

IEEE Serbia and Montenegro Section, CAS-SP joint Chapter and CI Chapter, i Elektrotehnički fakultet Univerziteta u Beogradu organizuju

PREDAVANJE Cooperative Networked Systems Svečana sala (prvi sprat), četvrtak, 20.09.2012, 12:00

Abstract:

Complexity. Complex systems. Emergence: examples. Swarm intelligence. Ant colony and particle swarm optimization: applications. Stigmergy. Adaptation. Autopoiesis. Multi-agent systems. Graph representation: Laplacian. Flocking: examples from computer-, communication-, and control sciences. Cooperation in multi agent systems. Decentralized vs. centralized decision making. Networked systems. Cyber-physical systems. Systems of systems.

Consensus based methodology applied to estimation, detection and control. Distributed sensor calibration. Distributed clock synchronization.

Future directions towards convergence of computers, communications and control.

Predavači Prof. dr Srđan Stanković

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Dr Miloš Stanković

Royal Institute of Technology, Stockholm, Sweden

Kratka biografija predavača:

Srdjan S. Stanković got his Dipl. Ing. degree from the Faculty of Electrical Engineering, University of Belgrade, Yugoslavia, in 1968. He got his M. Sc. degree in 1972, and Ph. D. degree in 1975 from the same Faculty. His M.Sc. and Ph.D. dissertations were both from the field of System Identification; his Ph. D. thesis supervisor was Professor Pieter Eykhoff, Eindhoven University of Technology, the Netherlands. He was with the Institute for Nuclear Sciences, Vinča, Belgrade, Yugoslavia, from 1968 to 1972. Since 1973 he has been with the Faculty of Electrical Engineering, University of Belgrade, where he is currently Professor Emeritus. He held the Research Fellow position from 1972 to 1973 at the Eindhoven University of Technology, Eindhoven, the Netherlands. He held the Visiting Professor position at the Santa Clara University, Santa Clara, California, from 1987 to 1988, in 1998, 2001 and 2003. He also held different part-time consulting positions in Government institutions and industry, as well as in research institutions, taking part in big research and development projects.

Prof. Srdjan S. Stanković published numerous scientific papers from the fields of System Identification, Stochastic Systems, State Estimation, Digital Signal Processing, Processing of Medical Images, Large Scale Systems and Neural Networks (see the list of publications). He was also leader of numerous scientific and R & D projects either for Yugoslav (or Serbian) Science Foundation or for industry. He published a textbook on Nonlinear Control Systems (with Professor Rajko Tomović). He has been Scientific Coordinator of two Tempus Projects within the CARDS Program, related to curricula development and life-long education in ICT in Health Care.

He was Head of the Automatic Control Department at the Faculty of Electrical Engineering in Belgrade for many elective periods. He is actually Head of the Department for Signals and Systems. He was a member of the Theory Committee of the International Federation of Automatic Control (IFAC). He has also been a member of Organizing and Program Committees for numerous conferences and symposia, of Editorial Boards of scientific journals, as well as of different professional associations. He is actually President of the Serbian Association for Electronics, Telecommunications, Automatic Control, Informatics and Nuclear Technology. He is also a member of the National Council for Higher Education of the Republic of Serbia.

Miloš Stanković received his Bachelor and Master degrees from the School of Electrical Engineering at the University of Belgrade in 2002 and 2006, respectively. He received his Ph.D. degree in Systems and Entrepreneurial Engineering from the University of Illinois at Urbana-Champaign (UIUC) in 2009. He was a research assistant in the Control and Decision Group of the Coordinated Science Laboratory at the UIUC (2006-2009). In 2009 he joined the Royal Institute of Technology (KTH) in Stockholm, Sweden as a postdoctoral researcher in the Automatic Control Laboratory and the ACCESS Linnaeus Centre. His research interests include decentralized decision making, networked control systems, dynamic game theory, optimization, machine learning, and network science, with applications to mobile sensor networks and multiple-agent systems.

Branimir Reljin, Senior Member IEEE, IEEE S&M CAS-SP Chair