

**International Conference
in Memoriam
John von Neumann**



*December 12, 2003
Budapest, Hungary*

FINAL PROGRAM

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in Memoriam John von Neumann**

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Organized by
John von Neumann Computer Society
Budapest Polytechnic
Hungarian Fuzzy Association

PROCEEDINGS

The proceedings will be provided to all registrants.

To obtain more copies of the printed version of the proceedings, please contact the general chair

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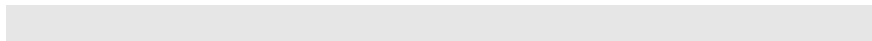
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GENERAL INFORMATION

Date and Place

The conference will take place on December 12, 2003, in Hotel Nemzeti, Budapest, Hungary.

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.

Opening Hours of the Registration Desk

The registration desk will be open during the conference.

Presentation

All the presentations can be made by using OHP or data projector. All authors are kindly asked to take their presentation on CD and not to use their own laptop.

Technical Program

Conference Hall, Hotel Nemzeti

8:00 – 8:30 **OPENING CEREMONY**

8:30 – 10:10 **MORNING SESSION I**

Session Chair: *Imre J. Rudas*

8:30 **On Integrity Problem of Inference Systems in Adaptive Fuzzy-Neural Computing**
Georgi Dimirovski, Dijana J. Tanevska

8:50 **Parallel Computing Recovery for Fault Tolerant Systems**
Liberios Vokorokos

9:10 **Intelligent Agents in Support System for Discrete Processes Control Desing**
Ivana Budinska, Baltazar Frankovic, T. T. Dang

9:30 **Planning and Management of Large, Distributed Systems and Projects**
George Kovács

9:50 **Two Degree of Freedom Fuzzy Controllers: Structure and Development**
Stefan Preitl, Radu-Emil Precup, Zsuzsa Preitl

10:10 – 10:30 **COFFEE BREAK**

10:30 – 12:10 **MORNING SESSION II**

Session Chair: *George Kovács*

10:30 **Application of Neumann's Machine of Self-Reproduction – Evolution and Artificial Life in Process Engineering**
János Madár, János Abonyi, Ferenc Szeifert

- 10:50** **Ubiquitous Sensory Intelligence**
Péter Korondi, Péter Szemes, Hideki Hashimoto
- 11:10** **Sliding Mode Control of Rigid Manipulators Using Generalized Velocity Components**
Przemyslaw Herman, Krzysztof Kozlowski, Dariusz Fanelak, Imre J. Rudas, József K. Tar
- 11:30** **Filtering Hidden Information Processes in Photon Counting Experiments**
László Nádai, Péter Várlaki
- 11:50** **Cellular Automata Models of Environmental Processes**
Éva Veronika Rác Pesti, Miklós Bulla
- 12:10 – 13:10** **LUNCH**
- 13:10 – 14:50** **AFTERNOON SESSION I**
- Session Chair: *Baltazár Frankovic*
- 13:10** **Capek, Turing, von Neumann, and the 20th Century Evolution of the Concept of Machine**
Jana Hováková, Jozef Kelemen
- 13:30** **The Beginning of Scientific Career in Göttingen**
Márta Seebauer
- 13:50** **Forty Years of Education and Research in Computers and Informatics at „Politechnica” University of Timisoara**
Stefan Holban, Stefan Preitl, Marius Crisan
- 14:10** **Parameter Influence on the Performances of 10Gb/s Ethernet Optical Link with Multimode Fibers and Vcsel’s**
Bojanco Mitev, Aleksandar Risteski, Boris Spasenovski, Tatjana Ulcar-Stavrova, Petar Pepeljugoski

14:30 **Classification of Multivariate Data Using Distribution Mapping Exponent**
Marcel Jirina

14:40 – 15:00 **COFFEE BREAK**

15:00 – 16:40 **AFTERNOON SESSION II**

Session Chair: *Jozef Kelemen*

15:00 **Towards Setting up the Research Center of Soft Computing in East-Hungary**
Ágnes B. Simon

15:20 **Experiments with HITEC: a Hierarchical Text Categorizer**
Domonkos Tikk, György Biró

15:40 **Fuzzy Behavior-based Structures in Adaptive Applications**
Szilveszter Kovács

16:00 **Special Retrieval Systems with Exponentially and Uniformly Distributed Service Time**
Péter Kárász

16:20 **Mobile Robot Navigation Projects at BMF NIK**
Zoltán Vámosy, András Molnár, Péter Hirschberg, Ákos Tóth, Balázs Máthé

16:40 – 17:00 **COFFEE BREAK**

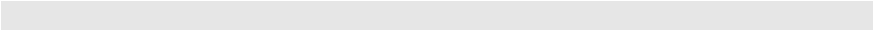
17:00 – 19:00 **AFTERNOON SESSION III**

Session Chair: *Stefan Preidl*

17:00 **Human and Computer in Engineering**
László Horváth

17:20 **Residuum-based Inference Mechanism with Distance-based Operators**

Márta Takács

- 17:40** **Spatiotemporal Database Models for Attracting Students to Research**
Ágnes Bércesné Novák, Peter Revesz, Zsolt Tuza
- 18:00** **Adaptive Control of the Double Inverted Pendulum Based on Novel Principles of Soft Computing**
József K. Tar, Imre J. Rudas, László Horváth, Spyros G. Tzafestas
- 18:20** **Aspects of User Behaviour Modelling**
József Tick
- 18:40** **Algorithm for Real-Time Tool Path Generation**
Gyula Hermann
- 19:00** **RECEPTION**
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