

CONFERENCE PROGRAM

Sunday – October 17, 2010		
13:00 - 15:00	Registration	
15:00 - 15:30	Opening ceremony (George Enescu hall)	
15:30 - 16:30	Plenary session I (George Enescu hall)	
16:30 - 16:50	Coffee break	
17:00 - 19:00	Regular sessions SP1-1, SP1-2, SP1-3	
20:00 – 23.00	Welcome party (PALACE Restaurant)	
Monday – October 18, 2010		
08:00 - 09:00	Registration	
09:00 - 10:00	Plenary session II (George Enescu hall)	
10:00 - 10:20	Coffee break	
10:30 - 12:30	Regular sessions MA1-1, MA1-2, MA1-3	Poster session
12:30 - 13:50	Lunch	
14:00 - 16:00	Regular sessions MP1-1, MP1-2, MP1-3	Company presentations (Constantin Brâncuși hall)
16:00 - 16:20	Coffee break	
16:30 - 18:10	Regular sessions MP2-1, MP2-2, MP2-3	
19:00 – 23.00	Social event (Pârâul Rece, Restaurant Bucegi – Porțile Regatului)	
Tuesday – October 19, 2010		
08:00 - 09:00	Registration	
09:00 - 10:00	Plenary session III (George Enescu hall)	
10:00 - 10:20	Coffee break	
10:30 - 12:30	Regular sessions TA1-1, TA1-2, TA1-3	
12:30 - 12:50	Closing ceremony (George Enescu hall)	
13:00 - 14:30	Lunch	

Sunday, October 17, 2010, 15:00 - 16:30:

Opening ceremony, Plenary session I

George Enescu hall

**Chairpersons: Vladimir RĂSVAN, Silviu Iulian NICULESCU, Dan
POPESCU, Vasile MANTA, Adrian FILIPESCU**

Order	Authors	Title
1	Alexander POZNYAK	Robust maximum principle and all around

Sunday, October 17, 2010, 17:00 - 19:00:

Session SP1-1: Robustness and oscillations

George Enescu hall

Chairpersons: Adrian-Mihail STOICA, Mircea IVĂNESCU

Order	Authors	Paper ID	Title
1	Valentin PANA and Adrian-Mihail STOICA	75	Robust Analysis Approach for Prediction of Pilot Induced Oscillations
2	Vladimir RASVAN, Dan POPESCU and Daniela DANCIU	93	Monotone and slope restricted nonlinearities - a PIO II case study
3	Daniela DANCIU	114	Absolute stability conditions for some scalar nonlinear time-delay systems with monotone increasing nonlinearity
4	Bogdan LIACU, Cesar MENDEZ-BARRIOS, Silviu-Iulian NICULESCU and Sorin OLARU	83	Some Remarks on the Fragility of PD Controllers for SISO Systems with I/O Delays
5	Mircea IVANESCU, Nicu BIZDOACA and Mihaela FLORESCU	97	On the Popov Criterion for a Hyper-redundant Arm Control

Sunday, October 17, 2010, 17:00 - 19:00:

Session SP1-2: Predictive control

Mircea Eliade hall

Chairpersons: Corneliu LAZĂR, Sorin OLARU

Order	Authors	Paper ID	Title
1	Mitra BAHADORIAN, Borislav SAVKOVIC, Ray EATON and Tim HESKETH	18	Robust Model Predictive Control For Time-variant Systems

Order	Authors	Paper ID	Title
2	Otilia Elena DRAGOMIR, Florin DRAGOMIR, Rafael GOURIVEAU and Eugenia MINCA	46	Reliability Prediction under Uncertainties using Fuzzy/Possibility Approach
3	Veaceslav SPINU, Mircea LAZAR and Paul VAN DEN BOSCH	47	On low complexity model predictive control of DC/DC converters
4	Pedro J. RODRIGUEZ-AYERBE and Sorin OLARU	13	Disturbance model in explicit control laws
5	Cosmin COPOT, Adrian BURLACU and Corneliu LAZAR	44	An image moment based approach for visual predictive control

Sunday, October 17, 2010, 17:00 - 19:00:

Session SP1-3: Fuzzy, neural and sliding mode control

Nicolae Iorga hall

Chairpersons: Radu-Emil PRECUP, Adrian FILIPESCU

Order	Authors	Paper ID	Title
1	Alina PATELLI and Lavinia FERARIU	12	Dynamic Fuzzy Controlled Regressor Encapsulation in Evolving Nonlinear Models
2	Bogdan BURLACU and Lavinia FERARIU	24	Graph Genetic Programming Toolbox for Neural Identification
3	Viorel DUGAN, Razvan SOLEA, Adrian FILIPESCU	80	On Extracting of Fuzzy Rules from High-Dimensional Heart Disease Databases by Neuro-Fuzzy Systems
4	Letitia MIREA	84	Fault Detection and Isolation Using Recurrent Wavelet Neural Networks
5	Adriana SERBENCU, Adrian Emanoil SERBENCU and Daniela Cristina CERNEGA	45	Evolutionary Strategies for Sliding Mode Controller Parameters
6	Dorin SENDRESCU, Constantin MARIN and Emil PETRE	112	Weighted Moments Based Identification of DC Motor

Monday, October 18, 2010, 9:00 - 10:00:

Plenary session II

George Enescu hall

Chairperson: Eduard GROELLER

Order	Authors	Title
1	Werner PURGATHOFER	Some trends in computer graphics

Monday, October 18, 2010, 10:30 - 12:30:

Session MA1-1: Computer graphics (Invited session)

George Enescu hall

Organizer: Florina UNGUREANU

Chairpersons: Vasile MANTA, Eduard GROELLER

Order	Authors	Paper ID	Title
1	Paul HERGHELEGIU and Vasile MANTA	68	Single volume reconstruction from multiple MRI images
2	Lucian CARATA and Vasile MANTA	72	The Influence of Chromatic and Luminance Noise in Real-Time Object Recognition Using Scale-Invariant Descriptors
3	Simona CARAIMAN	91	Towards Quantum Computer Graphics
4	Daniel SCHERZER	119	An Overview of Temporal Coherence Methods in Real-Time Rendering
5	Ralf HABEL	120	Real-Time Rendering and Animation of Vegetation
6	Cristian SMOCHINA, Vasile MANTA, Giovanna BISES and Radu ROGOJANU	65	Automatic cell nuclei detection in tissue sections from colorectal cancer
7	Bogdan APOSTOL and Vasile MANTA	50	Object Tracking in Real Time Video Sequences Using a Fast Level Set Method
8	Marius GAVRILESCU, Muhammad Muddassir MALIK and Eduard GROELLER	33	Custom Interface Elements for Improved Parameter Control in Volume Rendering

Monday, October 18, 2010, 10:30 - 12:30:

Session MA1-2: Dynamic modelling and control of automotive systems (Invited session)

Mircea Eliade hall

Organizers: Corneliu LAZĂR, Octavian PĂSTRĂVANU

Order	Authors	Paper ID	Title
1	Virginia Ecaterina OLTEAN, Radu DOBRESU and Dan POPESCU	74	On a hybrid control structure in automotive applications

Order	Authors	Paper ID	Title
2	Radu-Emil PRECUP, Claudia-Adina DRAGOS, Stefan PREITL, Mircea-Bogdan RADAC and Emil PETRIU	22	Tensor Product Models for Automotive Applications
3	Claudia-Adina DRAGOS, Stefan PREITL, Radu-Emil PRECUP, Cristian-Sorin NES, Emil PETRIU and Gabriela TIRTEA	29	One- and Two-Degree-of-Freedom Fuzzy Control of an Electromagnetic Actuated Clutch
4	Emanuel FERU, Daniel PATRASCU and Corneliu LAZAR	32	Dynamic Simulator of a Wet Plate Clutch System for Automatic Transmission
5	Cezar BABICI and Alexandru ONEA	43	Hybrid Electric Vehicles Control Strategies-A Comparative Study
6	Radu DOBRESCU, Ecaterina OLTEAN and Dan POPESCU	70	Combined Technologies for Fuel Economy Improvement on Hybrid Vehicles

Monday, October 18, 2010, 10:30 - 12:30:
Session MA1-3: System analysis and synthesis
Nicolae Iorga hall
Chairpersons: Pierre APKARIAN, Mihail VOICU

Order	Authors	Paper ID	Title
1	Pierre APKARIAN	2	Nonsmooth mu-synthesis
2	Mihaela-Hanako MATCOVSCHI, Octavian PASTRAVANU and Adrian ALECU	38	Switched linear systems in discrete-time: Criteria for the existence of invariant sets
3	Mihaela-Hanako MATCOVSCHI, Octavian PASTRAVANU and Mihail VOICU	39	Eigenvalue ranges of interval matrices - The practical use of a theorem providing right outer bounds
4	Octavian PASTRAVANU, Mihaela-Hanako MATCOVSCHI, Alina DOBAN and Dorian FLORESCU	40	Algebraic tools for exploring the free-response of discrete-time linear systems: matrix norms versus eigenvalues
5	Ciprian LUPU, Dumitru POPESCU, Andreea UDREA and Catalin PETRESCU	66	Multi Model Structure Reduction using Nonlinearity Compensators
6	Przemyslaw IGNACIUK and Andrzej BARTOSZEWICZ	10	DSM Control of Inventory Systems with Deteriorating Stock – the Case of a Single Supply Source

Monday, October 18, 2010, 10:30 - 12:30:

Poster Session

Constantin Brâncuși hall

Chairpersons: Emil PETRE, Alexandru ONEA

Order	Authors	Paper ID	Title
1	Florin STINGA, Dan MITOIU, Ionut NISIPEANU and Andreea SOIMU	111	Hybrid Control Scheme Implemented on a Programmable Automation Controller
2	Elena BUNCIU	109	Estimation and Control in the Production of PHB
3	Diana-Mara ANGHELINA	63	Inter-VLAN Routing using VLAN Trunk Protocol and Spanning Tree Protocol
4	Ionut Cristian RESCEANU, George Cristian CALUGARU and Cristina Floriana RESCEANU	27	Smith Predictor Structure Experiments for a Quanser Servo Motor
5	Bogdan ALECSA and Alexandru ONEA	42	Output Analysis of Digital Interface Plants Based on FPGA Rapid Prototyping
6	Giuseppe BOCCOLATO, Ionut DINULESCU, Alice PREDESCU and Dorian COJOCARU	96	Position Control of a Non Conventional Hyper Redundant Arm
7	Gabriel VLADUT, Monica MATEESCU, Liana Simona SBIRNA and Sebastian SBIRNA	118	Mathematical model proposed for simulating the influence on air quality of the three ash dumps that affect Craiova, Romania
8	Gheorghe PUSCASU, Bogdan CODRES and Alexandru CODRES	28	Expert System Used to Help the Beginner Driver to Learn the Driver Skills
9	Monica MATEESCU, Liana Simona SBIRNA, Gabriel VLADUT and Sebastian SBIRNA	121	Comparative study between an alternate fuel and a classic one - scenarios of using different biodiesel/diesel blends (B5, B20, B100) in the public transport network of Craiova metropolis
10	Cosmin STOICA SPAHIU	82	Questions generation management system for e-learning

Monday, October 18, 2010, 14:00 - 16:00:
Session MP1-1: Distributed control systems
George Enescu hall
Chairpersons: Florina UNGUREANU, Vasile MANTA

Order	Authors	Paper ID	Title
1	Robert Gabriel LUPU, Vlad CEHAN, Florina UNGUREANU, Conrad CIOBANICA	60	Gateway software design for Mobile Patient Monitoring
2	Mircea Ionut ASTRATIEI and Alexandru ARCHIP	56	A Case Study on Improving the Performance of Text Classifiers
3	Alexandru ARCHIP, Vasile MANTA and Gabriela DANILET	92	Parallel K-Means Revisited: A Hypercube Approach
4	Florin Catalin BRAESCU, Lavinia FERARIU	90	Run-time Feasibility Verification in Event Driven Operating Systems with Static Priorities
5	Nicolae BOTEZATU, Vasile MANTA and Andrei STAN	14	Self-adaptable Security Architecture for Power-aware Embedded Systems

Monday, October 18, 2010, 14:00 - 16:00:
Session MP1-2: Software applications
Mircea Eliade hall
Chairpersons: Daniela Cristina CERNEGA, Miloš PAVLÍK

Order	Authors	Paper ID	Title
1	Dan PUIU, Florin MOLDOVEANU and D. FLOROIAN	21	Distributed Control Architecture with Intelligent Servo Drives for Sun Tracking Systems
2	Miloš PAVLÍK, Iveta ZOĽOTOVÁ, Rastislav HOŠÁK and Lenka LANDRYOVÁ	23	Benefits of Virtualization in HMI/SCADA Systems
3	Carlos PASCAL and Doru PANESCU	30	A Study on the Holons' Interaction for Manufacturing Flexibility
4	Dan FLOROIAN and Florin MOLDOVEANU	49	RoboSmith: Architecture for a Flexible Mini Robot for Multiagent Robotic System
5	Daniela Cristina CERNEGA and Razvan SOLEA	59	"Follow the Leader" Control for Multi-robot Formation with Hybrid Control Structure
6	Andrei STAN, Lucian PANDURU and Florina UNGUREANU	77	Architectural Support for Subroutine Execution Time Monitoring in Embedded Microprocessors

Monday, October 18, 2010, 14:00 - 16:00:
Session MP1-3: Bioprocesses and nonlinear control
Nicolae Iorga hall
Chairpersons: Radu DOBRESCU, Sergiu CARAMAN

Order	Authors	Paper ID	Title
1	George IFRIM, Marian BARBU, Mariana TITICA, Lionel BOILLEREAUX and Sergiu CARAMAN	52	Control of the microalgae photosynthetic growth in a torus photobioreactor
2	Radu DOBRESCU, Eugen IANCU, Emil PETRE and Ionela IANCU	107	The Control of Infected Cell Populations
3	Monica ROMAN	113	Modeling and Simulation of a Baker's Yeast Fed-batch Bioprocess
4	Alexander KAMACHKIN and Alexander STEPANOV	17	On Stabilization of Control Systems Containing Dry Friction Nonlinearities
5	Nguyen Hoai NAM and Sorin OLARU	6	Hybrid modeling and optimal control of juggling systems
6	Gabriela CANURECI, Matei VINATORU and Camelia MAICAN	61	Experimental Studies Regarding for Faults Detection Using Residuals Generator Method

Monday, October 18, 2010, 16:30 - 18:10:
Session MP2-1: Mobile robots
George Enescu hall
Chairpersons: Adrian FILIPESCU, Doru PĂNESCU

Order	Authors	Paper ID	Title
1	Grigore VASILIU, Ionut MIHALCEA, Serghei RADJABOV, Adriana FILIPESCU	51	Intelligent Trajectory Tracking in Sliding Mode Based Wheeled Mobile Robot Control
2	Bogdan DUMITRASCU and Adrian FILIPESCU	54	Sliding Mode Controller for Steering of Four-Wheels Driving and Steering Vehicle
3	Doru PANESCU, Marius KLOETZER, Adrian BURLACU and Carlos PASCAL	58	A multiagent based solution for mobile robots path planning
4	Narcis GHITA and Marius KLOETZER	69	Cell Decomposition-Based Strategy for Planning and Controlling a Car-like Robot
5	Cristina RESCEANU	36	Control of Legged Robot with Locked Joint

Monday, October 18, 2010, 16:30 - 18:10:
Session MP2-2: Power engineering applications
Mircea Eliade hall
Chairpersons: Corneliu BOȚAN, Matei VÎNĂTORU

Order	Authors	Paper ID	Title
1	Adriana SCARLAT, Iulian MUNTEANU, Antoneta Iuliana BRATCU and Emil CEANGA	7	Improved power optimization method for squirrel cage induction generator-based wind energy conversion systems
2	Corneliu BOTAN, Florin OSTAFI and Marcel RATOI	25	Minimum Energy of Electrical Servo Drive Systems
3	Matei VINATORU	81	Dynamic Stability for Hydropower Plant Systems
4	Sergiu CARAMAN, Marian BARBU, Viorel MINZU, Nicolae BADEA, Emil CEANGA	85	Modeling and control of an autonomous energetic system obtained through tri-generation
5	Corneliu BOTAN and Florin OSTAFI	11	Solutions to Riccati Differential Equations in LQ Problems

Monday, October 18, 2010, 16:30 - 18:10:
Session MP2-3: E-learning and multi-agent systems
Nicolae Iorga hall
Chairpersons: Honoriu VĂLEAN, Marius MARIAN

Order	Authors	Paper ID	Title
1	Elvira POPESCU	78	Adding a Social Dimension to a Learning Style-based Adaptive Educational System
2	Mihnea SCAFES and Costin BADICA	94	Complex negotiations in multi-agent systems
3	Ancuța DOBIRCAU, Corina NEMES, Silviu FOLEA, Honoriu VALEAN, Adina MORARIU	101	Simulation of a Monitoring Agent Based System
4	Marius MARIAN	116	A Security Infrastructure for the University-based IT Services

Tuesday, October 19, 2010, 9:00 - 10:00:

Plenary session III

George Enescu hall

Chairperson: Corneliu LAZĂR

Order	Authors	Title
1	Paul van den BOSCH	Price-based, distributed control in power systems

Tuesday, October 19, 2010, 10:30 - 12:30:

Session TA1-1: Image analysis and simulation

George Enescu hall

Chairpersons: Honoriu VĂLEAN, Gabriel RĂDULESCU

Order	Authors	Paper ID	Title
1	Marta CHINNICI, Salvatore CUOMO, Silvio MIGLIORI and Andrea QUINTILIANI	3	Numerical and statistical tools for images analysis based on the database from ENEA-Tokamak
2	Adina PETROVICI and Corneliu LAZAR	71	Altered fingerprints analysis based on orientation field reliability
3	Lucian-Florentin BARBULESCU	86	Functional analysis of a communication framework used in a modular simulator
4	Adina MORARIU, Honoriu VALEAN and Daniela BORDENCEA	103	Intelligent Virus Spreading Simulator
5	Caius SULIMAN, Cristina CRUCERU, G. MACESANU and Florin MOLDOVEANU	64	Person Tracking in Video Surveillance Systems Using Kalman Filtering
6	Gabriel RADULESCU and Nicolae PARASCHIV	41	Using a Virtualization Techniques – Based Platform for Advanced Studies on Operating Systems

Tuesday, October 19, 2010, 10:30 - 12:30:

Session TA1-2: Measurement and monitoring

Mircea Eliade hall

Chairpersons: Dorina PURCARU, Jérôme BOUDY

Order	Authors	Paper ID	Title
1	Jamshed IQBAL, Salman KHAN, Faisal MASOOD	15	An Electronic Support Measure (ESM) Angle of Arrival Measurement System
2	Salman KHAN, Jamshed IQBAL, Faisal MASOOD	16	Design and Layout Implementation of Microstrip Balanced Diode Filter

Order	Authors	Paper ID	Title
3	Mihai POSTOLACHE, Ciprian SPIRIDON	87	XCPI - A Measurement and Calibration Software Tool for Networked and Embedded Control Systems
4	Dorina PURCARU, Anca PURCARU, Claudiu RUSU, Marius CĂPĂȚÎNĂ	105	Electronic Equipment for Monitoring and Recording Analog and Digital Inputs
5	Mohamed SEHILI, Dan ISTRATE, Jérôme BOUDY	110	First Investigation of Sound Recognition for Domotic Application Using SVM
6	Cristina HUZUM and Petru CASCAVAL	99	Linked Neighborhood Pattern-Sensitive Faults in Random-Access Memories. A Fault Coverage Evaluation

Tuesday, October 19, 2010, 10:30 - 12:30:
Session TA1-3: Control applications and robotics
Nicolae Iorga hall
Chairpersons: Sorin OLARU, Mircea NIȚULESCU

Order	Authors	Paper ID	Title
1	Ionela PRODAN, Sorin OLARU, Cristina STOICA, Silviu-Iulian NICULESCU	34	Path following with collision avoidance and velocity constraints for multi-agent group formations
2	Bogdan LEVARDA, Cristina BUDACIU	48	Temperature Control Application for a Ventilation System using PIC18F4620
3	Bogdan ALECSA, Bogdan RADU, Alexandru ONEA, Alexandru BARLEANU	57	A FPGA Implementation of an Active Noise Cancellation System
4	Maria Magdalena SANTA, Octavian CUIBUS, Tiberiu LETIA	73	Train Scheduling with Delay Time Petri Nets and Genetic Algorithms
5	Mihai George RADUCU, Mircea NITULESCU	95	Control Algorithms for a Self Reconfiguring Robotic System