MMAR 2019 Lecture Schedule - Compact Form

Monday, 15:10 - 16:10

Marco Polo (Casino) **A1L-A**, page **??**
Optimization of Decentralized Control Systems **Lall**

Monday, 16:30 - 17:50

Marco Polo (Casino) **A2L-A**, page **??**	**Vasco da Gamma (Kalman)** **A2L-B**, page **??**	**Ferdinand Magellan (Lehar)** **A2L-C**, page **??**
Stability and Angles Between State Matrices of Positive Linear Systems **Kaczorek**	Selection of Training Options for Deep Learning Neural Network Using Genetic Algorithm **Szymak**	Model-Based Controller Using Quasi-Velocities for Some Vehicles **Herman**
Extremal Problems for Integral Time Lag Parabolic Systems **Kowalewski, Miśkowicz**	Deep Neural Network Architecture Search Using Network Morphism **Grochowski, Kwasigroch, Mikołajczyk**	Localization of Workpieces by Robot Manipulators Using RFID Technology **Thormann, Winkler**
On asymptotic properties of discrete Volterra equations of convolution type **Anh, Babiarz, Czornik, Niezabitowski, Siegmund**	Enhanced Process Fault Diagnosis Through Integrating Neural Networks and Andrews Plot **Wang, Zhang**	Cooperative Target Tracking in Elliptical Formation **Ma**
Techniques for Verified Reachability Analysis of Quasi-Linear Continuous-Time Systems **Rauh, Kersten, Aschemann**	Style Transfer-Based Image Synthesis As an Efficient Regularization Technique in Deep Learning **Grochowski, Mikołajczyk**	

Tuesday, 09:00 - 10:00

Marco Polo (Casino) **B1L-A**, page **??**
Normal Forms of Nonlinear Control Systems **Respondek**

Tuesday, 10:00 - 11:00

Marco Polo (Casino) **B2L-A**, page **??**	**Vasco da Gamma (Kalman)** **B2L-B**, page **??**	**Ferdinand Magellan (Lehar)** **B2L-C**, page **??**
Robust and Adaptive Ship Path-Following Control Design with the Full Vessel Model **Zwierzewicz**	Fusion of Gesture and Speech for Increased Accuracy in Human Robot Interaction **Baranwal, Singh, Hellström**	A Memetic Algorithm for the Discrete Scheduling-Location Problem with Unrelated Executors **Ławrynowicz, Józefczyk**
Adaptive, Nonlinear Control of a Third-Order Duffing–Holmes Type Chaotic Oscillator **Kabziński, Mosiołek**	The Quality Interaction Function Deployment for Lean Human-Robot Interaction **Bonini, Urru, Echelmeyer**	Cyclic Scheduling of Lots with Setup Times **Smutnicki**
Adaptive Identification Method for Simulation and Control of Glass Melting Process **Byrski, Drapała**	Achievable Stereo Vision Depth Accuracy with Changing Camera Baseline **Sasiadek, Walker**	Scheduling Identical Jobs with Linear Resource Usage Profile to Minimize Schedule Length **Różycki, Waligóra**

Tuesday, 11:20 - 13:00

Marco Polo (Casino) **B4L-A**, page **??**	**Vasco da Gamma (Kalman)** **B4L-B**, page **??**	**Ferdinand Magellan (Lehar)** **B4L-C**, page **??**
Poles and Zeros of Standard and Fractional Positive Stable Linear Systems **Sajewski, Kaczorek**	Robotic Manipulator Path-Planning: Cost-Function Approximation with Fuzzy Inference System **Szabó, Gincsainé Szádeczky-Kardo**	Power System Resilience Using Network Reconfiguration **Ghadage, Bhopale, Bajaria**
An Interpolation Approach to the Integer–Order Approximation of Fractional–Order Systems **Casagrande, Viaro**	Dynamic Trajectory Planning for Autonomous Driving Based on Fluid Simulation **Sułkowski, Bugiel, Izydorczyk**	A Simple Heuristic Approach for Attitude/Altitude Control of a Quadrotor with Uncertain Parameters **Ailon, Arogeti**
Variable-, Fractional-Order Linear MIMO System Matrix Description **Ostalczyk**	Trajectory Control of the Wheeled Mobile Robots in Dynamic Environment **Zhang, Krasnov, Chepinskiy, Grigoriev, Artemov, Liao, Zhang, Wang**	On the First Single-Nonlinearity Seven-Term Memristor-Based Chaotic Snap System: a Line Equilibrium and Coexisting Hidden Attractors **Ahmad, Srisuchinwong**
Expansion of a Solver for Nonlinear Fractional Problems - the Inclusion of Time Delays **Sowa, Dziedzic**	Formation of Two-Wheeled Mobile Robots Moving in the Task Space with Static Obstacles - Numerical Verification for Bounded Controls **Kowalczyk, Kozłowski**	Multicriteria Coordination of Flood Control in Water Reservoir Systems **Skulimowski**
Fractional-Order Difference Basis Functions a New Modeling Concept for Dynamical Systems **Gałek, Stanisławski, Rydel, Latawiec, Łukaniszyn**	Trajectory Tracking of a Tri-wheel Mobile Robot Using the Castor Wheel's Twist Angle **Beniak, Pyka**	

Tuesday, 15:00 - 16:20

Marco Polo (Casino) **B5L-A**, page **??**	**Vasco da Gamma (Kalman)** **B5L-B**, page **??**	**Ferdinand Magellan (Lehar)** **B5L-C**, page **??**
Calculation of Descriptive Statistics by Devices with Low Computational Resources for Use in Calibration of V2I System **Kubiak, Banach, Długosz**	An Application of the Induced Matrix Norm in the Minimum-Energy Design of Perfect Control Algorithm **Pączko, Hunek**	Parameter Optimization of Control with Feedback Linearization for a Model of Thermoelectric Processes in Cylindrical Bodies **Gavrikov, Kostin, Knyazkov, Rauh, Aschemann**
Techniques to Facilitate the Use of V2I Communication System As Support for Traffic Sign Recognition Algorithms **Banach, Długosz**	Relative Degree One and Two Sliding Variables for Multi-Input Discrete-Time Systems **Latosiński, Bartoszewicz**	Optimizing Consumer-Side Electricity Usage in a Smart Household **Taik, Kiss**
Camera Model for Lens with Strong Distortion in Automotive Application **Lelowicz**	Periodic Regimes of Motion of a Body with a Moving Internal Mass **Figurina, Knyazkov**	Optimization of Traffic Signal Control Based on Game Theoretical Framework **Guo, Harmati**
	Discrete-Time Design of Model Reference Learning Control System **Kurniawan, Widiyatmoko, Bayuwati, Afandi, Suryadi, Rofianingrum**	An Improved Reinforcement Learning Control Strategy for Batch Processes **Zhang, Zhang, Long, Hu**

Wednesday, 09:00 - 10:00

Marco Polo (Casino) **C1L-A**, page **??**
Game Theory and Distributed Control **Shamma**

Wednesday, 10:00 - 11:00

Marco Polo (Casino) **C2L-A**, page **??**	**Vasco da Gamma (Kalman)** **C2L-B**, page **??**
Robust Unknown Input Observer Design for Simultaneous Actuator and Sensor Faults **Pazera, Witczak, Kukurowski**	Explicit Interpolating Control of Unmanned Aerial Vehicle **Bouček, Flídr**
Interval Observer-Based Controller Design for Systems with State Constraints: Application to Solid Oxide Fuel Cells Stacks **Ifqir, Rauh, Kersten, Ichalal, Ait-Oufroukh, Mammar**	Computation Complexity Evaluation of FastSLAM Algorithm for Unmanned Ground Vehicles **Al-Tarras, Yacoub, Asfoor, Sharaf**
Design of a Takagi-Sugeno State and Disturbance Observer for a Torque-Controlled Hydrostatic Transmission **Dang, Aschemann**	

Wednesday, 11:20 - 13:00

Marco Polo (Casino) **C4L-A**, page **??**	**Vasco da Gamma (Kalman)** **C4L-B**, page **??**	**Ferdinand Magellan (Lehar)** **C4L-C**, page **??**
Parameter Identification for the Fractional Order, State Space Model of Heat Transfer Process Using Atangana-Baleanu Operator **Oprzędkiewicz, Mitkowski**	Parametric Identification of PMSM Mathematical Model **Zawarczynski, Stefanski**	Integrated Maintenance Decision Making Platform for Gantry Cranes in Container Terminal **Szpytko, Salgado**
Markov Parameters of the Input-Output Map for Discrete-Time Order Systems with Grunwald-Letnikov h-difference operator **Pawluszewicz, Koszewnik**	Duality-Based Approach to Identification of Linear Time-Varying Hamiltonian Systems with RKHS As Data Descriptors **Roman-Flores, Rapisarda, Montesdeoca**	Approximation State-Space Model for 2x2 Hyperbolic Systems with Collocated Boundary Inputs **Bartecki**
A Digital PID Controller Based on Grunwald-Letnikov Fractional-, Variable-Order Operator **Oziabło, Mozyrska, Wyrwas**	Optimization Techniques for the Design of Identification Procedures for the Electro-Chemical Dynamics of High-Temperature Fuel Cells **Frenkel, Rauh, Kersten, Aschemann**	Simulation Platform for Wireless Data Communication Using a New Signal Reconstruction Method **Majewski, Hunek**
Nonlinear Fractional-Order Impedance Control for Knee Rehabilitation **Pomprapa, Kastouri, Liu, Leonhardt**	Identification of Multichannel Nonlinear Systems Excited by Realisations of Mutivariate Orthogonal Multisine Random Time-Series **Figwer**	Modelling of a Highly-Viscous, Non-Isothermal Fluid with Free Surface Using Model Reduction **Skeli, Harder, Weidemann, Panreck**
Digital and Analog Design of Fractional PD Controller for a Servo System **Bauer, Baranowski, Kapoulea, Psychalinos**	FEM Modeling and Parameter Identification of Thermoelectrical Processes in Cylindrical Bodies **Knyazkov, Kostin, Gavrikov, Aschemann, Rauh**	Games with Resources and Their Use in Modeling Control Processes in Heterogeneous Populations **Swierniak, Krzeslak, Borys**

Thursday, 09:00 - 10:20

Marco Polo (Casino) **D1L-A**, page **??**	**Vasco da Gamma (Kalman)** **D1L-B**, page **??**	**Ferdinand Magellan (Lehar)** **D1L-C**, page **??**
Static Camera Calibration for Advanced Driver Assistance System Used in Trucks **Dlugosz, Dworakowski, Suliga**	Modeling of Switching-Mode Nonlinear System by Exponentially Weighted Aggregation **Wachel, Śliwiński, Hasiewicz**	Automotive Ethernet Applications Using Scalable Service-Oriented Middleware Over IP: Service Discovery **Nichitelea, Unguritu**
The Application of Virtual Logic Models to Simulate Real Environment for Testing Advanced Driving-Assistance Systems **Pikus, Was**	Experimental Validation of a Nonlinear Model for Controlled Thermoelectric Processes in Cylindrical Bodies **Gavrikov, Kostin, Knyazkov, Rauh, Aschemann**	Development of an Agent-Based System for Decentralized Control of District Energy Systems **Fritz, Xhonneux, Müller**
Lean Systems Engineering for Automotive Perception Systems **Buczacki, Cieślar, Oppenheim, Stachnik**	Self-Tuning Control for Nonlinear Systems Using a State-Dependent Riccati Equation Approach **Wache, Aschemann**	Software Framework for Fast Image Retrieval **Grycuk, Scherer**
Selected Methods for Increasing the Accuracy of Vehicle Lights Detection **Bogacki, Długosz**	Model-Based Nonlinear Control of the Cathode Pressure of a PEM Fuel Cell System Using a VTG **Schitz, Aschemann**	Process Fault Detection and Reconstruction by Principal Component Analysis **Qi, Zhang**

Thursday, 10:40 - 12:00

Marco Polo (Casino) **D2L-A**, page **??**	**Vasco da Gamma (Kalman)** **D2L-B**, page **??**	**Ferdinand Magellan (Lehar)** **D2L-C**, page **??**
Performance of Lidar Object Detection Deep Learning Architectures Based on Artificially Generated Point Cloud Data from CARLA Simulator **Dworak, Ciepiela, Derbisz, Izzat, Komorkiewicz, Wójcik**	Stress Analysis Recorded in the EEG Signal Based on Mathematical Markers **żołubak**	Kinematic Predictive Imaging Technique for Telerobotic Surgery with Time Delay Using Model Predictive Control **Ladoiye, Necsulescu, Sasiadek**
Uncertainty Propagation for Vehicle Detections in Experimentally Validated Radar Model for Automotive Application **Martowicz, Gallina, Karpiel**	Embedded Heart Rate Analysis Based on Sound Sensing **Rosół, Więckowski**	Social Robot in Diagnosis of Autism Among Preschool Children **Arent, Kruk-Lasocka, Niemiec, Szczepanowski**
A Generic Validation Scheme for Real-Time Capable Automotive Radar Sensor Models Integrated Into an Autonomous Driving Simulator **Jasiński**	Soft Real-Time Communication with WebSocket and WebRTC Protocols Performance Analysis for Web-Based Control Loops **Karla, Tarnawski**	Development of a High-Efficiency Pitch/Roll Inertial Measurement Unit Based on a Low-Cost Accelerometer and Gyroscope Sensors **Okulski, Ławryńczuk**
Full State Proportional Controller for Adaptive Cruise Control System **Długosz, Zhang**	Remote Receiver Control in MPTCP Networks in Uncertain Operating Conditions **Ignaciuk, Morawski**	Features Matching Based Merging of 3D Maps in Multi-Robot Systems **Drwięga**