Paper No.	Paper Title	Session Code
P00022	Neural-Network-Based Vehicle Torque Demand Forecasting	WA1
P00070	New Formula ZD4I\$g\$S_Q Applied to Solving Future Nonlinear Systems of Equations with Abundant Numerical Experiment Verification	WA1
P00100	Study on Object Recognition by Active Stereo Camera for Clean-up Robot	WA1
P00224	Designing a Neuro-Fuzzy PID Controller Based on Smith Predictor for Heating System	WA1
P00296	A Vehicle Detection Using Selective Multi-stage Features in Convolutional Neural Networks	WA1
P00407	Clustering Wear Particle Using Computer Vision and SOM System	WA1
P00101	Efficient and Robust Drivable Region Extraction for Autonomous Vehicles	WA2
P00297	Vision-Based Road Region Detection Using Probability Map of Road Color Features	WA2
P00325	Predictive Risk Assessment Using Cooperation Concept for Collision Avoidance of Side Crash in Autonomous Lane Change Systems	WA2
P00326	Vehicle Side Slip Angle Estimation Using Low-cost GPS/IMU	WA2
P00327	Vision-based Autonomous Indoor Valet Parking System	WA2
P00343	An Observertype Protocol Based Algorithm for A Dynamic Average Consensus	WA2
P00174	Moving Object Detection under Non-Stationary Camera via Multiple Foreground Clues	WA3
P00295	Ensemble Tracking with Deep Reinforcement Learning	WA3
P00397	Toward Flicker-Free Video Super-Resolution Using Temporal Gradient Loss	WA3
P00194	Optimal Design of a Five-Link Mechanism for an End-effector Typed Walking Rehabilitation Robot	WA4
P00201	Proprioceptive Interaction between Two Arms using Position Sense at the Human Elbow Joint	WA4
P00367	Classification of Gait Phases with a Long-Short-Term Memory-based Neural Network	WA4
P00392	Development of the Wearable Walking Robot for Spinal Cord Injury, RoboWear10	WA4
P00585	Comparisons of two types of rehabilitation robot on upper extremity function	WA4
P00192	Perspective and strategies for clinically applicable catheter robot	WA5
P00317	Development of Robotic Catheter Control Systems for Master-Slave Tele-operative Arrhythmia Ablation in Asan Medical Center	WA5
P00364	Development of a Miniaturized Continuum Manipulator for Endovascular Interventions within the Heart	WA5
P00036	Twin-motor System Using a Data-driven Dual-rate Control	WA6
P00105	Primal Formulation of Parallel Model Predictive Control	WA6
P00196	Multiple Object Center Point Estimation by Fusing SIFT Algorithm and Monte Carlo Method for Multiple Visual Servoing System	WA6
P00218	Continuous-time I-PD Gain Tuning Based on VRFT Using Closed-loop Step Response Data	WA6
P00344	Robust Control of Uncertain Robot Manipulator with a Momentum-based Disturbance Observer	WA6
P00405	Practicality and Performance Improvement of Time-delay Control	WA6

Paper No.	ICCAS 2017 Paper List (by Session Code) Paper Title	Session Code
P00029	Comparison Study of Parallel Operation of Motor Drives	WA7
P00043	Global consensus of heterogeneous agents with input saturation	WA7
P00085	A New Bearing-Only Navigation Law	WA7
P00152	Rigidity of Distance-based Formations with Additional Subtended-angle Constraints	WA7
P00193	Consensus of linear time-invariant multi-agent system over multilayer network	WA7
P00395	Study on Lock-in Thermography using an inverse dynamic system design	WA7
P00096	Generic Framework for Hybrid Fault Diagnosis and Health Monitoring of the Tennessee Eastman Process	WA8
P00289	Sensor Attack Detection for Railway Vehicles using Topographic Information	WA8
P00290	Sensor Security Index for Control Systems	WA8
P00402	Sensor Failure Detection, Identification and Accommodation Using Neural Network and Fuzzy Voter	WA8
P00161	Supervision of industrial manipulators using ANFIS system	WA8
P00153	Acoustic Vibration Sensor Based on Macro-Bend Coated Fiber For Pipeline Leakage Detection	WA8
P00015	Model Identification of Nonlinear Sputter Processes	WB1
P00019	Estimation of an uncertain bilinear boundary condition in linear 2x2 hyperbolic systems with application to drilling	WB1
P00159	An Approach for System Identification in Unmanned Surface Vehicles	WB1
P00235	System Identification with Mixed Binary-valued and Precise Measurements	WB1
P00320	H∞ Fuzzy Control of Interval Type-2 TakagiSugeno Fuzzy Systems Under Imperfect Premise Matching	WB1
P00086	A finite-time convergence of generalized acyclic persistent formation in 3-D using relative position measurements	WB2
P00103	Leader-Following Formation Control of Nonholonomic Robots with Switching Network Topologies	WB2
P00113	Design and Development of a Semi-Autonomous Stair Climbing Robotic Platform For Rough Terrains	WB2
P00163	3D Pose Tracking for GPS-denied Terrain Rovers by Fast State Variable Extension and Enhanced Motion Model	WB2
P00227	A Novel Offline Coverage Path Planning Algorithm for A Tethered Robot	WB2
P00375	Object Tracking With A Robotic Manipulator Mounted On Ground Vehicle Using Image Based Visual Servoing	WB2
P00147	Improving Person Re-identification via Pose Prior	WB3
P00178	Real-time Scheme for 3-Dimensional Localizing and Tracking of People in Multiple Camera Settings	WB3
P00252	Local Group Relationship Analysis for Group Activity Recognition	WB3
P00118	3D Upper Limb Multi-Joint/DOF Mechanical Impedance Estimation	WB4
P00135	Reach Task Exercise for Chronic Stroke Survivors using Upper Extremity Rehabilitation Robot	WB4
P00158	Clinical Research on LE Rehabilitation Robots -The Effects of Exoskeleton Overground Gait Assist Robot (Exowalk ®, HMH Co. Ltd, Korea) in Stroke Patients -	WB4

Paper No.	Paper Title	Session Code
P00173	Development of a Rehabilitative System using a Ceiling-Rail Platform for the Independent Walking and Postural Training of Hemiplegic Patients	WB4
P00222	Study on the maufacturing process of single lumen tube using TPE	WB5
P00299	Augmented reality based cannula guide system for interventional cardiology procedures	WB5
P00328	Nonrigid Registration Method between Biplane X-ray Angiogram Image and CT Image	WB5
P00393	Review of electroanatomic mapping systems and technologies	WB5
P00087	Distributed learning in a multi-agent potential game	WB7
P00155	Design and kinematic analysis of 5-DOF Stage using parallel mechanism	WB7
P00304	Electromagnetic Pump in Sodium Thermal-Hydraulic Test Facility: Design and Control Issues	WB7
P00308	A Brief Survey of Sensors for Detect, Sense, and Avoid Operations of Small Unmanned Aerial Vehicles	WB7
P00404	A Practical Distributed Mobile Network Protocol and Its Application to Drone Formation Control	WB7
P00597	Consensus under Misaligned Orientations	WB7
P00148	Op-Amps Based Schmitt Trigger with Controllable Threshold Voltage and Its Application to Voltage-to-Period Converter	WB8
P00177	3-D Shape Recovery from Image Focus Using no-reference sharpness metric based on inherent sharpness	WB8
P00348	Capacitive Measuring of Crude Palm Oil–Water Mixture	WB8
P00356	A Versatile Interface Circuit for Capacitive and Resistive Sensors	WB8
P00373	Saline Solution Concentration Measurement Based on Contact Angle Approach	WB8
P00351	Improve Efficiency Multi-Turn Magnetic Encoder that uses Gear System	WB8
P00038	Exploring Response Time Delays of the Cloud-Based Web Services	WC1
P00050	Extraction of GGO regions from chest CT images using deep learning	WC1
P00068	Design of Virtual Platoon Control System using Augmented Reality to Assist Welfare Vehicle Users	WC1
P00209	Preliminary Test of Affective Virtual Reality Scenes with Head Mount Display for Emotion Elicitation Experiment	WC1
P00144	Traffic of the Communities around Higher Education Service areas in Bangkok Metropolitan, Thailand	WC1
P00243	Feature-Point Extraction Based on an Improved SIFT Algorithm	WC1
P00026	Variant PID Controller Design for Autonomous Visual Tracking of Oil and Gas Pipelines via an Unmanned Aerial Vehicle	WC2
P00114	Optimal Control-Based UAV Path Planning with Dynamically-Constrained TSP with Neighborhoods	WC2
P00136	Vision based Autonomous Landing of an Unmanned Aerial Vehicle on a Stationary Target	WC2
P00312	Design and Development of an Automated Battery Swapping and Charging Station for Multirotor Aerial Vehicles	WC2
P00040	Design of a Tracking Filter Suitable for 2D Motion Dynamics of an Off-Road Target	WC2
P00080	Real Time Traffic Control System Using Wavelet Neural Networks Signal for Wireless Communication Technology of Future High Speed Railways Performance in Thailand with Intelligent Transportation Systems	WC3

Paper No.	Paper Title	Session Code
P00106	Fuzzy Logic based Building Energy and Comfort Management	WC3
P00255	Multi-Objective Optimal Operation with Demand Management and Voltage Stability	WC3
P00549	Study on the Innovation Efficiency of China's High - tech Industry Considering the Enterprise Nature	WC3
P00293	Joint Trajectory Generation and Motion Control of a Wearable Robot for Complete Paraplegics based on Forward Inflection Walking	WC4
P00311	An Algorithm for Improving the Accuracy of Ground Reaction Force Measured by an Insole-type Sensor System	WC4
P00318	Zero-Impedance Control of ANGELEGS, a Wearable Robot	WC4
P00324	Twisted String Actuation Mechanism with an Improved Linearity in Speed Reduction Ratio	WC4
P00330	Recent Advances in Wearable Robotics	WC4
P00336	Joint Moment Estimation of a Lower Limb Werable Robot	WC4
P00242	The integrated elasto-plastic cable modeling for cable driven parallel robots(CDPRs)	WC5
P00285	Black-Box Accuracy Compensation for a Cable-Driven Parallel Robot	WC5
P00329	Development of an Extensible Back-Heating Parallel Cable Robot	WC5
P00337	Development of a High Payload Cable-Driven Parallel Robot	WC5
P00371	Adaptive control for cable driven parallel robots	WC5
P00027	Remarks on stability robustness of linear quadratic regulators	WC7
P00123	On dynamic output-feedback control for uncertain singular Markovian jump system: LMI approach	WC7
P00142	Design of an Energy-based Controller for a 2D Ball Segway	WC7
P00162	A study on the l1 analysis of discrete-time systems	WC7
P00275	Analysis on Stability for Generalized Neural Networks with Time-Varying Delays via Second-Order Orthogonal Polynomials-Based Integral Inequality	WC7
P00421	A design method of preview controller for linear continuous-time systems with multiple input delays	WC7
P00059	Enabling an Automation Architecture of CPPs based on UML combined with IEC-61499	WC8
P00108	Mechatronic Architecture Development of UX-1	WC8
P00279	Path planning for remotely controlled UAVs using Gaussian process filter	WC8
P00298	Coarse Alignment of Lunar Exploration Rover Using Accelerometer and Sun Sensor	WC8
P00353	Validation of CAN-CAN Gateway in the Automotive Network System	WC8
P00357	Comparison of IEEE802 and AVB in multi switch Environment in Embedded system	WC8
P00024	Representation of Thai Character Features with Impulse Response of FIR System	TA1
P00058	PLC-based Industrial Temperature Controller with Different Response Times	TA1
P00138	Adaptive Regulation of Sampling Rates for Power Efficient Embedded Control System Design	TA1

Paper No.	Paper Title	Session Code
P00256	Real time Depth Measurement using FPGA	TA1
P00272	Correlation and Interdependence Structure in Stock Market : Based on Information Theory and Complex Networks	TA1
P00350	RSSI-Based Indoor Localization System with Access Points Selection Method	TA1
P00023	Build-up of customized test automation solutions for efficient verification of chassis systems in vehicle HILS	TA2
P00164	Loop Shaping Technique for Control Design of Electrical Power Steering System	TA2
P00199	A Cylindrical Magnetic Levitation Stage for High-Precision Rotations	TA2
P00358	Analysis of CAN FD to CAN message routing method for CAN FD and CAN Gateway	TA2
P00376	Optimization on Turbofan Cycle Parameter Based on Improved Differential Evolution Algorithm	TA2
P00399	Modeling and Simulation of Gas Turbine Engine Based on Object-oriented Approach	TA2
P00098	Radial Basis Function Neural Network Based PID Control for Quad-rotor Flying Robot	TA3
P00150	Adaptive Backstepping Control of Single Chamber Microbial Fuel Cell	TA3
P00167	Non-Linear Fuzzy- PID Controller Design for Track Following of Hard Disk Drive Servo System	TA3
P00238	The European Vulnerable Option Pricing Based on Jump-Diffusion Process in Fractional Market	TA3
P00339	Data-driven Feedforward Control on Active Vibration Isolation System	TA3
P00065	Surgical Robot	TA4
P00125	Robots for Interventional Procedures	TA4
P00127	Medical Simulation	TA4
P00137	Electromagnetically Actuated Microrobots using Temperature/pH Responsive Hydrogels	TA4
P00176	Surgical Navigation using Augmented Reality	TA4
P00301	System design of person carrier robot	TA5
P00389	A Proposal on Determination of Protective Stop Space of Mobile Servant Robots for ISO13482	TA5
P00412	A new concept suggestion for maneuvering the self-balancing personal mobility : ATD for human-like behavior	TA5
P00414	Parameter estimation for two-wheeled self-balancing personal mobility : preliminary results	TA5
P00415	Comparative study for the effectiveness of ATD configurations for personal mobility : prismatic vs. rotary	TA5
P00244	OctoMap-Based Coverage Path Planning for Inspection of 3D Structures	TA6
P00246	Design of Model Predictive Control for Industrial Process with Input Time Delay	TA6
P00278	Mechanism Design and Impedance Control of Series Elastic Actuator Driven Bi-articular Robotic Arm	TA6
P00342	Evaluation of Explicit Model Predictive Temperature Control for On-off Air Conditioner	TA6
P00355	Safety Instrumented System Design in Consideration of Cost-Benefit Analysis : A Case Study of Tail Gas Treating Process	TA6

Paper No.	Paper Title	Session Code
P00369	Petri Net Modeling for Performance Analysis of FF-Based Process Control in Terms of Safety and Availability Enhancement	TA6
P00401	Line-up Formation Control of Intelligent Traffic Cones	TA6
P00044	Reset Control of Nonlinear Chaotic Systems Using Describing Function	TA7
P00046	Residual Load Sway Reduction Control in Double-pendulum Overhead Cranes Using Motion Trajectory Based on Adams-Matlab Joint Simulation	TA7
P00267	State estimation for switched systems with nonlinear disturbances under arbitrary switching via generalized Gronwall-Bellman inequality	TA7
P00277	Deferrable Energy/Commodity Purchase and Consumption Policy under Stochastic Prices	TA7
P00378	A newborn anti-windup scheme based on state prediction of fractional integrator for variable speed motor	TA7
P00028	Effects of a soft wearable robotic suit on metabolic cost and gait characteristics in healthy young subjects	TA8
P00075	Design for Walking Rehabilitation of a Lower Limb Exoskeleton Based on Interaction Torque	TA8
P00217	A tool for the design of DNA base sequences for molecular circuits	TA8
P00284	Stability Analysis of Wnt-ERK cellular signalling by using Nyquist Criterion	TA8
P00089	Designing Self-feeding System for Increasing Independence of Elders and Parkinson People	TA8
P00076	Nonground objects modeling using cube voxels and texture mapping	TB1
P00251	Optimal Experimental Design Approach for Machine Learning Process	TB1
P00280	Learning drone-control actions in surveillance videos	TB1
P00283	A Comparison of Convolutional Object Detectors for Real-time Drone Tracking Using a PTZ Camera	TB1
P00300	Incremental Model Learning and Building of Unknown Objects	TB1
P00309	Robust path control of an unmanned ground vehicle in rough terrain	TB1
P00408	Application of SLAM for 3 Dimensional Ground Navigation	TB2
P00420	Robust Neural Network Control of Neural Synchronization in the Mutually Coupled Network	TB2
P00422	Real-time Air Conditioner Zone Temperature Control by Cascaded Intelligent PI	TB2
P00423	Attitude Estimation of an Unmanned Surface Vehicle Using MEMS-AHRS and GNSS	TB2
P00425	Object Following Method For A Differential Type Mobile Robot Based on Ultra Wide Band Distance Sensor System	TB2
P00018	Leak Detection In Pipeline via Sliding Motion	TB3
P00039	Applying Audioanalytics for Determining Contingencies	TB3
P00090	An Application of Nonlinear High-Gain Observer for the n-link Robot Manipulator which has Measurement Noise in a Feedback Control System	TB3
P00117	The Modification of Yaw Sensor for Length Standard Calibration System	TB3
P00149	Nonlinear Optimal Control of a 3-D Overhead Crane with Varying Rope Length	TB3
P00168	A PI λ D μ Controller Design for Peltier-Thermoelectric Cooling System	TB3

Paper No.	Paper Title	Session Code
P00082	Development of Soft Wearable Hand Rehabilitation Device	TB4
P00134	Commercialization of Rehabilitation Robots	TB4
P00225	KIMM Robotic Ankle-Foot Prosthesis for Lower Limb Amputee	TB4
P00282	Development of Brain-Machine Interface Training System for Anthropomorphic Robotic Arm Control	TB4
P00382	Design and Control of Robotic Orthosis with Cable Differential Mechanism	TB4
P00139	Development of Aerial Image Transmitting Sensor Platform for Disaster Site Surveillance	TC1
P00204	A Methodology on the Efficiency of Wireless Power Transfer for the Low Power System	TC1
P00250	Rapid Feature Tracking for Event-Based Vision Sensor	TC1
P00276	Dynamic Map Management for Vehicle Localization in Large Scale Area	TC1
P00419	A Cascaded Model Identification Technique by RLS-Based Monte Carlo Simulation : Application to a Gyroscopic Actuator	TC1
P00008	Output Feedback Control for Local Power System Stability based on Sum of Square Programming	TC2
P00069	Maneuverability Evaluation of Skid Steer Welfare Vehicle for Robust Assistance Control with Model Error Compensator	TC2
P00181	Demand Response Considering Participation Rate in Smart Grid: Two Level Optimal Management for DisCo and Customers	TC2
P00219	Decentralized Control with Neural Network of Cooperative Robot Manipulator For Object Balancing Task on Flat Plate	TC2
P00288	Stimuli-Induced Equilibrium Point: A Psychological Field Theory Application in Ramp Merging Systems	TC2
P00310	Study on Power Control Methodology of the Accelerator Driven Sub-critical Reactor System	TC2
P00030	Flow-Level Cascade Control via WirelessHART TM Transmitter Using LabVIEW	TC3
P00097	Supervisory Optimization of the MGT-CCHP System Using Model Predictive Control	TC3
P00156	The Implementation of PI Controller for Evaporative Cooling System in Controlled Environment Greenhouse	TC3
P00221	The Comparison of Two U-shaped Lines with an Individual Variance on some Tasks	TC3
P00345	Chemical Dosing Control for Ultrafiltration Water Treatment System	TC3
P00363	Optimal Design and Operating Conditions of Solid Oxide Fuel Cell based Auxiliary Power Unit Systems According to Cell Characteristics	TC3
P00057	Does Size Matter in the Speed and Accuracy on Image Identification?	TC4
P00060	Admittance Control for Robot Assisted Retinal Vein Micro-Cannulation under Human-Robot Collaborative Mode	TC4
P00066	Response to Assist Torque Failure of Physical-Assistant Robots	TC4
P00088	Critical Contact Pressure and Transferred Energy for Soft Tissue Injury by Blunt Impact in Human-Robot Interaction	TC4
P00230	Teleoperation of an UAV by a 6-DOF Parallel Manipulator with Hybrid Mapping for Inspection of Industrial Structures	TC4
P00385	Robot Supporting for Deaf and Less Hearing People	TC4
P00334	A study on the risk investigation and safety of personal care robots	TC5

Paper No.	Paper Title	Session Code
P00391	Strategy for Ergonomic Safety Design of Personal Care Robots in accordance with ISO 13482	TC5
P00411	Low cost pressure sensor characteristics comparison for pressure sensing in wearable robots-preliminary result	TC5
P00413	Low Cost Insole Sensor for Measuring COP in Wearable Robot	TC5
P00417	Design and PID Force Control of the Calibration Equipment for the Precise Calibration of FSR Sensor	TC5
P00418	Preliminary experimental results for chest compression in mobile robot-human unconstrained-collision	TC5
P00172	Numerical and Practical Experiments of Acceleration-Level Fault-Tolerant Scheme for Redundant Manipulator MPaC	TC6
P00186	Development of Wheeled Balancing Wheelchair for Lower Limb Disabled Person: Design of Wheelchair Platform	TC6
P00195	Adaptive Motion Planning in Bin-Picking with Object Uncertainties	TC6
P00207	System Design for Autonomous Table Tennis Ball Collecting Robot	TC6
P00067	Robust Variable Stiffness Control of McKibben Type Pneumatic Artificial Muscle Arm by using Multiple Model Error Compensator	TC7
P00071	Quick Recovery after Feedback Loss: Delay-Differential Systems	TC7
P00092	Robust Adaptive Gain for Suppression of Chattering in Sliding Mode Controller	TC7
P00157	Bottom Hole Pressure Control for Oil Well Drilling using Model Reference Adaptive Control	TC7
P00313	Convex Parametrization of H_{#infty} Controllers for Positively Dominated Systems	TC7
P00314	On the H2 and Hinf Performance of Uncertain Positive Systems	TC7
P00104	Dynamics of Predicting Temperature-Humidity Index and Power Consumption in Small-scale System Utilizing Bayesian Inference Via the EAP Estimation	TC8
P00133	Development of Inter-Vehicle Distance Measurement System using Camera-Equipped Portable Device	TC8
P00179	Effects of the Presence of an Audience on Dance Movements: A Trial analysis of male and female dancers	TC8
P00188	A Consideration of Step Pattern Extraction and Personal Identification from Gait Vibration Data	TC8
P00212	Compressed Sensing for Phase Unwrapping of Interferometric SAR Data	TC8
P00234	Influence of WheelTerrain Contact Point Information Errors on the Accuracy of Three-Dimensional Space Odometry Using Tactile Wheels and Gyros	TC8
P00009	Bounded Control of a Ball and Beam System in the Absence of Feedback	TP-B
P00032	Study on the Innovation Efficiency of China's High - tech Industry Considering the Enterprise Nature	TP-B
P00037	A Distributed Coverage Algorithm for Multi-UAV with Average Voronoi Partition	TP-B
P00072	Source Seeking of Multi-UAV Based on Extremum Seeking Algorithm	TP-B
P00079	Methods of Selecting Electroencephalographic Features for Personal Authentication	TP-B
P00081	A Research on Junction Temperature Measurement of MOSFETs	TP-B
P00116	Learning to Grasp Objects based on Ensemble Learning Combining Simulation Data and Real Data	TP-B
P00131	Finding efficient paths for multi-robot path coverage	TP-B

Paper No.	Paper Title	Session Code
P00145	Data Association Approach to Mobile Robot Localization Using Non-Unique Landmarks	TP-B
P00169	Automated Extraction of Optic Disc Regions from Fundus Images for Preperimetric Glaucoma Diagnosis	TP-B
P00185	A Switching Action for PID Controller to Improve Trajectory Tracking Performance	TP-B
P00198	Auto-Guided Combine Harvester simulation and its Validation test	TP-B
P00211	Verification of Energy Model of Solar Powered UAV using Virtual Flight Evaluation	TP-B
P00216	Implementation of High-Speed Autonomous Driving based on Low cost GPS and NTRIP	TP-B
P00223	Robust Hydraulic Position Control based on Uncertainty and Disturbance Estimation	TP-B
P00226	Robust Control of Electro-Hydraulic Load Simulator Using Sliding Mode Control with Perturbation Estimation	TP-B
P00248	Sensor Fusion for Vehicle Tracking with Camera and Radar Sensor	TP-B
P00262	Initial dip-based brain area identification for right-hand finger movement	TP-B
P00266	Utilization of fNIRS signals as feedback for sensory decoding	TP-B
P00268	UAVs Cooperative Attack Based on Archimedes Spiral	TP-B
P00303	Data Augmentation using Synthesized Images for Object Detection	TP-B
P00307	Lennard-Jones Potential Field-based Swarm Systems for aggregation and obstacle avoidance	TP-B
P00333	Lane Detection and Vehicle Localization based on Particle Filter	TP-B
P00346	PID Control for Formation Flight in Presence of Disturbance	TP-B
P00370	Traffic light recognition with HUV-histogram from daytime driving-view images.	TP-B
P00390	Experiments and Characteristic Analysis of a Large-Capacity Prismatic Cell for Electric-Powered Application	TP-B
P00416	Study on Novel Structure and Control of Energy Saving of Hydraulic Hybrid Excavator	TP-B
P00428	Locomotion identification under load and various walking environment using surface electromyography and ground reaction force	TP-B
P00434	Real Time Road Lane detection with Lane Filtering Algorithm	TP-B
P00435	Deep Learning Based Vehicle and Pedestrian Detection Using Embedded GPU System	TP-B
P00436	The Smart Wearable Bio Temperature Regulation Sensor for Improving Human Wellness	TP-B
P00439	Depth-Hybrid Speeded-Up Robust Features	TP-B
P00460	Operability with Total Steering Wheel Revolution for Electric Control Steering System of Pleasure Boat	TP-B
P00463	A Novel Approach to the Enhancement of Lane Estimator by using Kalman Filter	TP-B
P00466	Vehicle detection using a laser range finder on the basis of SVDD(Support Vector Data Description)	TP-B
P00469	A Study on control system of dual turbo blower operating with air-foil bearing	TP-B
P00472	Current Measurement Module for Inexpensive DC Motor Torque Control System	TP-B

Paper No.	Paper Title	Session Code
P00488	Lane Localizatoin based on Line Fitting	TP-B
P00496	Copper Foil Surface Defects Classification Algorithm Based on Convolutional Neural Networks	TP-B
P00498	Recurrent Neural Network Based Lane Change Prediction Using ADAS Sensors and V2X	TP-B
P00518	Memory Space Adjustable Iterative Learning Controller for Flyback Inverter	TP-B
P00519	Design of Plug-In Repetitive Controller for Unfolding-Type Cuk Inverter	TP-B
P00523	A Study on the Stability of a Trans-admittance Amplifier as Synthetic Admittance for Piezoelectric Shunt Damping	TP-B
P00525	Transient Improvement of Cuk Converter based Fuel-Cell Power Conditioning System	TP-B
P00529	Active vibration control of a flexible rod in water	TP-B
P00530	Development of a dual wavelength 32-channel functional near-infrared spectroscopy based neuroimaging system	TP-B
P00537	Real-time ECG and Respiration Monitoring System in Rehabilitation Robot for Gait training	TP-B
P00538	Integrated Chassis Control of suspension and steering systems for LKAS	TP-B
P00581	Probabilistic Approach to k-Nearest Neighbor Rule	TP-B
P00588	Backstepping Control for Electro-Hydrostatic Actuation Systems With Mismatched Disturbances Via a Disturbance Observer	TP-B
P00555	Automatic Age and Gender Classification for Korean	TP-B
P00598	Robust Proportional-Type Position Tracking Controller for DC Motor with Disturbance Observers	TP-B
P00528	Output regulation based rejection of harmonic disturbances in grid tied inverter	TP-B
P00508	Unambiguity of Delay-and-Multiply Acquisition Method for GPS L1C Signal	TP-B
P00007	Multi-Parametric Model Predictive Control for Variable Valve Timing	TP-C
P00014	Optimal Parameter Setting of Optical Mouse based Mobile Robot Traveling Simulator	TP-C
P00016	A Diagnostic Function of Lithium Ion Battery Management Systems	TP-C
P00047	Improvement of face recognition performance evaluation technology by using a display device through color adjustment	TP-C
P00095	Double-loop Control with Proportional-Integral and Partial Feedback Linearization for a 3D Gantry Crane	TP-C
P00112	Effect of Local-Adaptive Haptic Guidance on a Path-Following Task	TP-C
P00119	Exponential decay rate of planar switched positive linear systems	TP-C
P00120	Exponential stability of switched time-varying systems with delay and disturbance	TP-C
P00121	Comparison Study of Potential Workload Index in a Simulated Multiple-UAV Operation Environment	TP-C
P00132	Anti-Skid Braking Realization at Wheel-Rail Contact using a Sliding Mode Control Scheme	TP-C
P00232	Weighted Moments of Discrete-Time Systems from Experimental Data	TP-C
P00237	Volatility spillover among USA and major East Asian stock indices based on multivariate stochastic volatility with regime-switching model	TP-C

Paper No.	Paper Title	Session Code
P00239	On Modified Plant in Active Disturbance Rejection Control	TP-C
P00291	Extension of Simplified Internal Model Control for Systems with Double Integrators	TP-C
P00302	Position and Altitude Control of a Quadcopter using State Dependent Riccati Equation Control	TP-C
P00319	Fuzzy Observer Design and Its Experimental Validation Using the Fuzzy Lyapunov Function	TP-C
P00331	Global Fast Terminal Sliding Mode Control for Quadrotor UAV	TP-C
P00338	A Study on the Framework Design of Korean-Model PLC-Integrated Drone Landing Site in Mountain Regions: A Software Engineering Approach	TP-C
P00340	A Solution to Optimal Preview Control for Linear Time-Varying Systems	TP-C
P00361	Requirement Analysis of Simulator-based Integration for Disaster Response Robots	TP-C
P00381	Fault detection and isolation of semi-active system using integrated method	TP-C
P00386	Turn-Taking Intention Recognition using Multimodal Cues in Social Human-Robot Interaction	TP-C
P00424	A Study on Positional Displacement Control for the Pontoon Ribbon Bridges for River-crossing Purpose	TP-C
P00433	A Study on 3D-Touch Usability on a Large Screen Touch Device	TP-C
P00440	T-S Fuzzy-based Nonlinear DOB using State Observer	TP-C
P00443	Maintaining State of Charge Method for Repetitive Driving	TP-C
P00444	Design of Knee Joint Actuation Module Using Four-bar Linkage Mechanism for Running Exoskeleton	TP-C
P00446	Permanent magnet type and Reluctance type Limited Angle DC Motor for Robust Robot System (ICCAS 2017)	TP-C
P00448	A Design of Mapping to Represent Human Motion with Humanoid Robot by Singular Value Decomposition	TP-C
P00449	Feasibility Test Results of an Instantaneous Walking Speed Estimation of the Lower-limb Exoskeleton Robots	TP-C
P00458	Development of Parallel Link Robot for Somatosensory Stimulation	TP-C
P00471	Development of a Driving Simulator to Acquire Human Reaction Time on Audible Collision Warning	TP-C
P00476	Road Profile Estimation using Inertial Sensors	TP-C
P00484	On a Discrete-Time Sliding-Mode Controller for Magnetic Levitation Systems	TP-C
P00486	Development of A Design Specification and Verification Test Method for Vision-based Oncoming Vehicle Collision Avoidance System	TP-C
P00492	Modeling of Train Dynamics for Autonomous Operation	TP-C
P00495	Effect of Zero Mean Sensor Noise On the Dynamics of Linear-Plant-Nonlinear-Instrumentation Feedback Control Systems	TP-C
P00497	Robust and Resilient State Estimation	TP-C
P00499	MPC based Vehicle Post Impact Stabilization	TP-C
P00501	Fuel-Conscious Velocity Control Strategy for Adaptive Cruise Control	TP-C
P00515	The effective rehabilitation method realizing various environments in robot assisted gait training	TP-C

Paper No.	Paper Title	Session Code
P00516	A method of specific muscle group training of lower limb using an exoskeletal robot	TP-C
P00520	Double Line Frequency Ripple Suppression Control for Capacitor-Less Current-Fed Type Converter	TP-C
P00524	Nonlinear Digital Control for DC-DC Flyback Converter with Fast Transient Response	TP-C
P00535	Realization of Virtual Impedance in the Lower Limb Assistive Robot SUBAR	TP-C
P00558	Sliding Mode Control for Second-order Systems with Smooth Input	TP-C
P00564	Operability for Oscillating Motion of Pleasure Boats	TP-C
P00573	Chattering-free Integral Sliding Mode Control for Nuclear Reactor Power Tracking Problem in Load-following Scenario	TP-C
P00574	A Study on the Effects of Negative Power Assistance on Walking Efficiency Using an Ankle Exoskeleton	TP-C
P00562	Design of Tendon driven SEA(Series Elastic Actuator) based on Bio-mechanical Gait Analysis for a Soft Exo-Suit	TP-C
P00554	Design and Dynamic Analysis of Series Elastic Actuator using Electro-Hydraulic Actuator	TP-C
P00566	A Study on Driving Stability and Visual Fatigue Assessment using Fully Digital Instrument Cluster	TP-C
P00571	Robotic Drilling System for Deep-hole Machining of Automotive Molding	TP-C
P00109	Real-time Pedestrian Detection Using a Support Vector Machine and Stixel Information	FA1
P00146	Human fall classification system for ceiling-mounted kinect depth images	FA1
P00257	Optical flow estimation on the boundary of regions with different velocity	FA1
P00258	Exploiting Color Spaces for the task of Foreground Detection	FA1
P00366	Finger Motion Estimation Based on Frequency Conversion of EMG Signals and Image Recognition Using Convolutional Neural Network	FA1
P00379	Weld line detection algorithm for radiography test of welding beads in a ship piping system	FA1
P00093	Performance Analysis Model Development of Flap Control System using Multi-domain Analysis Platform	FA2
P00099	Jumping Pattern Generation for One-Legged Jumping Robot	FA2
P00102	A cost-effective and miniaturized actuation system for two three-tube concentric tube robots with parallel actuation	FA2
P00202	Rehabilitation Support Robot for Self-Standing-Up Training of Hemiplegic Stroke Patients : Guiding Control Method Using Two Passive Robots	FA2
P00203	A Piston Finger Device for Restoring the Motor Function of Chronic Plegic Fingers: Development of the Device and Verification of the Effectiveness	FA2
P00315	Design of 2-DOF Flapping Robot using Spatial 4-bar Linkage Mechansim	FA2
P00347	Model of Skin Stiffness Including the Radial Artery Pressure	FA2
P00264	A Numerical and Theoretical Study on the Aerodynamics of a Rhinoceros Beetle (Trypoxylus Dichotomus) and Optimization of its Wing Kinematics in Hover	FA3
P00445	Improvement of power-mass budget of biomimetic robots through comparative analysis with insects	FA3
P00481	Investigation of Double-Tripod Locomotion of Insect Robot using Differential Gear	FA3
P00485	Soft Robot Dynamic Simulation Using Pseudo Rigid Body Model	FA3

Paper No.	Paper Title	Session Code
P00487	Fabrication of Pressure-dependent Rigidity Controllable Biomimetic Insect Wing for an Ornithopter	FA3
P00552	Deployable Glider Module for Jump-Gliding Robot	FA3
P00561	Design of Hybrid Actuator using Smart Soft Composite and Ionic Polymer-Metal Composite	FA3
P00063	A study on the P.H.A.S (Piezoelectric energy Harvesting based Access control System) using motor vibration	FA4
P00064	SMCSPO based Force Estimation for a Hydraulic Cylinder	FA4
P00165	Location Estimation Process of Low-Cost Pedestrian Dead-Reckoning System using Walk Condition Estimation Algorithm	FA4
P00214	Implementation of Safety Monitoring System at the Waterfront Based on Video Analysis Technique	FA4
P00228	Application of Maximized Inter-class Variance for Gender Classification using RGB-Depth Camera	FA4
P00048	Detection of Abnormal Candidate Regions on Temporal Subtraction Images Based on DCNN	FA5
P00053	Detection of Lung Nodules on Temporal Subtraction Images Using 3D Sparse Coding	FA5
P00054	Environment Recognition for Navigation of Autonomous Wheelchair from a Video Images	FA5
P00073	Automatic Identification of Circulating Tumor Cells in Fluorescence Microscopy Images Based on AdaBoost	FA5
P00260	Proposal of a Fixation Method for Wearable Assistive Systems Using Jamming Transition and the Expansion of an Elastic Bag	FA6
P00294	Electrode selection metric for signal demixing in overdetermined sEMG detection	FA6
P00362	Development and Evaluation of Muscle Suit for Arms and Lower Back Support	FA6
P00365	A Study on the Effect of Vibration Stimulation during Continuous Knee Joint Flexion/Extension Motion for Lower- limb Perception-assist	FA6
P00374	Towards controlling of an upper-limb exoskeleton for motion assist with EEG signals – motion prediction	FA6
P00190	Dynamic Programming based Operational Planning of Refinery Combined with Two Stage Stochastic Programming	FA7
P00197	On-line Approximated Just-In-Time Model Predictive Control for Batch Trajectory Tracking	FA7
P00200	Model-based Optimization of a Pectin Extraction Process	FA7
P00210	Closed-loop Multi-rate Identification with zone-MPC using Constrained Subspace Method	FA7
P00245	Iterative Convex Relaxation Methods for Adaptive Optimal Input Design in System Identification	FA7
P00270	Synthesis of the optimal heat and water recovery system for reduction of the refinery CO2 emission	FA7
P00020	Concept, results and future topics for the Human Robotics Research Center at Kyushu Sangyo University	FA8
P00034	Research and development of wearable auxiliary tool for behavior assistance of elderly who requires nursing care.	FA8
P00083	A Study of a Standing-Up Motion Training Aid by Non-Electric Source Driving	FA8
P00122	Development of Rehabilitation Device for Standing Position Weight Bearing Exercise Using Wii Balance Board	FA8
P00010	Task Prioritization for Automated Robotic Item Picking	FB2
P00042	Concept Design of Personal Mobility Vehicle	FB2

Paper No.	Paper Title	Session Code
P00084	Preliminary Research into Control System using Quantified Human Emotions	FB2
P00129	A Floating Waste Scooper Robot On Water Surface	FB2
P00205	A Mobile Robot Based Watering System for Smart Lawn Maintenance	FB2
P00233	RUNNER BIB NUMBER RECOGNITION SYSTEM	FB2
P00465	Analysis of Radio Frequency Interference for a Biomimetic Chassis Mode Antenna	FB3
P00517	The Comparison of RPL, ORPL, and LOADng for Low-power Biomimetic Robot Networks	FB3
P00526	Piezoresistive effects of silicon nanowire for biomimetic inertial sensors	FB3
P00542	Proposition on Complex Visual Field Prediction Model of Flying Insect Robot	FB3
P00545	On the generalized deep learning model of signal detection for molecular communication based biomimetic robots	FB3
P00546	Modeling and Analysis of Operation Time for Photovoltaic Energy Harvesting Assisted Mobile Robot System	FB3
P00556	Tactile and chemical sensor system for small biomimetic robots	FB3
P00128	Image-based Hand Pose Classification using Faster R-CNN	FB4
P00151	Realization of a hybrid human motion capture system.	FB4
P00187	Multi-lane Detection By Finding Epipole using Convolutional Neural Network	FB4
P00590	Comparative Analysis of RADAR- IR Sensor Fusion Methods for Object Detection	FB4
P00049	Classification of Osteoporosis from Phalanges CR Images Based on DCNN	FB5
P00051	Automatic Liver Segmentation from Multiphase CT images by Using Level Set Method	FB5
P00052	Image Analysis of Cleft Lip from Moire Image Based on Symmetry Analysis	FB5
P00055	Extraction of Spinal Candidate Region from A Dental MR Imaging	FB5
P00056	Image Registration on Vertebral Region from CT Images Based on Salient Region Feature	FB5
P00094	The Disturbance Rejection Design Based on Physical Feedforward for Solid Oxide Fuel Cell	FB6
P00166	Adaptive Sliding Mode Control Using Radial Basis Function Network for Container Cranes	FB6
P00171	Sliding Mode Control of A Newly Designed Cable-Driven Manipulator with Time Delay Estimation	FB6
P00306	Anti-windup Compensator Synthesis for Cascaded Linear Control System	FB6
P00377	Novel Fractional Order PD $^{\mu}$ Controller for Open-Loop Unstable Inverted Pendulum System	FB6
P00594	Robust Anti-Windup Control Design for PID Controllers	FB6
P00091	Reconcile Security Requirements for Intelligent Vehicles	FB7
P00141	On Analyzing Parking Lot Pedestrian Behaviors as Particle Mass on Time-Space	FB7
P00208	Probabilistic Prediction based Automated Driving Motion Planning Algorithm for Lane Change	FB7

Paper No.	Paper Title	Session Code
P00396	Backstepping Approach for Lateral Control of Autonomous Vehicle	FB7
P00265	Comparison of Resonance Ratio Control and Inner Force Control for Position control of Series Elastic Actuator	FB8
P00041	Estimation Force of Master-Slave for the End Effector of Hydraulic Servo System Using SMCSPO	FC2
P00124	Multi-robot SLAM via Distributed Extended Kalman Filters	FC2
P00191	Distributed Control Design for a Platoon of Wheeled Mobile Robots: Application to Teleoperation with Predictive Display	FC2
P00321	Haptic Guidance Steering System of a Quadruped Robot for Robotic Disaster Relief Operations	FC2
P00372	Velocity-field control of hydraulic robot with coupled hydraulic circuitry	FC2
P00383	A Study of Eye Contact for Tabletop Robot	FC2
P00474	Path Planning for Beacon Robot-Assisted Localization in Wireless Sensor Networks	FC3
P00479	Optical Flow Based Three Potential Applications with Biomimetic Vision System	FC3
P00490	Surface Recognition Using Dash Robot	FC3
P00491	Understanding Visual Information with Compound Eye Camera	FC3
P00503	Modeling and Attitude Control of Flapping MAV Using Disturbance Observer	FC3
P00522	Development of a Mechanism for Flapping Wing Micro Aerial Vehicle	FC3
P00536	Experiments on Autonomous Hovering Flight in Flapping-Wing Micro Air Vehicle	FC3
P00077	Object Tracking Using Particle Filter with Back Projection-Based Sampling on Saliency	FC4
P00170	Anti-saturation and Contrast Enhancement Technique using Interlaced Histogram Equalization (IHE) for Improving Target Detection Performance of EO/IR Images	FC4
P00182	Zooming multiple objects using wide-angle camera and PTZ camera in visual serveillance	FC4
P00583	3D Space Recognition for indoor Drone Navigation using Multiple Cameras	FC4
P00035	Changes in fuel injection pressures and fuel spray quantity of marine diesel engines	FP-B
P00074	Wireless Control and Monitoring using Programmable Logic Controller (PLC)	FP-B
P00110	Statistical Evaluation of the Multi-Frequency GPS Ionospheric Scintillation Observation Data	FP-B
P00126	Design and implementation of an automated, long-range selfie camera system using LORA	FP-B
P00180	Design and Implementation of an Acoustic Leak Monitoring System Test-bed using FPGA Platform	FP-B
P00183	Development of Control Simulator Software for Plant Engineers Training	FP-B
P00184	Evaluation of Bumpless Transfer Capability for Control Transient Mitigation	FP-B
P00206	An Optimized Approach on Assessing and Implementing Security Controls for I&C Systems in Operating Nuclear Power Plants	FP-B
P00213	A Method of Cyber Security Vulnerability Test for the DPPS and PMAS Test-bed	FP-B
P00231	Measurement of Attack Preference by Using Analytical Hierarchy Process (AHP) for an Operating Nuclear Power Plant	FP-B

Paper No.	Paper Title	Session Code
P00240	Testing-based Software Verification Methodology and Supporting Tool for Railway Software	FP-B
P00241	Performance Assessment of GNSS in Train Control System	FP-B
P00254	A study on the maximum distance of glide type ammunition according to the flight condition	FP-B
P00261	Adjustment of Replacement Conditions for Genetic Algorithm Used in Optimizing Ion-Trap Electrodes at a Junction	FP-B
P00271	Gain Selection Method for Robustness Enhancement in Sliding Mode Control Combined with Decoupled Disturbance Compensator with Unknown Inertia in Industrial Servo Systems	FP-B
P00274	Applications of Command Shaping Methods for Reducing Residual Vibration in Industrial Servo Systems	FP-B
P00323	Auto lead angle algorithm for high efficiency control of BLDC Motor	FP-B
P00359	Bipedal Robot Walking Pattern Generation Based on Capture Point and Minimizing Falling Damage and Posture Recovery	FP-B
P00368	Tgo Rational Function Biased PN Guidance Law for Precise Impact Angle with First-Order Dynamic Lag	FP-B
P00384	A study on Efficient Security Control Assessment Method using System Attributes for Critical Digital Assets in NPPs	FP-B
P00387	Industrial Robot Calibration Method using Denavit – Hatenberg Parameters	FP-B
P00400	Frequency analysis of Fault Currents in LFAC Power Transmission System	FP-B
P00427	Design of remote fabrication mock-up	FP-B
P00429	A Stable Working Path Control of Vertical Type Robot System with 7 Joint for Forging Manufacturing Automation	FP-B
P00430	A Study on Intelligent Control of Mobile-Manipulator Robot based on Voice Command for Smart FA	FP-B
P00431	A Study on Robust Control of Biped Robot for Cooperative Working	FP-B
P00432	A Study on Learning Control of Humanoid Robot for Unmanned FA	FP-B
P00438	Mobile Edge Cloud Architecture	FP-B
P00447	Neural Network Based Autonomous Navigation for a USV Considering Sea Current	FP-B
P00456	Vibration control of a flexible beam by state feedback using tip accelerometer	FP-B
P00457	Evaluation of Galvanic Vestibular Stimulation Acceleration Sensation by Myoelectricity of Cervical Shallow-layer Muscles	FP-B
P00468	A Multi-Objective Decision Making based Mobile Robot Path Planning Strategy	FP-B
P00489	A Development of Abnormal Condition Monitoring System for Underwater Structure	FP-B
P00494	Wireless Networked Control System Testbed Using Multiple Pneumatic Levitation Tubes	FP-B
P00500	Development of Video Simulator for Detection and Alarm of Subsea Plant Abnormal State	FP-B
P00502	A Backstepping Approach for Looper and Tension Control in Hot Strip Mills	FP-B
P00505	Effect of Model Accuracy in Model Predictive Control for Vehicle Steering System	FP-B
P00507	Sliding Mode Controller design for a PMSG wind Turbine system with varying Torque uncertainties	FP-B
P00514	Hole Classification for Image-based Rendering	FP-B

Paper No.	Paper Title	Session Code
P00532	Three-phase high power wireless transmission system	FP-B
P00534	A study on presentation of lateral acceleration using visually induced illusions of self-motion	FP-B
P00547	Loose part impact monitoring for coolant system: An ANN based approach	FP-B
P00550	Risk Statistics based Vehicle Collision Avoidance Control Strategy for Target Vehicles in Car-to-Car Accidents	FP-B
P00551	MPC-Based Power Management of a Parallel Hybrid Electric Vehicle	FP-B
P00559	Abnormal condition diagnosis of centrifugal pumps with ANN classifier	FP-B
P00572	Mask-Substrate Gap Control System Using Electromagnets	FP-B
P00586	Cuboid based Geometric Calibration: A Preliminary Study	FP-B
P00599	Effect of relative incidental angle and wave parameters on the light reflection at sea surface	FP-B
P00540	Force-regulated Impact Control of a Reinforced Concrete Box Culvert Chipping Robot	FP-B
P00259	Selecting Telemanipulators for Hazardous Task in a Radioactive Area	FP-B
P00462	Human-Robot Collaboration Strategy for a Reinforced Concrete Box Culvert (RCBC) maintenance robot	FP-B
P00539	Remote Control Method for Chipping Robots on Reinforced Concrete Box Culverts	FP-B
P00011	An Adaptive Position Control Algorithm of a DC Motor based on the First Order Approximation using Recursive Least Squares with Forgetting	FP-B
P00441	Implementation of ARM-CORE based Power Management Algorithme for Dual-sensing Subsea Environmental Monitoring System	FP-B
P00580	Fast Initial Attitude Estimation in Dynamic Condition for INS/GNSS Navigation	FP-B
P00017	Towards Training an Agent in Augmented Reality World with Reinforcement Learning	FP-C
P00111	IR-UWB Radar Based Near-Field Intentional Eyelid Movement Sensing Under Fixed Head and Body Motions	FP-C
P00115	Virtual Bubble Filtering based on heading angle and velocity for Unmanned Surface Vehicle	FP-C
P00130	The Safety Design Concept for Surgical Robot Employing Degree of Autonomy	FP-C
P00189	Stochastic Identification of Terrain Parameter for Lunar Exploration Rover Using a Bayesian Approach	FP-C
P00263	Orientation Estimation of a Mobile Robot Using Vanishing Point in Indoor Environment	FP-C
P00269	Convolutional Neural Network-Based Pose-Graph SLAM System Using a Monocular Vision Sensor	FP-C
P00286	Performance analysis of the jamming signal geolocation system using on-board AoA estimator mounted on UAV	FP-C
P00287	A new method for obtaining multiple array signal measurements using single RF channel	FP-C
P00316	A Nondeterministic Flowchart-based Script Editor	FP-C
P00322	Evaluation of 2D-3D registration of broken femur using simplified phantom C-arm	FP-C
P00335	Development of a Wearable Device based on Reaction Wheels to deliver Kinesthetic Cues for Balance Training	FP-C
P00352	Peg-in-hole assembly method using variable compliance device with the displacement measurement system	FP-C

Paper No.	Paper Title	Session Code
P00354	Robotic Guidance System for Distal Screwing of Intramedullary Nail : Evaluation on Success Rate of Drilling using Model Bone	FP-C
P00360	Incorporating Building Information to Globalize and Robustify Grid-Based Indoor SLAM	FP-C
P00380	Design of a Haptic Walker system based on cable driven actuator for Lower Limb Rehabilitation	FP-C
P00388	Test and Evaluation for the Autonomous Multi-Zone Navigation Coverage Test in IEC 62885-7	FP-C
P00426	Mobile robot localization and path planning based on Feature recognition and Dijkastra's Algorithm	FP-C
P00437	The Method of Quantitative Reliability Evaluation for Railway System Software	FP-C
P00450	Development of the Sensor Network Algorithm for Maximizing the Electricity Generation of the Smart Photovoltaic (PV) Blind	FP-C
P00451	Incremental Vocabulary Tree for Binary Features	FP-C
P00452	Efficient Recognition for Vision-based Homing Strategy	FP-C
P00454	Walking monitoring using an IMU and encoders for a walker user	FP-C
P00455	A COG Trajectory Planning Method of a Quadruped Robot for Stable and Efficient Walking	FP-C
P00459	Compliance control of a rescue robot in interact with ground	FP-C
P00461	ACE-Modularized Knee Mechanism: Design Concept and Kinematics	FP-C
P00464	Development of an Algorithm for Multimodal Head Support System (MHSS) on behalf of Preventing Drowsy Driving	FP-C
P00467	Correlation between COP and pitch rate of self-balancing personal mobility : validation via force plate and gyro sensor	FP-C
P00470	Kalman Filter Based Multiple Human Tracking Method in Multi-Camera Environment	FP-C
P00475	Co-Pilot: Vehicle/Driver Cooperative and Autonomous Driving System	FP-C
P00478	Design of a Human-sized Energy Efficient Quadruped Robot	FP-C
P00493	Electro-active Polymer Actuator Based On Cellulose Acetatee-Graphene and Ionic Liquid Nanocomposites	FP-C
P00509	Terrain Identification by Fuzzy Logic and Its Application to The Smart Prosthetic Ankle	FP-C
P00510	Development of measurement system for robotic walking training device to improve exercise effect in convalescence rehabilitation	FP-C
P00511	RT Educational Tool to Support Learning Physics in High School Curriculum - Development and Evaluation of the RT Educational Tool -	FP-C
P00512	Comparative study of underwater reconstruction using imaging sonar and laser scanner	FP-C
P00513	Attitude Dependent Gyro Bias Calibration Technique for RLG based Rotational Inertial Navigation System	FP-C
P00527	A Study on the development of customized gripper using axiomatic design for assembly object	FP-C
P00531	Development and Analysis of a Soft Skin Interface for Surface Electromyography (sEMG) Signals	FP-C
P00543	Dead-Reckoning based Position Estimation of Pipe Climbing Robot with Mother Mobile Robot	FP-C
P00544	Development of a soft sensor system for human joint motion analysis	FP-C
P00553	Robotic Bin Picking Using Multiple Features for Manufacturing Process Automation	FP-C

Paper No.	Paper Title	Session Code
P00565	Estimation and validation of dynamic ankle characteristics for ankle spasticity assessment	FP-C
P00568	Overground Gait Pattern of Stroke Survivor by Smartphone-based Auditory Cue using IMU and FSR: A Preliminary Study	FP-C
P00577	Evaluation of Variable Focus DCX Lens Module for Consumer Electronics	FP-C
P00578	The Development of Step Count Detection Algorithm using Self-paced Treadmill	FP-C
P00477	Localization Using Reference Line and Vanishing Point	FP-C
P00249	Weather Invariant Place Recognition Using 360-Degree Image Processing	FP-C
P00292	Video Upscaling Method Based on ADJSRCNN and Color Histogram Similarity	FP-C
P00442	The Effective Biometric Fingerprint Sensor Quality Analysis System using NIST NFIQ Algorithm	FP-C
P00570	Comparison of Repulsive Force Formula between Two Permanent Cylindrical Magnets According to Distance	FP-C
P00587	Underground Localization using Magnetic Field and Concurrent Normalized Cross-Correlation	FP-C
P00567	Autonomous Drone Design Based on FIR Filtering	FP-C
P00569	Energy Management System for Legacy Devices Based on Adaptive Neuro Fuzzy Inference System	FP-C
P00473	Enhancement of Surface Plasmonic Resonance Effect through Adjustment of pH Level (A SERS-Imposed Paper Chip)	FP-C
P00031	Development of multi-agent systems with distributed solutions for energy problems	FP-C
P00107	Machine Learning based Pattern Recognition and Classification Framework Development	FP-C
P00579	Real Time System Identification of a Small Cropped Delta UAVs using Flight Test Methods	FP-C
P00480	An Agent-based System for Abnormal Flow Detection in Semiconductor Production Line	SA4
P00589	A Deep Learning Based Video Classification System Using Multimodality Correlation Approach	SA4
P00592	Analysis of the Yearbook from the Korea Meteorological Administration using a Text-Mining Algorithm	SA4