annamária R. Várkonyi-Kóczy, András Rövid, Péter Várlaki, Hungary

4 Fuzzy Logic Decision Rules in Two Input-Single Output Linear Time-varying

Systems Control

Radu-Emil Precup, Stefan Preitl, Romania

12:30 - 14:00 Lunch

14:00 – 15:40 *Afternoon Session I*

Session Chair: Stefan Holban, "Politehnica" University of Timisoara, Timisoara, Romania

1 Base Changing Strategies in an Adaptive Representation Evolutionary Algorithm

Crina Grosan, Daniela Zaharie, Romania

2 Electrical Energy Prediction Study Case Based on Neural Networks

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

3 Soft Computing Method for Determining the Safety of Technological System by IEC 61508

László Ormos, István Ajtonyi, Hungary

4 Artificial Intelligence Techniques In An Evaluation And Decision System For Economic Activity

Nicolae Morariu, Romania

5 Error Propagation Study for Gutowitz Encryption Algorithm

Daniel-Ioan Curiac, George Serban Vremescu, Romania

15:40 – 16:00 *Coffee Break*

16:00 – 17:40 *Afternoon Session II*

<u>Session Chair</u>: **Radu-Emil Precup,** "Politehnica" University of Timisoara, Timisoara, Romania

- 1 Standard Selection of Objects within a Wood Construction CAD System
 - G. Cristian Savii, Romania
- 2 Applying Fuzzy Logic to Admission Control in GPRS/EGPRS Networks Doru Todinca, Romania
- 3 Welding Equipment with Improved Digital Control

Krisztián Lamár, Péter Zalotay, Endre Borbély, Hungary

4 Secure Web Access Control Algorithm

Ioan Filip, Iosif Szeidert, Cristian Vasar, Romania

5 A Computational Methodology for Linguistic Rules Konstantinos Fouskakis, Romania

18:00 Welcome Reception

Wednesday, May 26

9:00 – 10:40 *Morning Session I*

Session Chair: Annamária R. Várkonyi-Kóczy, Budapest University of Technology and Economics, Budapest, Hungary

1 Fuzzy Reliability for a System with N Components

Cornelia Victoria Anghel, Romania

2 Searching for the Lost Noise: the Genetical Experiments

Ioan Hălălae, Romania

3 Features of Non-linear Robot Position-controllers by Simulation of Control Model

István Szénásy, Hungary

4 ECG Analysis System, Using a Multi-Layer Neural Network

Dumitru Ostafe Eugenia Iancu Sorin Vlad Paul Pascu, Romania

5 A Comparative Study of Association Rules Mining Algorithms

Cornelia Győrödi, Robert Győrödi, Stefan Holban, Romania

10:40 – 11:00 *Coffee Break*

11:00 – 12:40 *Morning Session II*

<u>Session Chair</u>: **Toma Leonida Dragomir,** "Politehnica" University of Timisoara, Timisoara, Romania

1 A Survey Of Interpolative Methods Based on Rules and their Applications in Control Structures

Sanda Dale, Alexandru Bara, Romania

2 SMARTFACTORY - an Implementation of the Domain Driven Development Approach

Emanuel Țundrea, Philippe Lahire, Didier Parigot, Ciprian-Bogdan Chirilă, Dan Pescaru, Romania

3 Extending the Unified Problem-solving Method Development Language

Calin Sandru, Viorel Negru, Romania

4 The Advantage of Using Artificial Neural Networks in Economy

Eugenia Iancu, Doru Tiliute, Romania

5 A Contour Based Descriptor for Object Recognition

Cezar Popescu, Romania

12:40 - 14:00 Lunch

14:00 – 14:40 *Afternoon Session*

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

1 Error Correction of Co-ordinate Measuring Machines

Gyula Hermann, Hungary

2 Adaptive Nonlinear Vibration Control Based on Casual Time-invariant Green Functions and on a Novel Branch of Soft Computing

József K. Tar, Imre J. Rudas, János F. Bitó, Hungary, José A. Tenreiro Machado, Portugal

The Road in Software Engineering Education from Structured Programming to Object-Oriented Modelling

József Tick, Hungary

4 Behavior Model Assisted Decisions in Active Modeling Supported Engineering

László Horváth, Imre J. Rudas, Hungary, Gerhard Hancke, South Africa

5 Software Development with Quality Control

Marianna Lendvay, Attila L. Bencsik, Hungary

14:40	Closing Ceremony
17:00	Banquet