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Plenary Keynotes

Real-time Communications, from Industrial Networks Toward IoT

Sebestyen Gheorghe

Fuzzy Rule Interpolation for Robot Behavior Modeling

Szilveszter Kovács

DC versus AC: Is the Smart Grid Going to Be DC ?

Pavol Bauer

Technical Papers

Improved Closed Loop Performance and Control Signal Using Evolutionary Algorithms Based PID Controller

Alireza Aarabi, Mehdi Shahbazian, Mohsen Hadian

Model Reference Adaptive Control for MIMO Nonlinear Systems by Using Linear Time Varying Approximation

Naser Babaei, Metin U. Salamci

Design and Validation of a Low Resource-Cost Video Data Processing Method for Embedded Implementation of Optical Flow Extraction

László Bakó, Călin Enăchescu, Sándor-Tihamér Brassai

Robust Control of Drum Boiler

Peter Balko, Danica Rosinová

Monitoring System's Utilization for Risk Simulation in Water Distribution Systems

Alicja Bałut, Andrzej Urbaniak

Quality Indicator Model of Dynamic System Boring Machine – Rock

Vladena Baranová, Lenka Landryová, Jozef Futó

Predictive Control of Processes with Fast Dynamics

Tomáš Barot, Marek Kubalčík

A Fuzzy Rule Interpolation Base Algorithm Implementation on Different Platforms

Roland Bartók, József Vásárhelyi

On the Dynamics of Oilwell Drillstrings with Asynchronous Motor Drive

Eugen Bobașu, Daniela Danciu, Dan Popescu, Vladimir Rășvan

Iterative Function Systems for Natural Image Processing

Popa Bogdan

Dijkstra Algorithm in Parallel-Case Study

Popa Bogdan

Measurement and Analysis of Hydrate Formation

Ildikó Bölkény

Hardware Implemented Adaptive Neuro Fuzzy System

Sándor Tihamér Brassai, Tibor Tamas, Szabolcs Hajdu, László Bakó

Control System for a Small Electrodynamic Exciter ()
Martin Čala

Setting of Combustion Engine ECU Parameters with Use of Knocking Detection () -
Radim Čech, Petr Tomčík, Jiří Kulháněk

Differential Filters in Control Systems - Manipulator () +
Leszek Cedro

Technical Diagnostics of Tram Undercarriages - Design, Development and Control () +
Josef Černožský, Josef Kolář

RTR+C*CS: An Effective Geometric Planner for Car-like Robots () ,)
Gábor Csorvási, Ákos Nagy, Domokos Kiss

Intensity Feature for Speech Stress Detection () - %
László Czap, Judit Mária Pintér

An Approach to Optimize the Proportional-Integral-Derivative Controller System () -)
Samad Dadvandipour, Navid Khalili Dizaji, Samad Rosshan Entezar

Computational Issues Based on Neural Networks for a Class of Systems of Conservation Laws () %\$\$
Daniela Danciu, Dan Popescu, Eugen Bobașu

Simulation Approach to Throughput Assessment of Single-Track Tramline () %\$*
Michal Dorda, Peter Márton

Modelling of the Heating Process Massive Batch () %&
Milan Durdán, Beáta Stehlíková

Modelling of Heat Losses in UCG Under Laboratory Conditions and in Situ () %+
Milan Durdán, Karol Kostúr

Reaction Time Measurement of Non-Synchronized Industrial Ethernet IO Device () %&%
István Ferenczi, József Vásárhelyi

Storing High Volumes of Data in MS SQL Server Express () %&)
David Fojtík, Petr Podešva, Jan Gebauer

Rolling Mill Interstand Section Linguistic Fuzzy-Logic Control () %&-
Ivo Formánek, Radim Farana

Active Noise Control in the Concept of IoT () % ' ')
Róbert Galambos, László Sujbert

Modeling of the Electronic Variable Pitch Drive () % ,
Jan Gebauer, David Fojtík, Petr Podešva

Massive Open Online Courses - Pedagogical Overview () % (&
Dragana Glušac, Dijana Karuović, Dušanka Milanov

Advances in Fractional Calculus: Control and Signal Processing Applications () % (+
Emmanuel A. Gonzalez, Ivo Petráš

Simulation Analysis of a Real Small Production Process () % ' ')
Oto Haffner, Zdenka Králová

Gyroless Attitude and Rate Estimation of Small Satellites Using Singular Value Decomposition and Extended Kalman Filter () %) -
Chingiz Hajiyev, Demet Çilden, Yevgeny Somov

Decision Support by Dynamic Simulation Method

Jiří Holík, Lenka Landryová, Dušan Teichmann

Draft for Extension and Amendment ThermoChemDC Web Service

Pavel Horovčák, Ján Terpák, Matej Lukáč

Design and Implementation of Web Service for Mutual Comparison of the Set of Algebraic Vectors

Pavel Horovčák, Igor Leško, Zuzana Gašpárová

An Influence of Selected Anthropogenic and Climatic Conditions on the Production of Energy in Photovoltaic Panels

Wiktor Hudy, Jaracz Kazimierz, Pytel Krzysztof

Experimental Model of Passive Optical Network Technical University of Košice

Tomáš Ivaniga, Ľuboš Ovseník, Ján Turán

Model Reference Adaptive Sliding Surface Design for Nonlinear Systems

Fatma Kara, Metin U. Salamci

Behavior-based Critical Cyber Asset Identification in Process Control Systems Under Cyber Attacks

István Kiss, Béla Genge, Piroska Haller

Model Reference Adaptive Control Design for Nonlinear Systems Using Linear Time Varying Approximations

Fettah Kodalak, Metin U. Salamci

Virtual Reality in Control

Oldřich Kodym, Vladimír Kebo, Pavel Staša, Filip Beneš, Jiří Švub

EPC Application Framework in the Context of Internet of Things

Oldřich Kodym, Filip Benes, Jiri Svub

Off-Grid Telemetry System for Hydrate Inhibition on Gas Wells

József Konyha

Simulation Analysis of Flue-Dust Thermal Treatment in Microfluid Furnace

Imrich Košťial, Ján Gloček, Pavol Palička, Dušan Naščák

Indirect Measurement of Syngas Calorific Value

Karol Kostúr, Ján Kačur

The Active Vibration Control of the Smart Plate by Using Piezo-Patches

Andrzej Koszewnik

Analysis for Inverted Pendulums Use for Human Sway Modeling

Andrzej Kot, Agata Nawrocka

Synchronization Performance Evaluation of Reference Clock Connection Methods for IEEE 1588 Master Clocks

Tamás Kovácsházy

Creation of Fractional-Order PID Controller Function Block in Automation Studio Environment

Miroslav Köver-Dorčo, Ivo Petráš

Control Design for Discrete-Time Linear Systems Using Enhanced LMI Conditions

Dusan Krokavec, Anna Filasová

Advanced Techniques for Modelling of AS/RS Systems in Automotive Industry Using High-Level Petri Nets

Erik Kučera, Miriama Nižnanská, Štefan Kozák

Design of Education Model with NI LabView

Jiří Kulhánek, Jaromír Škuta

Security of ONS Service For Applications of the Internet of Things and Their Pilot Implementation in Academic Network

Lukas Kypus, Lukas Vojtech, Jaromir Hrad

System of Indirect Measurement Temperature of Melt with Adaptation Module

Marek Laciak, Ján Kačur, Milan Durdán, Patrik Flegner

Application of the Particle Filters for Identification of the Non-Gaussian Systems

Ales Lebeda

The Multidimensional Shewhart Control Chart for Multicriteria Quality Management

Igor Leško, Pavel Horovčák, Beata Stehlíková, Zuzana Gašpárová, Patrik Flegner

Contribution to the Problem of Knowledge Discovery of a Processional Character in Databases

Igor Leško, Pavel Horovčák, Patrik Flegner, Zuzana Gašpárová

Simulation Model for Regional Airport Passenger Throughputs

Dagmar Letávková, Simona Matušková, Vladimír Kebo

Network Synchronization of Periodic Multiple Source Flows

Filip Lorenz, Radim Farana, Dušan Teichmann

Finite Time Response Control of Affine Systems

Constantin Marin, Dan Selişteanu

Application of a New Approach in the Engineering Education

Andrea Mojžišová, Jana Pócsová

New Petrophysical Models Verified on Laboratory Data Measured by an Automatic Acoustic Test System

Judit Somogyiné Molnár, Mihály Dobróka, Anett Kiss

Sliding Mode Control of a 2-DOF Hydraulic Servo System

Lindokuhle J. Mpanza, Jimoh O. Pedro

Remarks on Some Robust Nonlinear Observer and State-Feedback Zero-bias Control of AMB

Arkadiusz Mystkowski, Ewa Pawluszewicz

Type - 2 Fuzzy Logic Controller for Nonlinear Object Control

Agata Nawrocka, Marcin Nawrocki, Andrzej Kot

Ensuring the Security of Warehouse Using Automatic Identification by RFID

Zdeněk Neustupa, Roman Danel, Pavel Staša, Filip Beneš, Jiří Švub

Simulation and Experimental Testing of Power Assisted Steering

Petr Noskievič, Martin Březina

Application of Intelligent Control Algorithms for Thermal Comfort and Energy Saving in the Laboratory Room

Mariusz Nowak, Andrzej Urbaniak

Frequency Fitting Algorithm of Control Signals Based on Hermite Curves

Michal Ostaszewski, Tomasz Kuzmierowski

Comparison of Database Mirror Technologies for Use in Fault-Tolerant Information System Solutions

Lukáš Otte, Roman Danel, Michal Řepka, Vladislav Vančura, David Johanides

Monitoring and Supervision Solution for Distributed Control Systems

Nicolae Patrascoiu, Ioana Camelia Barbu

Evaluation of Customer Satisfaction Using the Quality Function Deployment

Marcela Pavlíčková

Use of PLC and PIC for Realization of Intelligent Family House

Miroslav Pawlenka, Jaromír Škuta

On-line Estimation and Control Strategies for a Microalgae Fermentation Continuous Process

Emil Petre, Dorin Şendrescu

Verification of Enhanced Interference Reduction in WVD on Real Non-Stationary Acoustic Signal

Stanislav Pikula

Resource Management of Many-Core Architectures in Different Abstraction Levels

Imre Piller, Sándor Fegyverneki

Support of Biomass Boiler Control Design by Modeling

Viktor Placek, Bohumil Sulc

Mathematical Modelling of Single Pressure Heat Recovery Steam Generator

Marcin Plis, Henryk Rusinowski

Investigation for Developing a Calibration Method for Non-Destructive Examination of Tree Trunks

Istvan Poser

Sound Power Produced by Piezoactuators at Vibration Control of Journal Bearings

David Pross, Jiří Tůma, Miroslav Mahdal, Jaromír Škuta

Results Obtained in Monitoring Transient Electrical Events from Hydropower Plants

Dorina-Mioara Purcaru, Ion Purcaru, Dan Popescu

Analysis of Syntactic Elements and Structure of Web Pages Using Eye-Tracking Technology

Michal Radecký, Jan Vykopal, Pavel Smutný

Early Warning of Flash Floods Based on the Weather Radar

Petr Rapant, Tomáš Inspektor, Jaromír Kolejka, Kateřina Batelková, Jana Zapletalová, Karel Kirchner, Tomáš Krejčí

Mathematical Modelling of Biomass Fired Fluidized Bed Boiler

Henryk Rusinowski, Marcin Plis

Decentralized Model Reference Adaptive Control Design for Nonlinear Systems; State Dependent Riccati Equation Approach

Farhad Sahami, Metin U. Salamci

A New Approach Towards Increasing Cyber-Physical Systems Dependability

Teodora Sanislav, George Mois, Liviu Miclea

Measurement-Control System for an Automotive Vehicle Engine Mount

Bogdan Sapiński, Maciej Rosół, Łukasz Jastrzębski

From Laboratory into Real Life: The EURATHLON and ELROB Disaster Response Robotics Competitions (*) &
Frank E. Schneider, Dennis Wildermuth

Road Quality Evaluation with Mobile Devices (*),
Gheorghe Sebestyen, Dan Muresan, Anca Hangan

Application of the Monte Carlo Method to Estimate the Uncertainty of Air Flow Measurement (*) (*),
Sona Sediva, Miroslav Uher, Marie Havlikova

Modeling of Bacterial Growth Bioprocesses Based on Heuristic Optimization Techniques (*) (+\$)
Dorin Şendrescu, Dan Selişteanu

Additive Faults Estimation Based on Adaptive Observers for Linear Systems (*) (+)
Vladimír Serbár, Pavol Liščinský

A Comparative Analysis of RLS Algorithm and F-RLS Algorithm for Residuals Generation (*) B#5
Nasar Aldian Ambark Shashoa, Ismail Shrena, Omar Abusaeeda, Saed Ahmed Sasi, Abdurahim Alfadel Sakeb

Controll of Car LED Lights by CAN/LIN Bus (*) (*), *
Jaromír Škuta, Jiří Kulhánek

Algorithm of Kalman Filter Used for Driving Observatory Tracking Device Placed on Board of Flying Object (*) (- \$)
Michal Sobolewski, Zbigniew Koruba

Influence of Diffusive Combustion on the Rotary Furnace Performance (*) (- *
Ján Spišák, Imrich Košťál, Martin Truchlý

Auto-ID for Automotive Industry (*) (\$) %
Pavel Staša, Filip Beneš, Jiří Švub, Vladimír Kebo, Jakub Unucka

Implementation of ESP Algorithm in LabVIEW cRIO (*) (\$) +
Martin Štěpán, Jiří Kulhánek, Renata Wagnerová

Design of GIS-based Decision System in Anti-hail Networks (*) (%) %
Constantin Şulea-Iorgulescu, Cosmin Ionete

Laboratory Model for Active Vibration Control (*) (%) +
Pavel Šuránek, Miroslav Mahdal, Jiří Tůma

Efficiency Analysis of Inflection Rule Induction (*) (%) &%
Gábor Szabó, László Kovács

Sensitivity Analysis of the Specific Consumption of Chemical Energy of Fuels for Assumed Uncertainty of Selected Measurements in a Steam Combined Heat and Power Unit (*) (*) &*
Marcin Szega, Henryk Rusinowski

Management of Switching in Hybrid FSO/RF Link (*) (*) ' &
Matúš Tatarko, Ľuboš Ovseník, Ján Turán

Using Mathematical Programming for Signal Plan Design – Some Practical Examples (*) (*) ' +
Dušan Teichmann, Michal Dorda

The Pong Game Implementation with the FRIQ-learning Reinforcement Learning Algorithm (*) (*) (&
Tamás Tompa, Dávid Vincze, Szilveszter Kovács

Implementation of Driving Assistance Systems Using LabVIEW-based Platform (*) (*) (*),
Attila Trohák, János Végh, Gergely Kovács, Zsófia Forgács

Effect of the Controller Gain on Efficiency of Active Vibration Control of Sliding Bearings) &
Jiří Tůma, Miroslav Mahdal, Jaromír Škuta, Jiří Šimek

Comparison and Cooperation of Using Camera and Acoustic Emission for Solid Particle Flow Measurement) ,
Miroslav Uher, Soňa Šedivá, Marie Havlíková

Process Knowledge Building an Optimized Alarm System) *
Patrik Urban, Lenka Landryová

Alarm Processing Analyses Using SPC Tools Based on Real-Time Data Acquired from a Control System) * +
Patrik Urban, Lenka Landryová

A Classification of Technical System's State Descriptor Set Based on the Possible Automation of the Parameter Registration Process) +%
Géza Vekov, László Pokorádi

Robust Control of Mechanical Systems) +)
Antonin Vitecek, Miluse Viteckova

Stability and Pole Dominance of Control Systems) , \$
Miluse Viteckova, Antonin Vitecek

Outdoor Localization Technique Using Active RFID Technology Aimed for Security and Disaster Management Applications) , *
Lukas Vojtech, Marek Neruda, Jaromir Hrad, Radoslav Bortel

Program Slicing Based on Runtime Dataflow Measurements) - \$
Gábor Wacha, János Lazányi, Béla Fehér

The Dynamic Properties of the IPMC Polymer) - (
Hubert Wiśniewski, Leszek Płonecki

Measurement of Car Frame Load During Deceleration Tests) - -
Vladimír Zbožínek, Petr Tomčík, Jiří Kulhánek