



Advanced Industrial Control Applications, AICA'15

Workshop
08 October 2015, Sofia, Bulgaria

Institute of Information and Communication Technologies,
Bulgarian Academy of Sciences
Acad. G. Bonchev Str. Block 25A, Hall 2

Programme

9.25 - 9.30 Opening

9.30 -10.15 Invited lecture: Control of Mechatronic Systems, I. Kalaykov

10.15 - 11.00 Invited lecture: Advanced Control of the Wood Thermal Treatment Processing, M. Hadjiski, N. Deliiski

11.00-11.20 Coffee Break

11.20-11.40 NEO-Fuzzy Neural Networks for Modeling, Identification and Control, Y. Todorov, M. Terziyska

11.40-12.00 Simulation study of motion and interaction between spherical tetrahedrons in laboratory ball mill, N. Stoimenov

12.00-12.20 Examination and control of service robots with thermal camera, D. Chikurtev

12.20-12.40 Examination and control of protective systems in the underground public transportation, N. Sabotinkov

12.40-13.00 Group control of mobile transport robots, M. Grueva

13.00-14.00 Lunch Break

14.00-14.20 Residual bound for a non-linear complex matrix equation from Control theory, I. Popchev, V. Angelova

14.20-14.40 Implementation of pseudorandom sequences in FPGA devices, V. Ivanov

14.40-15.00 Use of the highway 1-wire bus as a transport layer in the implementation of communication protocols for intelligent devices, A. Boneva, Z. Ilcheva, D. Bachvarov, S. Angelov, N. Baruh, G. Isaev

15.00-15.20 RS485+: Extension of the standard RS485 highway through inclusion groups of wired and wireless (radio) modules in its topological structure, D. Bachvarov, Z. Ilcheva, A. Boneva, S. Angelov, N. Baruh, G. Isaev

15.20-15.40 Study of the energy efficiency of building materials for buildings and facilities, V. Hristova

15.40-16.00 Coffee Break

16.00-16.20 Information technologies for enterprise management – Bulgarian SME experience, T. Atanasova, Y. Atanasov

16.20-16.40 Comparative analysis of a class of algorithms for traffic management in a crossbar commutator in terms of performance, speed and memory needed, Kolchakov, K., V. Monov

16.40-17.00 Solving Multicriteria Optimization Problems with WebOptim Software System, B. Staykov

17.00-17.20 Strategy for Individuals Distribution by Incident Nodes Participation in Star Topology of Distributed Evolutionary Algorithms, T. Balabanov, I. Zankinski, M. Barova

17.20-17.40 V. Djambov, On the fast computing of some constants: High precision computation with .NET Framework C# and X-MPIR.