

Presentation Title

7th

8th

9th

7th			8th			9th					
9:00					Adaptive robust fault detection and control for injection machine mold closing process with accurate parameter estimations	Wideband Backward-Drivability Motor Drive Based on Fast Current Control of Geared SPMSM		Hierarchical Gait Generation for Modular Robots Using Deep Reinforcement Learning	A Guide to Design Disturbance Observer-based Robust Motion Controllers in Discrete-time Domain	Passivity Based Hierarchically Decentralized Range Extension Control of In-wheel-motor Vehicles	
					Adaptive Robust Force Control of an Underactuated Stance Leg Exoskeleton for Human Performance Augmentation	On-line Estimation of Current Harmonics for Status Monitoring and Diagnosis of High-Speed Permanent Magnet Synchronous		Route optimization for autonomous bulldozer by distributed deep reinforcement learning	Disturbance Rejection Based on Equivalent-Input-Disturbance Approach Using High-Order Filter	A Fuzzy Logic-Based Adaptive Dynamic Window Approach for Mining Truck Path Planning	
10:30	Opening Plenary1				Adaptive Robust Motion Control of Series Elastic Actuator with Unmatched Uncertainties	A Study of Multisampling Deadbeat Control for Low Carrier Frequency PMSM Drive System Used in EVs and HEVs		Development of a Reference Signal Self-Organizing Control System Based on Deep Reinforcement Learning	Adaptive Cutting Force Observer for Machine Tool Considering Stage Parameter Variation	A Deep Learning-based Approach to Lane Change Maneuver of Adjacent Target Vehicles	
	Plenary2				Observer-based Angle of Attack Estimation for Tilt-Wing eVTOL Aircraft	Disturbance Rejection Performance of Adaptive Robust Control		Evaluation of Power-Assisted Cart Based on Inherently Safe Control	Active Disturbance Rejection Controller Design for Oxygen Excess Ratio of Proton Exchange Membrane Fuel Cell	Time Series Prediction of Driving Motion Scenarios Using Fuzzy Neural Networks	
					Development of a low-cost avionics platform for small-scale model airplanes	Precision Motion Control of Constrained SISO Nonlinear System via Direct Optimized Compensation		Validation of virtual hug effect under presentation of body contact pressure and HyperMirror image of a hug	Hybrid Reference Governor-Based Adaptive Robust Control of a Linear Motor Driven System	In-Vehicle Traffic Light based on The 4th Generation Mobile Communication Technology	
					Estimation and Compensation of Airframe's Disturbance Force using Rotor Angular Velocity for Propeller-driven Systems	Model Prediction based Online Feedforward Compensation Control of Maglev Planar Motor with Comparative Investigation		A Design of Back-Drivable Tendon-Driven Mechanism on Robotic Finger		In-Vehicle Traffic Light based on Local Area Network	
12:00											
13:00	GBDT Modeling of Deep Reinforcement Learning Agents Using Distillation	Modeling and Control of Stable Limit Cycle Walking on Floating Island	Modeling and Control Performance Evaluation for Testbed of Asteroid Flyby Observation System			Vibration Suppression and Tracking Control of a Flexure-Jointed Motion Stage Mechanism Using LTV-FIR Command Filtering			An improved ant colony optimization for path planning with multiple UAVs	Admittance Control-based Bilateral Control System for Haptic Data Reduction	
	Remarks on Octonion-valued Neural Networks with Application to Robot Manipulator Control	Algorithm to Improve the Predictability for Auto-vehicles Behaviors and Avoid Risk Accumulation during Driving	Vision-Based Rapid Target Tracking Method for Trajectories Estimation and Actuator Parameter Uncertainties for			Horizontal Counter Control Method for Suppressing Vibration of Machine Base			Cascade Terminal Sliding Mode Control for PMSM with Nonlinear Disturbance Observer	A New Autoregressive Neural Network Model with Command Compensation for Imitation Learning Based on Bilateral	
		Detection of Reduced Magnetic Attraction Force Using a Disturbance Observer for Crawler Robots	High-precision Visual Servoing in Asteroid Flyby with Multirate Feedforward Control and Trajectory Estimation			Basic Study on Analysis and Suppression of Inverse Response Caused by Feedforward Friction Compensation of Ball-screw			Fractional-Order Based Resonant Controller for Torque Ripple Suppression of Permanent Magnet Synchronous Motors		
14:30	Underwater Suction Gripper for Object Manipulation with an Underwater Robot	Study on how to remove the rope traction device on the overhead distribution lines	Localization of Planetary Rovers from Slip Ratio Estimation with Simple Model		Skeleton-based visualization of poor body movements in a child's gross-motor assessment using convolutional auto-encoder	Application of Limited Pole Placement Method to State Feedback System		Autonomous vehicle navigation based in a hybrid methodology: model based and machine learning based	Excitation System with Active Magnetic Bearing Control Performance Improvement for Rotordynamic Force	Acceleration Measurement Improves the Bandwidth of Force Estimation in Disturbance Observer	
	Prototype of 32-Joint Robot Hand Using Shape Memory Gel and Tendon-Driven Mechanism	Remote-controlled Rust Assessment System for Weathering Steel	Development of a Slotless Permanent Magnet Motor with Two-Layer Toroidal Winding for Minimization of Torque Ripple		Motion Control Method Based on Two-link Manipulator Model with Bi-articular Muscle Considering Planetary Gear	Development of Optimal Design Support System of Actuator Position and Control System Considering Resonant Vibration		Pressure-flow dynamics with semi-stable limit cycles in hydraulic cylinder circuits	Multirate Feedforward Control based on Modal Form with Mode Selection Applied to Multi-Modal High-Precision Positioning Stage	Multi-Functional Drill Incorporating Linear Motor for Haptic Surgical Instrument and Simulator	
	Modular Drivetrains for Increased Performance and Reliability	A modular architecture for mobile robots equipped with continuous-discrete observers			Deep Learning Based Singular Spectrum Analysis for Realization of Wideband Force Sensing	Assessment of Capacitor-based Charge Estimators for Piezoelectric Actuators		Contraction Region Estimate for State-Dependent Riccati-Equation-Based Controllers and its Application to a Two-Wheeled	Double-Disturbance Compensation Design for Full-Closed Cascade Control of Flexible Robots		
16:00	Plenary 3				Waste object classification with AI on the edge accelerators	Feedforward Control for Track-Seeking Control in Hard Disk Drive with Sampled-Data Polynomial Based on First-Order		A Model-less Approach for Estimating Vehicles Sideslip Angle by a Neural Network Concept	Load Balancing Method Using Server Temperature Prediction Considering Multiple Internal Heat Sources in Data Centers	Development of Reluctance Actuator for High-Precision Positioning and Scanning Motion	Force Disturbance Observer-based Force Control for Compliant Interaction with Dynamic Environment
					Experimental validation of interface aiding human depth prediction on images in terms of usability	A study on frequency-shaped PWM-type final-state control with quantization		Picometer-Scale Positioning of a Linear Drive System via Feedforward-Feedback Control	Frequency-domain experimental setup for mechatronic and suspension system components	Suppressing spatially distributed disturbances by exploiting additional sensors and actuators in inferential motion control	Load Torque Control of an Electromagnetic Motor with a Reduction Gear, a Spring, and Motor/Load-Side Encoders
17:00	Periodic/Aperiodic Hybrid Position/Impedance Control Using Periodic/Aperiodic Separation Filter	Experimental performance analysis of an electromagnetic impact-drive microrobot	Effect of insulating liquid on thrust force of a synchronous electrostatic film actuator		Internal Sensor Based Kinematic Parameters Estimation using Acceleration/Deceleration Motion			A mechatronic apparatus for shear stress application on endothelial cells: design, development and experimental	Smart Adaptronic Thermal Management System Designs for The Li-ion Battery Packs	Multirate State Tracking for Improving Intersample Behavior in Iterative Learning Control	Improvement of McKibben Type Artificial Rubber Muscle Model Based on End Shape Deformation
	Force restrained control to extend flexibility of trajectory planning	Design of Acceleration Control for Center of Mass on Sliding Robot	Achieving Resonance with Piezoelectric Transducers on 2-4 Phase Resonant Electrostatic Induction Motors	17:30	Development of Haptic Feedback Control Stick for Remote Control between Different Structures		Hybrid identification with time-series data and frequency response data for accurate estimation of linear		Closing		
	Challenges of Linearization-based Control of Industrial Robots with Cycloidal Drives	Stable Gait Generation on a Low Friction Road Surface by Making Impact Posture Asymmetric	Diagnosis of Sensor Faults in PMSM and Drive System Based on Structural Analysis		Assessment of Human Walking Stability Using the Gait Sensitivity Norm with Wearable Sensors	Control-Relevant Neural Networks for Intelligent Motion Feedforward		Analysis of the Sensitivity of Mechatronic Systems using the Example of a Light Guide	Technical Tour		
					On the Accuracy of IMUs for Human Motion Tracking: a Comparative Evaluation	A Closed-Loop Perspective on Fault Detection for Precision Motion Control: With Application to an Overactuated System		MPC-based Path Following Design for Automated Vehicles with Rear Wheel Steering			