

ICAT-2011
Preliminary Conference Program & Time table

Time	THURSDAY	FRIDAY	SATURDAY	
	27.10.2011.	28.10.2011.	29.10.2011.	
08:00	Participant registration			
08:15				
08:30				
08:45				
09:00			Plenary talk III	Plenary talk IV
09:15				
09:30			Coffee break	
09:45				
10:00	Opening ceremony	Session III	Coffee break	
10:15				
10:30	Plenary talk I			Session VII
10:45				
11:00	Plenary talk II		Workshop II	
11:15				
11:30				
11:45				
12:00	Welcome Cocktail	Session IV		
12:15				
12:30				
12:45				
13:00	Lunch break		Session VIII	
13:15		Lunch break		
13:30				
13:45				
14:00	Session I	Workshop I	Lunch break	
14:15				
14:30				
14:45				
15:00		Coffee break Sponsor presentations	Guided City Tour	
15:15				
15:30				
15:45				
16:00	Coffee break Sponsor presentations	Session V		
16:15				Tutorial II
16:30	Session II	OnLine Session		
16:45			Tutorial I	
17:00				
17:15				
17:30				
17:45				
18:00	Session VI			
18:15				
18:30				
18:45				
19:00				
19:15				
19:30				
19:45				
20:00	Gala Dinner (invitation only)	IEEE BiH Cocktail		
20:30				
21:00				
21:30				
22:00				
22:30				
23:00				
23:30				

8:00-10:00 Registration

10:00-10:30 Opening ceremony

10:30-11:15 Plenary talk I

- Control Challenges for Smart Vehicles
Maarten Steinbuch

11:15-12:00 Plenary talk II

- Convergence Analysis for a Class of Source Separation Methods
Alper Erdogan

12:00-12:45 Welcome Cocktail

12:45-14:00 Lunch

14:00-16:00 Session I: *Robotics*

- **Paper ID. 33:** Reduced Order Dynamics and Stability of a Parallel Manipulator through Bond-Graph Technique
- **Paper ID. 42:** Development of microgripper
- **Paper ID. 68:** Path Finding Simulator for Mobile Robot Navigation
- **Paper ID. 98:** Operating Characteristics of a Passive, Bidirectional Overrunning Clutch for Rotary Robots Joints
- **Paper ID. 160:** The Path Planning Algorithms for a Mobile Robot based on the Occupancy Grid Map of the Environment — A Comparative Study
- **Paper ID. 163:** Safe Motion Planning for Articulated Robots Using RRTs
- **Paper ID. 192:** SmartLeg: An Intelligent Active Robotic Prosthesis for Lower-Limb Amputees

16:00-16:45 Coffee Break *Sponsor presentations*

16:45-18:00 Session II: *Nonlinear and optimal control, hybrid systems*

- **Paper ID. 11:** Optimal Torque Control of the Interior Permanent Magnet Synchronous Machine
- **Paper ID. 43:** Decentralized set-valued state estimation and prediction for hybrid and discrete event systems
- **Paper ID. 73:** Using Behavior Models for Anomaly Detection in Hybrid Systems
- **Paper ID. 85:** Nonlinear Model Predictive Control of a Benchmark Nonlinear Boiler
- **Paper ID. 144:** Nonlinear Observer Design for a Class of Lipschitz Time-Delay Systems with Unknown Inputs: LMI Approach

18:00-19:00 Session VI: *Signal processing and communication*

- **Paper ID. 47:** New edge sorting criterion for maximum clique search algorithm in unit disk graphs
- **Paper ID. 69:** New Architecture Model for Measuring Dynamic Changes of EMF Strength Levels Using Smart Dust motes
- **Paper ID. 84:** Generalized Orthogonalization Method for finite discrete signals and its application

16:45-19:00 Tutorial I:

- A Control Engineering Perspective into Radio Resource Management Challenges In Emerging Cellular/Noncellular Radio Systems
Zekeriya Uykan

20:00-23:30 Gala dinner (*invitation only*)

Friday, 28.10.2011.

9:00-9:45 Plenary talk II:

- Co-Operative Decision Making & Control Systems
Ljubo Vlacic

9:45-10:15 Coffe Break

10:15-11:45 Session III: *Image and video processing*

- **Paper ID. 48:** Full Wave Analysis in 3D Laser Scans for Vegetation Detection in Urban Environments
- **Paper ID. 49:** Efficient Processing of Large 3D Point Clouds
- **Paper ID. 112:** Cheap Live Color Recognition with Webcam
- **Paper ID. 146:** Automatic Extraction of Cortical Gray Matter by Geodesic Contours
- **Paper ID. 151:** Image Retrieval Using Annular Histograms of Simple Binarized Feature Vectors Generated from DCT Coefficients
- **Paper ID. 150:** Localizing Google SketchUp Models in Outdoor 3D Scans

11:45-13:00 Session IV: *Fuzzy and Neural Systems*

- **Paper ID. 10:** Reduction of low-resolution incremental encoder usage effects on control performance by using a fuzzy controller
- **Paper ID 66 :** Multilayered Feedforward Neural Networks as a Tool for Distinction of the Authors of Texts
- **Paper ID. 88:** Simulation of Neuro-Fuzzy Controlled Grid Interactive Inverter
- **Paper ID 95:** V-BiCoMeS: A Binary Content Addressable Memory System
- **Paper ID. 120:** Neural Learning Behavior of Mobile Robot by Visually based Sequence of Actions

13:00-14:00 Lunch Break

14:00-15:30 Workshop I: *Safety Instrumented Systems for Automotive and Industrial Applications*

- **Paper ID. 72:** A Partially Automated HiL Test Environment for Model-Based Development using Simulink® and OPC Technology
- **Paper ID. 74:** Enhancing sefca to a SystemC based testbench tool for design verification
- **Paper ID. 79:** New Approach to Determine the Critical Number of Failure in Software Systems
- **Paper ID. 80:** Considering and Comparing Safety Parameters - using Different Calculation Approaches of PFD/PFH/HR
- **Paper ID. 97:** Towards safe data flow processing by integration of Design by Contract in deterministic UML activities

15:30-16:15 Coffee Break *Sponsor presentations*

16:15-18:15 Session V: *Industrial automation*

- **Paper ID. 23:** Modeling Knowledge for User-Centric Energy Cost Analysis of Industrial Automation Systems
- **Paper ID. 57:** Model of Elevator Drive With Jerk Control
- **Paper ID. 76:** Real Time DSP Based PID and State Feedback Control of Brushed DC Motor
- **Paper ID. 133:** Parameter Identification and Digital Control of Speed of a Permanent Magnet DC Motors
- **Paper ID. 145:** Design and Implementation of DSP-Based Three-Phase PFC
- **Paper ID. 138:** Agile Accelerated Aging and Degradation Characterization of a V/F Controlled Induction Motor in a Conveyor Belt Process

18:15-19:00 On-Line Session: *Data mining and human-computer interaction*

- **Paper ID. 183:** Evaluation of Authorship Attribution Software on a Chat Bot Corpus

- **Paper ID. 187:** An Improved LBP Algorithm for Avatar Face Recognition
- **Paper ID. 191:** New Hierarchical model using SOM Improves Accuracy of multiclass datasets

16:15-19:00 Tutorial II:

- Compressed Sensing (CS) Tutorial: Basic Elements of Compressed Sensing
Almir Mutapcic

20:00-22:00 IEEE BiH Cocktail

Saturday, 29.10.2011.

9:00-10:00 Plenary talk IV:

- Experiments into Biology-Technology Interaction
Kewin Warwick

10:00-10:30 Coffe Break

10:30-12:30 Session VII:

Electrical machines, drives and power engineering

- **Paper ID. 27:** Application of coupled 1D and 2D isoparametric discontinuous boundary elements in the calculation of large grounding systems
- **Paper ID. 28:** Modeling of coupled turbulent flow of SF6 gas and the electric field in the switching element switches the high voltage caused by interruption of capacitive currents
- **Paper ID. 56:** Power Loss Model for Efficiency Improvement of Boost Converter
- **Paper ID. 132:** Design of Wound Rotor Low-Voltage Synchronous Generator
- **Paper ID. 149:** Investigation of Current Harmonics Using FEM on Different Rotor Type of PMSM

10:30-12:30 Workshop II:

- Thermal 3D Modeling of Indoor Environments for Saving Energy
Jasmin Velagić

12:30-14:00 Session VIII:

Modeling, identification and optimization

- **Paper ID. 2:** Calculation of Optimal Trajectories of Mobile Robot Based on Minimal Curving Radius and Task Tree Based Approach
- **Paper ID. 52:** A Frequency Based Method for Complete Identification of Hammerstein-type Plants Based on Relay Feedback
- **Paper ID. 81:** Exact Double DCJ Distance Between Circular Genomes
- **Paper ID 83:** Implementation and performance analysis of the Simplex algorithm adapted to run on commodity OpenCL enabled graphics processors
- **Paper ID. 142:** Multidimensional Performance Optimization of Switched Reluctance Machines

14:00-15:00 Lunch Break

15:00-18:00 Guided City Tour

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