

ICCAS 2022 Paper List (Ver. 2022.10.24)

Session No.	Date	Time	Type	Paper No.	Paper Title	Author
MA1-1	Nov. 28	09:00-09:15	Oral	P00498	Animal Intrusion Detection in Farming Area using YOLOv5 Approach	Dr. Mohd Fauzi Othman, Dr. Normaisharah Mamat, Dr. Fitri Yakub
MA1-2	Nov. 28	09:15-09:30	Oral	P00433	Extracting spatial features of fNIRS signal using a graph representation	Mr. Minseok Seo, Mr. Eugene Jeong, Prof. Kyung-Soo Kim
MA1-3	Nov. 28	09:30-09:45	Oral	P00379	Improving Naive Bayes by Reducing the Importance of Low-Frequency Words Based on Entropy of Words for Spam Email	Dr. Arjin Numsomran, Mr. Phaiboon Trikanjananun, Dr. Vittaya Tipsewanporn
MA1-4	Nov. 28	09:45-15:00	Oral	P00300	Deep neural networks for gas concentration estimation and the effect of hyperparameter optimization on the estimation	Mr. Hee-Deok Jang, Mr. Jae-Hyeon Park, Dr. Hyunwoo Nam, Prof. Dong Eui Chang
MA1-5	Nov. 28	10:00-10:15	Oral	P00138	Semi-Supervised Imitation Learning with Mixed Qualities of Demonstrations for Autonomous Driving	Mr. Gunmin Lee, Mr. Wooseok Oh, Mr. Jeongwoo Oh, Mr. Seungyoun Shin, Mr. Dohyeong Kim, Ms. Jaeyeon Jeong, Prof. Sungjoon Choi, Prof.
MA1-6	Nov. 28	10:15-10:30	Oral	P00100	Using Machine Learning to Predict Heat Affected Zone in Steel Induction Heating	Dr. Dang Tri Dung, Prof. Nguyen Truong Thinh
MA1-7	Nov. 28	10:30-10:45	Oral	P00059	Online Recognition Method for Target Maneuver in UAV Autonomous Air Combat	Ms. Yicong Li, Dr. Zhen Yang
MA2-1	Nov. 28	09:00-09:15	Oral	P00419	Modeling of Autonomous Emergency Braking System with Minimum Jerk	Dr. Amrik Singh Phuman Singh, Dr. Osamu Nishihara
MA2-2	Nov. 28	09:15-09:30	Oral	P00392	Data Storage System Requirement for Autonomous Vehicle	Mr. Insup Kim, Mr. Ganggyu Lee, Mr. Seyoung Lee, Prof. Wonsuk Choi
MA2-3	Nov. 28	09:30-09:45	Oral	P00371	Speed Bump Estimation on the Road Using Vehicle Motion Sensors	Mr. Jeongku Kim, Prof. Seul Jung
MA2-4	Nov. 28	09:45-15:00	Oral	P00312	Automated Guided Vehicle Controlled by Li-Fi: A Study Case	Ms. Véronique Georlette
MA2-5	Nov. 28	10:00-10:15	Oral	P00078	Analysis of electrode configuration of underwater electric field sensor on electric-field-based localization for underwater robots	Mr. Jason Kim, Graduate Student Ingyu Lee, Mr. Meungsuk Lee, Dr. Ki-Woong Bae, Prof. Son-Cheol Yu
MA2-6	Nov. 28	10:15-10:30	Oral	P00074	Working environments and controller design for unmanned underwater vehicles in offshore aquaculture – A review	Mr. Thein Than Tun, Prof. Loulin Huang
MA3-1	Nov. 28	09:00-09:15	Oral	P00216	Disturbance-observer-based control for synchronization of complex dynamical networks	Dr. Kaviarasan Boomipalagan, Prof. Ohmin Kwon
MA3-2	Nov. 28	09:15-09:30	Oral	P00188	Robust control scheme for mobile manipulator on uneven terrain based on IMU-based motion compensation and time-delay	Dr. Hakjun Lee, Mr. Jinsuk Choi, Dr. Wookyong Kwon
MA3-3	Nov. 28	09:30-09:45	Oral	P00212	es-DNLC: A Deep Neural Network Control with Exponentially Stabilizing Control Lyapunov Functions for Attitude Stabilization	Mr. Minseok Jang, Mr. Jeongseok Hyun, Mr. Taeho Kwag, Mr. Chan Gwak, Graduate Student Chanyoung Jeong, Prof. Tuan Anh Nguyen, Prof.
MA3-4	Nov. 28	09:45-15:00	Oral	P00149	Finite-time boundedness and extended passive analysis for fuzzy Markov jump systems with saturation	Dr. Ramasamy Kavikumar, Dr. Ramalingam Sakthivel, Prof. Ohmin Kwon
MA3-5	Nov. 28	10:00-10:15	Oral	P00036	Exponential stability of discrete-time switched systems based on a switched time-varying Lyapunov function	Ms. Na Jiang, Dr. Yuangong Sun
MA3-6	Nov. 28	10:15-10:30	Oral	P00023	Practical finite-time stability of homogeneous positive nonlinear systems	Graduate Student Mengqian Liang, Prof. Yazhou Tian
MA3-7	Nov. 28	10:30-10:45	Oral	P00474	Development of Ethernet/IP Adapter for Explicit Messaging in Cooperative Robot Communication	Ms. Shaily Bajpai, Mr. Rahul Ranjan, Prof. Kyung-Oh Lee, Prof. Sungchul Lee, Prof. Joongeup Kye
MA4-1	Nov. 28	09:00-09:15	Oral	P00041	Strategies for Autonomous Small-satellite Technology Transfer from LEO to CisLunar Space	Mr. Mohammed Irfan Rashed, Prof. Hyochoong Bang
MA4-2	Nov. 28	09:15-09:30	Oral	P00151	Autonomous Navigation with Active SLAM for Disinfecting Robot	Mr. Kyeongjin Joo, Graduate Student Sanghyun Bae, Graduate Student Jeongwon Pyo, Graduate Student Arpan Ghosh, Prof. Hyunjin Park, Prof.
MA4-3	Nov. 28	09:30-09:45	Oral	P00178	Vehicle Navigation System for Underground Parking Lot using Smartphone	Dr. Beomju Shin, Dr. Jung Ho Lee, Mr. Changsoo Yu, Mr. Taehun Kim, Dr. Taikjin Lee

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Session No.	Date	Time	Type	Paper No.	Paper Title	Author
MA4-4	Nov. 28	09:45-15:00	Oral	P00376	Pose-Graph-Based UWB SLAM with NLOS Factor Estimation	Mr. Jieum Hyun, Prof. Hyun Myung
MA4-5	Nov. 28	10:00-10:15	Oral	P00440	Building Regular Formations with Establishing/Preserving Information Connectivity by Multi-Agent Robotic Teams	Prof. Alexey S. Matveev
MA4-6	Nov. 28	10:15-10:30	Oral	P00248	RGB-D Visual SLAM Algorithm Using Scene Flow and Conditional Random Field in Dynamic Environments	Mr. Hyeongjun Jeon, Mr. Changwan Han, Graduate Student Donggil You, Prof. Junghyun Oh
MA5-1	Nov. 28	09:00-09:15	Oral	P00451	A New Frequency Estimator with Dynamics That Are Independent of Input Amplitude and Its Application to Notch	Mr. Young-Seok Kim, Graduate Student Tae-Ho Oh, Mr. Dae-Young Yang, Mr. Tae-Hoon Kim, Dr. Sang-Hoon Lee, Prof. Dong-Il Dan Cho
MA5-2	Nov. 28	09:15-09:30	Oral	P00409	Closed-loop Stator Flux Control Method for Soft Starters to Prevent Rotor Speed oscillations in Induction Motors Drive	Mr. Tae-Hoon Kim, Mr. Dae-Young Yang, Graduate Student Tae-Ho Oh, Mr. Young-Seok Kim, Dr. Sang-Hoon Lee, Prof. Dong-Il Dan Cho
MA5-3	Nov. 28	09:30-09:45	Oral	P00407	A New Stability Index for Industrial Servo Systems Using Frequency Response Function Considering Measurement Delay	Graduate Student Tae-Ho Oh, Mr. Young-Seok Kim, Mr. Dae-Young Yang, Mr. Tae-Hoon Kim, Dr. Sang-Hoon Lee, Prof. Dong-Il Dan Cho
MA5-4	Nov. 28	09:45-15:00	Oral	P00199	Tool Monitoring System Using Vibration and Current Signals	Mr. Zhennan Wei, Mr. Zhenyu Qiu, Mr. Qian Huang, Dr. Yundi Chu
MA5-5	Nov. 28	10:00-10:15	Oral	P00200	Bearing Fault Diagnosis Using One-Dimensional Convolutional Neural Network	Mr. Zhanyuan Gao, Mr. Zhennan Wei, Mr. Yuan Chen, Mr. Tianqi Ying, Mr. Haojie Gao
MA5-6	Nov. 28	10:15-10:30	Oral	P00398	Particle Swarm Optimization Based Reliable Control Algorithm for Fuzzy Systems	Ms. Ponnarasi Loganathan, Prof. Pankajavalli P. B., Prof. Sakthivel R., Dr. Selvaraj P.
MA6-1	Nov. 28	09:00-09:15	Oral	P00475	Semantic Foreground Feature Extraction and Camera-aware Re-allocation Clustering for Unsupervised Person Re-identification	Mr. Ge Cao, Prof. Kanghyun Jo
MA6-2	Nov. 28	09:15-09:30	Oral	P00472	Combination of Deep Learner Network with Transformer for 3D Human Pose Estimation	Mr. Tran Tien Dat, Mr. Vo Xuan Thuy, Mr. Nguyen Duy Linh, Prof. Kang-Hyun Jo
MA6-3	Nov. 28	09:30-09:45	Oral	P00445	Automation of 3D sewing of two different shaped parts by robot arm - Proposal and evaluation of the sewing method of	Ms. Eiri Ogura, Prof. Takashi Yoshimi, Mr. Motoki Hirayama
MA6-4	Nov. 28	09:45-15:00	Oral	P00413	A surface shape measurement method using a self-shape sensor "Flexible Sensor Tube"	Dr. Daisuke Ura, Prof. Koichi Osuka
MA6-5	Nov. 28	10:00-10:15	Oral	P00364	A Facial Gender Detector on CPU using Multi-dilated Convolution with Attention Modules	Mr. Adri Priadana, Mr. Muhamad Dwisnanto Putro, Mr. Xuan-Thuy Vo, Prof. Kang-Hyun Jo
MA6-6	Nov. 28	10:15-10:30	Oral	P00357	Fast Terminal SMC with SPO for Trajectory Tracking of Robot Manipulator for Nuclear Reactor Dismantlement	Prof. Min Cheol Lee, Graduate Student Chengqian Li, Graduate Student Jaehyung Kim
MA7-1	Nov. 28	09:00-09:15	Oral	P00088	Plastic Bottle Recognition Using Improved U-Net	Mr. Daiki Ideta, Prof. Tohru Kamiya
MA7-2	Nov. 28	09:15-09:30	Oral	P00083	Environment Recognition from A Spherical Camera Image Based on Multi-Attention DeepLab	Mr. Yuta Nishida, Prof. Tohru Kamiya
MA7-3	Nov. 28	09:30-09:45	Oral	P00082	Identification for Drinking Spout of Plastic Bottle Using Multi Eff-UNet	Mr. Shunsuke Moritsuka, Prof. Tohru Kamiya
MA7-4	Nov. 28	09:45-15:00	Oral	P00070	Generation of Super-Resolution Images from Satellite Images Based on Improved RCAN	Mr. Futa Morishima, Prof. Huimin Lu, Prof. Tohru Kamiya
MA8-1	Nov. 28	09:00-09:15	Oral	P00491	Circuit Driving of RC Scale Cars using Reinforcement Learning	Graduate Student Minhyeok Kwon, Prof. Yongsoon Eun
MA8-2	Nov. 28	09:15-09:30	Oral	P00273	Data Augmentation of Selective Subspace to Improve the Performance of Offline Reinforcement Learning	Mr. Jungwoo Han, Prof. Jinwhan Kim
MA8-3	Nov. 28	09:30-09:45	Oral	P00246	Learning to Box: Reinforcement Learning using Heuristic Three-step Curriculum Learning	Ms. Heeseon Rho, Mr. Yeonguk Yu, Prof. Kyoobin Lee
MA8-4	Nov. 28	09:45-15:00	Oral	P00174	Vision-based Reinforcement learning : Moving object grasping with a Single Active-view Camera	Mr. Seongwon Jang, Ms. Hyemi Jeong, Prof. Hyun Seok Yang

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MA8-5	Nov. 28	10:00-10:15	Oral	P00127	Deep Reinforcement Learning-based ANM Optimization: A Soft Actor-Critic with Prioritized Experience Replay Approach	Graduate Student Xinfeng Sun, Graduate Student Yuna Oh, Dr. Myoung Hoon Lee, Prof. Jun Moon
MA8-6	Nov. 28	10:15-10:30	Oral	P00076	Continuous Control of Autonomous Vehicles using Plan-assisted Deep Reinforcement Learning	Mr. Tanay Dwivedi, Mr. Tobias Betz, Mr. Florian Sauerbeck, Dr. Pv Manivannan, Prof. Markus Lienkamp
MA9-1	Nov. 28	09:00-09:15	Oral	P00405	A new framework for sampled-data tracking problem with step reference and disturbance	Mr. Hae Yeon Park, Prof. Jung Hoon Kim
MA9-2	Nov. 28	09:15-09:30	Oral	P00321	Searching for an affordable Neural Network Architecture for Electrochemical Parameter Identification of a Li-ion Battery on an	Mr. Kwanwoong Yoon, Mr. Huiyong Chun, Mr. Hyeonjang Pyeon, Prof. Soohee Han
MA9-3	Nov. 28	09:30-09:45	Oral	P00302	Adapting Masking Network for Bloom Identification Number Recognition to Different Domains	Mr. Wonseok Jeong, Ms. Hyeeyeon Choi, Mr. Bum Jun Kim, Ms. Hyeonah Jang, Mr. Dong Gu Lee, Mr. Donggeon Lee, Prof. Sang Woo Kim
MA9-4	Nov. 28	09:45-15:00	Oral	P00205	How to easily make a policy network of reinforcement learning robust without physical modeling	Mr. Hyeonbeen Park, Dr. Seungmin Baek, Prof. Soohee Han
MA9-5	Nov. 28	10:00-10:15	Oral	P00038	Improved Robustness of Reinforcement Learning Based on Uncertainty and Disturbance Estimator	Mr. Jinsuk Choi, Mr. Hyunbeen Park, Mr. Jongchan Baek, Prof. Soohee Han
MA10-1	Nov. 28	09:00-09:15	Oral	P00406	Verification of the Gait-Assist Patterns to the Pelvis in a Wheeled Upright Walker to Build Robotic Assistive Control	Mr. Hiroki Aoyama, Prof. Kazuo Yonenobu, Dr. Katsushi Ogawa, Prof. Seonghee Jeong
MA10-2	Nov. 28	09:15-09:30	Oral	P00323	Measurement and Evaluation Method of Gait Parameters for Timed Up and Go Test using an IoRT Care-Walker	Mr. Akihiro Yamada, Prof. Seonghee Jeong, Dr. Hiroki Aoyama, Prof. Kazuo Yonenobu, Dr. Katsushi Ogawa
MA10-3	Nov. 28	09:30-09:45	Oral	P00292	Pneumatic Control System of Haptic Device for Abdominal Palpation Simulation	Mr. Hyung Taeg Han, Prof. Lee Doo Yong
MA10-4	Nov. 28	09:45-15:00	Oral	P00285	A Human Lifting and Navigation System Based on ICT for Underwater Rescue	Prof. Dal-Hwan Yoon, Mr. Jong Hwa Yoon
MA10-5	Nov. 28	10:00-10:15	Oral	P00270	Implementation of the Racing Game with the Virtual Reality and Cable Suspended Parallel Robot (CSPR)	Prof. Nguyen Truong Thinh, Mr. Chu Nhat Minh Quan, Mr. Tuong Phuoc Tho
MA10-6	Nov. 28	10:15-10:30	Oral	P00116	Development of a Laparoscope Prototype Based on the Continuous Redundant Cable Robot Tested in a Simulated	Mr. Hernando Leon-Rodriguez
MA11-1	Nov. 28	09:00-09:15	Oral	P00397	Robotic Dough Shaping	Mr. Jan Ondras, Graduate Student Di Ni, Graduate Student Xi Deng, Graduate Student Zeqi Gu, Graduate Student Henry Zheng, Prof.
MA11-2	Nov. 28	09:15-09:30	Oral	P00383	Illumination Effect Evaluation Algorithm for Vision-based Robotic Inspection	Mr. Minwoo Na, Prof. Jae-Bok Song
MA11-3	Nov. 28	09:30-09:45	Oral	P00276	Optimization of an Intelligent Wheelchair: LiDAR and Camera Vision for Obstacle Avoidance	Mr. Joshua Clounie, Mr. Joshua Green, Mr. Rafael Galarza, Mr. Shawn Anderson, Mr. Jash Campell-Smith, Dr. Razvan Cristian Voicu
MA11-4	Nov. 28	09:45-15:00	Oral	P00183	Development and Control of the Stick Robot Using Three Reaction Wheels	Mr. Matee Vadrukchid, Prof. Manukid Parnichkun
MA11-5	Nov. 28	10:00-10:15	Oral	P00164	Design of a Foldable Robot Arm for a Hybrid Robot Manipulator	Graduate Student Joon Woo Lee, Prof. Seul Jung
MA11-6	Nov. 28	10:15-10:30	Oral	P00014	Collision-Backpropagation based Obstacle Avoidance Method for a Legged Robot Expressed as a Simplified Dynamics Model	Mr. Jinwon Kim, Graduate Student Heechan Shin, Prof. Sung-Eui Yoon
MB1-1	Nov. 28	16:00-16:15	Oral	P00447	Performance Comparison of Human Activity Recognition for Unmanned Retailers	Ms. Sheilla Wesonga
MB1-2	Nov. 28	16:15-16:30	Oral	P00403	Towards On-device Deep Neural Network Inference and Model Update for Real-time Gesture Classification	Mr. Mustapha Deji Dere, Mr. Ji-Hun Jo, Prof. Boreom Lee
MB1-3	Nov. 28	16:30-16:45	Oral	P00388	Monocular Supervised Metric Distance Estimation for Autonomous Driving Applications	Mr. Yury Davydov, Dr. Wen-Hui Chen, Dr. Yu-Chen Lin
MB1-4	Nov. 28	16:45-17:00	Oral	P00291	Generating High-Resolution Fire Images with Controllable Attributes via Generative Adversarial Networks	Mr. Nguyen Quoc Dung, Prof. Hakil Kim

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Session No.	Date	Time	Type	Paper No.	Paper Title	Author
MB1-5	Nov. 28	17:00-17:15	Oral	P00143	Air path and combustion controls coordination in diesel engine	Dr. Loris Ventura, Dr. Stefano Alberto Malan
MB1-6	Nov. 28	17:15-17:30	Oral	P00024	Generation Method of Autonomous Evasive Maneuver Strategy in Air Combat	Ms. Lin Li, Dr. Zhen Yang, Dr. Zhixiao Sun, Dr. Guang Zhan, Dr. Haiyin Piao, Prof. Deyun Zhou
MB2-1	Nov. 28	16:00-16:15	Oral	P00303	Inference of Vehicle Lane Change Intention Using Multiple Model Estimator in Automated Highway Driving	Mr. Jongyong Do, Prof. Kyoungseok Han, Prof. Seibum Ben Choi
MB2-2	Nov. 28	16:15-16:30	Oral	P00208	A Sensor-Based Study for Security Events Detection Systems On Board Autonomous Trains	Dr. Claire Nicodeme
MB2-3	Nov. 28	16:30-16:45	Oral	P00187	Performance Analysis for Secure Communication based on CMAC	Mr. Kyungsu Lee
MB2-4	Nov. 28	16:45-17:00	Oral	P00185	Communication between two controllers with the different electric grounds for Fail-Operational	Mr. Sungsu Han
MB2-5	Nov. 28	17:00-17:15	Oral	P00109	Ethical Decision-Making Assistance for Autonomous Driving by Hybrid Approach in Collision Imminence with Vulnerable Road	Mr. Jin Ho Yang, Graduate Student Jin Sung Kim, Prof. Chung Choo Chung
MB2-6	Nov. 28	17:15-17:30	Oral	P00005	Evaluation of Advanced Adaptive Cruise Control Based on Lane-Change Detection	Dr. Hanwool Woo, Dr. Jongseong Gwak
MB2-7	Nov. 28	17:30-17:45	Oral	P00394	A Multi-Drone System for Oil Spill Detection: A Simulation and Emulation Platform	Dr. Ahmed Alwaasni, Dr. Jawaher Ghommani, Dr. Ashraf Saleem, Mr. Navid Nasiri, Dr. Omer Eldirdiry, Prof. Hadj Bourdoucen, Dr. Ghazi Al Bouay, Mr. Amr Al-Karzeri, Dr. Ahmed Amari
MB3-1	Nov. 28	16:00-16:15	Oral	P00437	Multivariable Representation and Analysis of Controllers Used for Individual Pitch Control of Large Wind Energy Converters	Dr. Adrian Gambier
MB3-2	Nov. 28	16:15-16:30	Oral	P00417	A Specified-Duration Shaper for Reducing Vibration of a Flexible Beam System	Prof. Brian Byunghyun Kang
MB3-3	Nov. 28	16:30-16:45	Oral	P00356	Output Feedback Control of Two-dimensional Polynomial Fuzzy Networked-Control-Systems	Prof. Lizhen Li, Graduate Student Yutang Wu, Graduate Student Deshi Hu
MB3-4	Nov. 28	16:45-17:00	Oral	P00304	Analysis of Fully Differential Folded-Cascode Cross-Coupled Power Amplifier	Dr. Kittipong Kan Tripetch
MB3-5	Nov. 28	17:00-17:15	Oral	P00175	Initialization-free Algorithm for Discrete-time Dynamic Average Consensus and Its Application to Distributed Optimization	Ms. Jiyeon Nam, Mr. Jinwook Heo, Graduate Student Jeong Woo Kim, Prof. Hyungbo Shim, Dr. Jae Sung Bang, Dr. Jinsung Kim
MB3-6	Nov. 28	17:15-17:30	Oral	P00099	Dynamical evolution of public perceptions of technological innovation in supernetwork	Dr. Qiu Xiao Yue, Dr. Liu Xia Qun, Prof. Zhuang Ya Ming
MB3-7	Nov. 28	17:30-17:45	Oral	P00035	Stability of generalized homogeneous cooperative systems	Ms. Yang Xu, Dr. Yuangong Sun
MB4-1	Nov. 28	16:00-16:15	Oral	P00506	Mars Atmospheric Entry Trajectory Generation using Parameter Optimization	Mr. Youngro Lee, Prof. Dae Young Lee
MB4-2	Nov. 28	16:15-16:30	Oral	P00490	UWB/GPS Sensor Fusion Using Kalman Filter for Outdoor Autonomous Robot	Mr. Junhyeok Shin, Prof. Hoeryong Jung
MB4-3	Nov. 28	16:30-16:45	Oral	P00442	Reentry-phase Tracking of a Ballistic Missile in the Presence of Radar Glint Noise	Mr. Natnael Zewge, Prof. Hyochoong Bang
MB4-4	Nov. 28	16:45-17:00	Oral	P00191	Construction of the Radio Map with Defective GPS Position Information	Graduate Student Taewon Kang, Dr. Joon Hyo Rhee
MB4-5	Nov. 28	17:00-17:15	Oral	P00137	Context Adaptive GPS/GF-INS Integrated Navigation System for Rotational Vehicle	Mr. Jae Hoon Son, Dr. Sang Heon Oh, Prof. Dong-Hwan Hwang
MB4-6	Nov. 28	17:15-17:30	Oral	P00016	Adapted ACO Algorithm for Energy-Efficient Path Finding of Waste Collection Robot	Graduate Student Koki Tomitagawa, Dr. Anuntapat Anuntachai, Dr. Supannada Chotiphan, Dr. Olarn Wongwirat, Prof. Shigeru Kuchii
MB5-1	Nov. 28	16:00-16:15	Oral	P00377	Basic research on AC characteristics and film thickness measurement of wet coating film using coaxial probe method	Dr. Katsushi Ogawa, Mr. Itaru Chiba, Prof. Tsuneo Jozen, Prof. Seonghee Jeong

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Session No.	Date	Time	Type	Paper No.	Paper Title	Author
MB5-2	Nov. 28	16:15-16:30	Oral	P00373	Development of Painting Robot for Cage-shape Iron Pillar Supporting Train Track : Prototype Design and Basic Motion	Prof. Seohghee Jeong, Prof. Katsushi Ogawa, Prof. Tsuneo Jozen
MB5-3	Nov. 28	16:30-16:45	Oral	P00331	Design a GA-based PID Controller for a Pressure Control of a Process Chamber using a Time-domain System Identification	Dr. Seungwan Ryu, Mr. Sungsoon Yim, Dr. Seokmin Wi, Dr. Seungyun Jung, Dr. Sanghoon Kim, Mr. Byeonghee Kim
MB5-4	Nov. 28	16:45-17:00	Oral	P00222	Automatic Control Crude Oil Feeder System	Dr. Sirichai Tammaruckwattana, Mr. Ekarin Vichachuai, Dr. Wandee Petchmaneelumka
MB5-5	Nov. 28	17:00-17:15	Oral	P00125	Load regulation of the heat supply unit assisted by the energy storage in thermal networks via a reference model-based	Mr. Jianjun Shu, Dr. Gengjin Shi
MB5-6	Nov. 28	17:15-17:30	Oral	P00080	State of Charge Estimation Using Multi-layer Neural Networks Based On Temperature	Mr. Dong Hun Wang, Graduate Student Jong Hyun Lee, Graduate Student Min Chan Kim, Prof. In Soo Lee
MB6-1	Nov. 28	16:00-16:15	Oral	P00348	Super Twisting Sliding Mode Control-Based Impedance Control for Teleoperated Virtual Robot Arm End-Effector Force Tracking	Prof. Min Cheol Lee, Mr. Muhammad Hamza Khan, Dr. Saad Jamshed Abbasi, Mr. Muhammad Salman
MB6-2	Nov. 28	16:15-16:30	Oral	P00324	Prototype on retrofittable autonomous lawn mower for golf resort	Mr. Kaito Ichihara, Prof. Tadahiro Hasegawa, Prof. Shin'Ichi Yuta, Mr. Tomoyuki Kato, Mr. Kentaro Nimura, Mr. Motoyuki Shiraishi
MB6-3	Nov. 28	16:30-16:45	Oral	P00177	A Development of Automatic Self-Ordering Following Module for Online Campus Tour Project of 5 Countries	Mr. Yoganata Kristanto
MB6-4	Nov. 28	16:45-17:00	Oral	P00157	Application of Model Predictive Control to Polishing Robot for Pushing Operation	Mr. Nobuaki Endo, Prof. Takashi Yoshimi, Mr. Koichiro Hayashi, Mr. Hiroki Murakami
MB6-5	Nov. 28	17:00-17:15	Oral	P00123	System Identification for Gimbal Structure Loading Device	Ms. Yeri Sim, Mr. Subin Lim, Ms. Suhyeon Park, Prof. Sangrok Jin
MB6-6	Nov. 28	17:15-17:30	Oral	P00097	Improvement of 3D-SLAM Accuracy by Removing Moving Objects on 3D-LiDAR Point Cloud Using Image Recognition in	Mr. Jun Konno, Prof. Yoshinobu Ando
MB7-1	Nov. 28	16:00-16:15	Oral	P00089	Identification of abnormal tissue from CT images using improved ResNet34	Mr. Naoya Honda, Prof. Tohru Kamiya
MB7-2	Nov. 28	16:15-16:30	Oral	P00087	Automatic Classification of Respiratory Considering Hierarchical Structure	Mr. Manami Tabata, Prof. Tohru Kamiya
MB7-3	Nov. 28	16:30-16:45	Oral	P00086	Detection of Driver Gene Mutations from Thoracic CT Images Based on LightGBM with Radiomics Features	Mr. Shion Watanabe, Prof. Tohru Kamiya
MB7-4	Nov. 28	16:45-17:00	Oral	P00071	Low-dose CT Denoising Using Deep CNN	Mr. Yuta Sadamatsu, Prof. Tohru Kamiya, Prof. Seiichi Murakami, Prof. Guangxu Li
MB7-5	Nov. 28	17:00-17:15	Oral	P00068	Classification of CTC on Fluorescence Image Based on Improved AlexNet	Mr. Kohei Kisanuki, Prof. Tohru Kamiya, Prof. Li Guangxu
MB8-1	Nov. 28	16:00-16:15	Oral	P00131	Automatic Identification of CTC in Fluorescence Microscope Images Using Morphological Filtering to Detect Cell Nuclei	Mr. Kazuki Hashimoto
MB8-2	Nov. 28	16:15-16:30	Oral	P00085	Development of Temporal Subtraction Technique for Phalanges CR Image using Geometric-matching CNN	Mr. Hikaru Ono, Prof. Tohru Kamiya
MB8-3	Nov. 28	16:30-16:45	Oral	P00084	Extraction of Cervical Lymph Nodes using Improved U-Net++	Mr. Nozomi Shime, Prof. Tohru Kamiya
MB8-4	Nov. 28	16:45-17:00	Oral	P00072	Automatic Detection of Cervical Lymph Nodes from Non-Contrast CT Images Using the SSD	Mr. Seitaro Baba, Prof. Tohru Kamiya, Prof. Takayuki Isida
MB8-5	Nov. 28	17:00-17:15	Oral	P00066	Classification the Root Resorption from Panoramic X-ray Image Using Center Loss Redefined in Angle Space	Mr. Kosei Tamura, Prof. Tohru Kamiya
MB9-1	Nov. 28	16:00-16:15	Oral	P00448	Optimization-based Energy Management Strategy for Hybrid Electric Tramways	Dr. Hoai-Vu-Anh Truong, Graduate Student Hoai-An Trinh, Prof. Kyoung Kwan Ahn
MB9-2	Nov. 28	16:15-16:30	Oral	P00243	Disturbance observer-based transformer current estimation for bidirectional dual-active-bridge DC-DC converter using LMI-	Dr. Ngoc-Duc Nguyen, Prof. Young Il Lee

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Session No.	Date	Time	Type	Paper No.	Paper Title	Author
MB9-3	Nov. 28	16:30-16:45	Oral	P00225	Commutation Methods of AC-AC Converter for Wind Power Generation System	Dr. Sirichai Tammaruckwattana, Mr. Pramook Kawpukdee, Mr. Natchanon Suppaadirek, Ms. Rutchanee Gullayanono, Dr. Apinai Rerkratn
MB9-4	Nov. 28	16:45-17:00	Oral	P00206	Convex Optimization on Differential Actuation of Quasi-Static MEMS Mirrors in Scanning Applications	Dr. Sangtak Park, Dr. Lawrence Wong, Dr. Jangwon Yie
MB9-5	Nov. 28	17:00-17:15	Oral	P00147	FOC Control Prototyping of 48V IDB System for Hardware Engineers	Ms. Minhye Yu, Mr. Sung Su Han
MB9-6	Nov. 28	17:15-17:30	Oral	P00037	Computational Study on the Rotordynamic of the Hole Diaphragm Labyrinth Seal	Dr. Xiang Zhang, Prof. Yinghou Jiao, Prof. Xiuquan Qu, Dr. Guanghe Huo
MB10-1	Nov. 28	16:00-16:15	Oral	P00418	Design and Control of a Humanoid Avatar Head with Realtime Face Animation	Prof. Mathew Schwartz, Graduate Student Jaehoon Sim, Prof. Jaeheung Park
MB10-2	Nov. 28	16:15-16:30	Oral	P00279	The Factors that Affect the Selecting of Sticker Image on Social Media Application : A Case Study of Retired People Purchasing	Dr. Kleddao Satcharoen
MB10-3	Nov. 28	16:30-16:45	Oral	P00266	A Mobile Robot Framework in Industrial Disaster for Human Rescue	Mr. Junho Baek, Mr. Junhyun Choi, Mr. Sangmin Kim, Mr. Hyunjin Park, Mr. Taeyong Kuc
MB10-4	Nov. 28	16:45-17:00	Oral	P00140	Linkage Mechanism-based Forced Blood Circulation System for Lower Limbs with an Indirect Stimulation Device	Mr. Hyeoncheol Kim, Mr. Kwon Donghyun, Prof. Choi Jungsu
MB10-5	Nov. 28	17:00-17:15	Oral	P00115	Bioelectronic transfemoral prosthesis to improve human gait by means of EMG and space-time physical variables	Mr. Hernando Leon-Rodriguez
MB10-6	Nov. 28	17:15-17:30	Oral	P00015	Leveraging Extended Chat History through Sentence Embedding in Multi-turn Dialogue toward Increasing User Engagement	Mr. Zeyu Ding, Dr. Armagan Elibol, Prof. Nak-Young Chong
MB11-1	Nov. 28	16:00-16:15	Oral	P00453	Continuous sliding mode control for indoor under-actuated overhead crane systems	Dr. Ngo Phong Nguyen, Dr. Hyondong Oh, Prof. Jun Moon
MB11-2	Nov. 28	16:15-16:30	Oral	P00408	Discrete-time Sliding Mode Control with Second-Order Decoupled Disturbance Compensator to Improve the Stability	Mr. Dae-Young Yang, Graduate Student Tae-Ho Oh, Mr. Young-Seok Kim, Mr. Tae-Hoon Kim, Dr. Sang-Hoon Lee, Prof. Dong-Il Dan Cho
MB11-3	Nov. 28	16:30-16:45	Oral	P00141	Event-Triggered Sliding Mode Control for Position Tracking of Permanent Magnet Synchronous Motors	Graduate Student Jaehyong Gu, Graduate Student Sesun You, Prof. Wonhee Kim, Prof. Jun Moon
MB11-4	Nov. 28	16:45-17:00	Oral	P00111	A Study on Fuzzy-based Super-Twisting Sliding Mode Control Approaches for Rotary Inverted Pendulum Systems	Mr. Suk-Jun Lee, Prof. Jun Moon
MB11-5	Nov. 28	17:00-17:15	Oral	P00126	Attitude Control of a Satellite based on Sliding Mode Control	Mr. Prasitthichai Naronglerdrit, Prof. Manukid Parnichkun
MB11-6	Nov. 28	17:15-17:30	Oral	P00042	Sliding Mode Control based Robust Gap Control for Virtual Coupling of Railway Vehicles	Mr. Jaegeun Park, Prof. Yongsoon Eun
MP-1	Nov. 28	13:20-14:50	Poster	P00063	High Path Converging Reward Space: Imitating Human Behavior in Robot Arm Control	Ms. Dahyun Koh, Graduate Student Seongwon Jang, Prof. Hyun Seok Yang
MP-2	Nov. 28	13:20-14:50	Poster	P00469	Failure Detection and System Stabilization Strategy of Quadcopter using SINDy-PI Algorithm	Mr. Taewook Um, Mr. Jun Oh Park, Prof. Hyo-Sung Ahn
MP-3	Nov. 28	13:20-14:50	Poster	P00468	Flight Path Planning of Multi Agent System using Model Predictive Control	Mr. Jun-Oh Park, Mr. Tae-Wook Um, Prof. Hyo-Sung Ahn
MP-4	Nov. 28	13:20-14:50	Poster	P00466	Low-level Hovering system of quad-rotor itself using Reinforcement Learning	Mr. Junghyun Seo, Prof. Yongseob Lim, Graduate Student Geon Park, Graduate Student Gihwan Jeon
MP-5	Nov. 28	13:20-14:50	Poster	P00456	Solar-Powered UAV Waypoint Following using Reinforcement Learning Algorithm	Mr. Giancarlo Eder Guerra Padilla, Dr. Kun-Jung Kim, Prof. Kee-Ho Yu
MP-6	Nov. 28	13:20-14:50	Poster	P00430	Visual Inertial Odometry based Autonomous Landing Algorithm considering the GNSS-Denied Situation of Drone using Pixhawk	Mr. Hyeongseok Kim, Mr. Seongbong Lee, Ms. Hyeji Kim, Prof. Dongjin Lee
MP-7	Nov. 28	13:20-14:50	Poster	P00306	Modeling and Simulation of Solar-powered Aquatic UAV for Sailing Mission	Ms. Hyeong Jun Park, Mr. Giancarlo Eder Guerra Padilla, Prof. Kee-Ho Yu

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MP-8	Nov. 28	13:20-14:50	Poster	P00240	Finite Memory Consensus Filter-based Distributed Neural Network Control for Multi-agent Systems	Dr. Dong Kyu Lee, Mr. Gi Heon Lee, Prof. Choon Ki Ahn
MP-9	Nov. 28	13:20-14:50	Poster	P00231	Detection of Moving Objects in Complex Urban Environments Based on Residual-Image and Segment	Mr. Changwan Han, Graduate Student Hyeongjun Jeon, Graduate Student Dongguil You, Prof. Junghyun Oh
MP-10	Nov. 28	13:20-14:50	Poster	P00196	Estimation of Vehicle Position and Velocity in Lane Coordinate using IMU-Camera Sensor Fusion	Mr. Weonmo Kang, Prof. Changsun Ahn
MP-11	Nov. 28	13:20-14:50	Poster	P00181	Flight Path Planning for UAM/UAV based on Fast Marching Method Considering Building Wind	Mr. Min-Chang Kim, Mr. Giancarlo Eder Guerra Padilla, Dr. Kun-Jung Kim, Prof. Kee-Ho Yu
MP-12	Nov. 28	13:20-14:50	Poster	P00108	A Study on the Control Technology of the Underwater Glider Recovery Equipment Using the ROV Platform	Mr. Munhaeng Lee, Mr. Sungjae Kim, Dr. Huynh Thinh, Dr. Tran Minh-Thien, Mr. Jungwoo Lee, Prof. Jinho Suh
MP-13	Nov. 28	13:20-14:50	Poster	P00263	Parsing Indoor Manhattan Scenes Using Four-Point LiDAR on a Micro UAV	Ms. Eunju Jeong, Ms. Suyoung Kang, Ms. Daekyeong Lee, Prof. Pyojin Kim
MP-14	Nov. 28	13:20-14:50	Poster	P00326	Maximum Power Point Tracking Control for Photovoltaic Systems Using Maximum Power Line	Dr. Hyoung-Kyu Yang, Dr. Sang Min Park, Dr. Dongmyoung Joo, Mr. Byoung Jo Hyon, Dr. Jin-Hong Kim
MP-15	Nov. 28	13:20-14:50	Poster	P00207	Robust Sampled-data Output Feedback T-S Fuzzy Control for Vehicle Active Suspension Systems via Input Delay Approach	Mr. Yong Jun Lee, Mr. Seong Woo Kang, Prof. Dong Sung Pae, Prof. Hyun Duck Choi, Prof. Myo Taeg Lim
MP-16	Nov. 28	13:20-14:50	Poster	P00133	Containment Control for Multi-Agent Systems under Directed Interaction Topologies with Time-Varying Delays	Dr. Xiaojie Peng, Prof. Yong He
MP-17	Nov. 28	13:20-14:50	Poster	P00132	A Study on Position Controller with Backward Compensation According to the change of Position Command	Mr. Hyunbae Lee, Mr. Minkuk Kim
MP-18	Nov. 28	13:20-14:50	Poster	P00505	Improved Stochastic Reinforcement Learning for Motor Speed Controller	Mr. Chaehun Park, Mr. Cheolmin Jeong, Prof. Changmook Kang
MP-19	Nov. 28	13:20-14:50	Poster	P00465	An Improved Path Tracking Laguerre based Exponential Weight Design for Vehicle Motion Using Adaptive Model Predictive	Mr. Bilal Sadiq, Dr. Yongseob Lim
MP-20	Nov. 28	13:20-14:50	Poster	P00411	Base Disturbance Rejection Controller with Outer-DOB of Floating Base Single-axis Gimbal	Mr. Young Hun Chung, Dr. Do Hyeon Lee, Prof. Sehoon Oh
MP-21	Nov. 28	13:20-14:50	Poster	P00350	Battery Thermal Management of Electronic Vehicle using MPC	Mr. Seongun Park, Prof. Changsun Ahn
MP-22	Nov. 28	13:20-14:50	Poster	P00334	Modeling of EV Battery Cooling System using Artificial Neural Network	Mr. Kiheon Nam, Prof. Changsun Ahn
MP-23	Nov. 28	13:20-14:50	Poster	P00242	Finite Memory Estimator-based Online Approach to Self-Calibration of Serial Manipulators	Dr. Kwansoo Kim, Mr. Dong Hyeon Kim, Prof. Seok-Kyoon Kim, Prof. Choon Ki Ahn
MP-24	Nov. 28	13:20-14:50	Poster	P00239	Visual-Inertial Odometry-based Finite Memory Estimation for Camera Localization	Ms. Ju Yeon Ko, Dr. Hyun Ho Kang, Prof. Sung Hyun You, Prof. Choon Ki Ahn
MP-25	Nov. 28	13:20-14:50	Poster	P00172	Adaptive control in ultrasonic actuation system for particle manipulation	Mr. Han-Sol Lee, Prof. Chang-Sei Kim
MP-26	Nov. 28	13:20-14:50	Poster	P00044	An adaptive fuzzy sliding mode control for a Cable-driven Parallel Robot	Mr. Thanh-Hai Nguyen, Prof. Kwan-Woong Gwak, Dr. Dinh Ba Pham, Mr. Duc Hai Nguyen
MP-27	Nov. 28	13:20-14:50	Poster	P00043	Distributed formation control of a three-agent system with orientation errors	Dr. Jae-Gyeong Lee, Dr. Koog-Hwan Oh, Dr. Ji-Tae Hong
MP-28	Nov. 28	13:20-14:50	Poster	P00001	sigongji test	Dr. Kyoungil Kim
MP-29	Nov. 28	13:20-14:50	Poster	P00201	Experimental validation of DOB based sliding mode control of a Jimmy Jib system with a gravity compensation system	Mr. Byeong-Soo Kim, Prof. Kwan-Woong Gwak
MP-30	Nov. 28	13:20-14:50	Poster	P00117	Optimal Digital Twin Model-based CPS (Cyber Physical System) Design for Smart Factory	Prof. Youngkuk Kwon

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MP-31	Nov. 28	13:20-14:50	Poster	P00028	A Systematic Comparison of Simulation Software for Robotic Arm Manipulation using ROS2	Mr. Florent Philippe Audonnet, Dr. Andrew Hamilton, Dr. Gerardo Aragon-Camarasa
MP-32	Nov. 28	13:20-14:50	Poster	P00020	New Guidance Law for Impact Time and Angle Control Against Maneuvering Target	Dr. Pengyu Wang, Prof. Chang-Hun Lee, Prof. Bong Wie
MP-33	Nov. 28	13:20-14:50	Poster	P00489	A Magnetic Actuation Scheme Based on Artificial Potential Field Using Field Free Point	Mr. Yonggyu Kim, Graduate Student Minh Phu Bui, Dr. Hosu Lee, Graduate Student Myungjin Park, Prof. Jungwon Yoon
MP-34	Nov. 28	13:20-14:50	Poster	P00467	A Consensus-based SLAM Algorithm for a Single Vehicle	Prof. Hyo-Sung Ahn, Prof. Myo Taeg Lim
MP-35	Nov. 28	13:20-14:50	Poster	P00274	Low-Cost LiDAR-based SLAM for Small Robot Systems	Mr. Insik Jang, Prof. Heoncheol Lee
MP-36	Nov. 28	13:20-14:50	Poster	P00332	Comparing the Effects of Admittance and Error-based Control of a Trunk Rehabilitation Robot on the User's Balance	Dr. Hosu Lee, Dr. Amre Eizad, Mr. Junyeong Lee, Graduate Student Yunho Choi, Dr. Won-Kyung Song, Prof. Kyung-Joong Kim, Prof. Jungwon Yoon
MP-37	Nov. 28	13:20-14:50	Poster	P00171	Validation of Finger Extensor Facilitation Training Device "iPARKO" for hemiplegic persons	Ms. Ai Nakamura, Ms. Reika Yokoyama, Mr. Ryuji Iio, Dr. Igor Zubrycki, Prof. Hirofumi Tanabe, Prof. Yoshifumi Morita
MP-38	Nov. 28	13:20-14:50	Poster	P00152	Development of a prosthetic hand with a built-in heating device to prevent residual limb pain for upper limb amputee	Mr. Seunggi Kim, Mr. Beom-Ki Hong, Mr. Hyun-Jo Kim, Mr. Dong-Young Ahn, Mr. Kyoung-Ho Kim, Dr. Dong-Sub Son, Dr. Se-Hoon Park
MP-39	Nov. 28	13:20-14:50	Poster	P00094	Development of Lightweight Wearable Suit for Agricultural Worker	Mr. Kwanhyung Park, Dr. Haeyong Yun, Mr. Yongjun Cho, Dr. Hyunggil Hong
MP-40	Nov. 28	13:20-14:50	Poster	P00481	Workspace Force/Acceleration Disturbance Observer for Robust Impedance-based Motion Control	Mr. Wooseok Han, Mr. Wonbum Yun, Prof. Sehoon Oh
MP-41	Nov. 28	13:20-14:50	Poster	P00214	Validation of wearable robot performance evaluation index based on robot dummy	Mr. Chang-Hwan Lee, Prof. Kwan-Woong Gwak
MP-42	Nov. 28	13:20-14:50	Poster	P00203	Integrated System of EMG Classification Based Robotic Prosthetic Hand Control and Wearable Haptic Device Based	Mr. Seungun Yang, Prof. Sukho Park
MP-43	Nov. 28	13:20-14:50	Poster	P00047	Ergonomic Analysis of Head-mounted Display as a Vision System for the Surgical Robot	Mr. Jong Hyeon Lee, Mr. Young Gyun Kim, Mr. Sungwoo Park, Mr. Jae Woo Shim, Mr. Youho Myong, Prof. Minwoo Cho, Prof. Sungwan Kim
MP-44	Nov. 28	13:20-14:50	Poster	P00195	Novel Automatic Workpiece Surface Defects Detection System	Mr. Wen Kai Xin, Prof. Kun Yan, Mr. Wei Liu
MP-45	Nov. 28	13:20-14:50	Poster	P00335	Extending Range of Dual-Motor Electric Vehicle with MPC	Mr. Gyeongho Cho, Prof. Changsun Ahn
MP-46	Nov. 28	13:20-14:50	Poster	P00333	Energy Management Rule Extraction of Dual-Motor EV from Dynamic Programming	Mr. Dongwoo Yoo, Prof. Changsun Ahn
MP-47	Nov. 28	13:20-14:50	Poster	P00254	Anomaly Detection of Vacuum Pump for Diagnosis and Prevention of Failuremory	Ms. Dowan Kim, Prof. Jaewook Jeon
MP-48	Nov. 28	13:20-14:50	Poster	P00223	Display Manufacturing Industrial Robot Anomaly Detection and Classification Using Convolutional Neural Network by Encoding	Mr. Young Mo Ham, Prof. Jae Wook Jeon
MP-49	Nov. 28	13:20-14:50	Poster	P00045	Truck-based Cable driven parallel robot for On-site Applications	Mr. Thanh-Hai Nguyen, Prof. Kwan-Woong Gwak
TA1-1	Nov. 29	09:00-09:15	Oral	P00227	GYM-Net: Graphical Y-branched Multi-tasking Network for Trajectory Prediction	Mr. Taeri Kim, Mr. Junseok Lee, Mr. Seongju Lee, Prof. Kyoobin Lee
TA1-2	Nov. 29	09:15-09:30	Oral	P00198	Performance Comparison of Backbone Networks for Multi-Tasking in Self-Driving Operations	Mr. Shakhboz Abdigapporov, Mr. Shokhrukh Miraliev, Mr. Jumabek Alikhanov, Dr. Vijay Kakani, Prof. Hakil Kim
TA1-3	Nov. 29	09:30-09:45	Oral	P00134	Anomaly Detection of an Air Compressor from Time-series Measurement Data	Mr. Myeong-Joon Kim, Dr. Hyun-Jik Cho, Prof. Chul-Goo Kang
TA1-4	Nov. 29	09:45-10:00	Oral	P00119	EventPointNet: Robust Keypoint Detection with Neuromorphic Camera Data	Mr. Howoong Jun, Graduate Student Sangil Lee, Prof. Songhwai Oh

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TA1-5	Nov. 29	10:00-10:15	Oral	P00103	Neural-net based Controller for Rotary Inverted Pendulum systems	Mr. Dongbeom Kim, Prof. Jun Moon
TA1-6	Nov. 29	10:15-10:30	Oral	P00013	Fuzzy Reinforcement Learning Based Trajectory-tracking Control of an Autonomous Mobile Robot	Graduate Student Muhammad Qomaruz Zaman, Dr. Hsiu-Ming Wu
TA10-1	Nov. 29	09:00-09:15	Oral	P00361	Application of Visual Inertial Odometry for Pose Estimation of a Mobile Robot	Ms. Boeun Lee, Prof. Nakyong Ko, Prof. Hong Gi Yeom
TA10-2	Nov. 29	09:15-09:30	Oral	P00336	Fault Detection in Inertial Measurement Unit and Global Navigation Satellite System of an Unmanned surface vehicle	Mr. Gyeongsu Song, Prof. Nak Yong Ko, Dr. Hyun Taek Choi, Dr. Joono Sur
TA10-3	Nov. 29	09:30-09:45	Oral	P00328	Dead Reckoning of a Mobile Robot in 2-Dimensional Special Euclidean Group	Mr. Da Bin Jeong, Prof. Nak Yong Ko
TA10-4	Nov. 29	09:45-10:00	Oral	P00319	Multi-Functional Brain Computer Interface Using Convolutional Neural Networks	Mr. Woosung Choi, Prof. Hong Gi Yeom, Prof. Nak Yong Ko
TA10-5	Nov. 29	10:00-10:15	Oral	P00101	Development of robot control interface using EMG Data	Mr. Shogo Sekiguchi
TA11-1	Nov. 29	09:00-09:15	Oral	P00473	Anomaly detection model using time series dataset of small manufacturing industry	Mr. Jong Hyuk Lee, Mr. Gun-Oh Lee, Dr. Sung-Hyuk Choi, Prof. Min Young Kim
TA11-2	Nov. 29	09:15-09:30	Oral	P00441	Magnetic Recording Reliability Evaluation	Mr. Ekkaphon Phonyiam, Dr. Ponrudee Netisopakul
TA11-3	Nov. 29	09:30-09:45	Oral	P00370	Simultaneous Optimization of Task Allocation and Path Planning Using Mixed-Integer Programming for Time and Capacity	Mr. Takuma Okubo, Dr. Masaki Takahashi
TA11-4	Nov. 29	09:45-10:00	Oral	P00226	Applied to reuse steam condensate water in Medium petrochemical plant to boiler feed water	Dr. Sirichai Tammaruckwattana, Mr. Apinan Seekhieo, Dr. Narin Tammarugwattana
TA11-5	Nov. 29	10:00-10:15	Oral	P00060	PFDL: A Production Flow Description Language for an Order-Controlled Production	Mr. Peter Detzner, Mr. Andreas Ebner, Mr. Maximilian Hoerstrup, Dr. Sören Kerner
TA11-6	Nov. 29	10:15-10:30	Oral	P00053	AI-Enhanced Predictive Maintenance in Manufacturing Processes	Dr. Ponrudee Netisopakul, Ms. Nawarat Phumee
TA2-1	Nov. 29	09:00-09:15	Oral	P00260	Autonomous Drone Surveillance in a Known Environment Using Reinforcement Learning	Ms. Mengyi Gao, Mr. Xiaowei Xing, Prof. Dong Eui Chang
TA2-2	Nov. 29	09:15-09:30	Oral	P00162	Terrain Following of Tiltrotor UAV using MPC and Nonlinear Disturbance Observer-based Backstepping	Mr. Jayden Dongwoo Lee, Mr. Minwoo Kang, Mr. Seungjun Han, Prof. Hyochoong Bang
TA2-3	Nov. 29	09:30-09:45	Oral	P00031	The Robust Gait of a Tilt-rotor and Its Application to Tracking Control -- Application of Two Color Map Theorem	Mr. Zhe Shen, Prof. Takeshi Tsuchiya
TA2-4	Nov. 29	09:45-10:00	Oral	P00018	Autonomous Flying Robot for the Seismic Exploration	Dr. Grigoriy Yashin, Mr. Nikita Mikhailovskiy, Mr. Valerii Serpiva, Dr. Anton Egorov, Dr. Pavel Golikov
TA2-5	Nov. 29	10:00-10:15	Oral	P00022	Hybrid Gradient Vector Fields Based on Maneuver Space for Path-following Guidance	Dr. Yiyang Zhao, Dr. Zhen Yang
TA3-1	Nov. 29	09:00-09:15	Oral	P00307	A Practical Method to Improve the Tracking Performance of PID control	Dr. Junyoung Lee, Dr. Byeonggi Yu, Graduate Student Sang Hyun Park, Dr. Maolin Jin
TA3-2	Nov. 29	09:15-09:30	Oral	P00293	Implicit Model Predictive Control for Discretized Brayton-Moser Equations	Dr. Tomoaki Hashimoto
TA3-3	Nov. 29	09:30-09:45	Oral	P00237	The Design of PI + Approximation 2 Degree of Freedom Cascade Controller for Vertical Coupled Liquid Tank System	Dr. Satit Mangkalajan, Dr. Wittaya Koodtalang, Dr. Thaksin Sangsuwan, Dr. Chirdpong Deelertpaiboon, Dr. Kamon Jirasereeamornkul
TA3-4	Nov. 29	09:45-10:00	Oral	P00186	T-S fuzzy controller design for Rotary Inverted Pendulum with input delay using Wirtinger-based inequality	Mr. Yeongjae Kim, Mr. Yonggwon Lee, Dr. Seunghoon Lee, Prof. Ohmin Kwon
TA3-5	Nov. 29	10:00-10:15	Oral	P00167	Reset control of Torsional Vibration	Dr. Masataka Iwai

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TA3-6	Nov. 29	10:15-10:30	Oral	P00034	Stability of Switching Linear Uncertain Systems via switching time-varying Lyapunov functions	Ms. Huimin Zheng, Dr. Yuangong Sun
TA4-1	Nov. 29	09:00-09:15	Oral	P00378	Study on Cooperative Air-to-Ground Surveillance Planning and Controlling for Unmanned Aerial Vehicles	Dr. Chai Shiyuan, Prof. Yang Zhen
TA4-2	Nov. 29	09:15-09:30	Oral	P00353	Smartphone based Indoor Localization Technology using 1D CNN-BLSTM	Mr. Changsoo Yu, Dr. Beomju Shin, Prof. Chung G. Kang, Dr. Jung Ho Lee, Mr. Hankyeol Kyung, Mr. Taehun Kim, Dr. Taikjin Lee
TA4-3	Nov. 29	09:30-09:45	Oral	P00344	Real-time and Precise Indoor Localization System in Multi-Floor Buildings for Pedestrian using Cloud Platform	Mr. Taehun Kim, Dr. Beomju Shin, Prof. Chung G. Kang, Dr. Jung Ho Lee, Mr. Changsoo Yu, Mr. Hankyeol Kyung, Mr. Donghyun Shin, Dr. Taikjin Lee
TA4-4	Nov. 29	09:45-10:00	Oral	P00220	Development of Passive Guidance Scheme for the Sample Return System from the International Space Station	Mr. Youngro Lee, Prof. Dae Young Lee
TA4-5	Nov. 29	10:00-10:15	Oral	P00219	Deep reinforcement learning-based robust missile guidance	Mr. Jeongsu Ahn, Prof. Jongho Shin, Prof. Hyeonggeun Kim
TA4-6	Nov. 29	10:15-10:30	Oral	P00027	Three-dimensional Multi-missile Cooperative Guidance Law with Time and Space Constraints	Mr. Jian Meng, Dr. Zhen Yang, Dr. Jichuan Huang, Dr. Haiyin Piao, Dr. Yiyang Zhao, Prof. Deyun Zhou
TA5-1	Nov. 29	09:00-09:15	Oral	P00426	Passive Transformable Fingertip to Augment Tableware Grasp Capability	Mr. Haejun Seong, Mr. Youngjin Hong, Mr. Hong-Ryul Jung, Mr. Myeongyun Doh, Prof. Jonghyun Kim, Prof. Hyungpil Moon
TA5-2	Nov. 29	09:15-09:30	Oral	P00425	NODE IK: Solving Inverse Kinematics with Neural Ordinary Differential Equations for Path Planning	Mr. Suhan Park, Prof. Mathew Schwartz, Prof. Jaeheung Park
TA5-3	Nov. 29	09:30-09:45	Oral	P00259	IMU-based Online Kinematic Model Parameter Estimation for Four-Wheeled Skid-Steering Mobile Robot Desired Motion	Mr. Kai Li, Mr. Le Bao, Prof. Chang Soo Han, Prof. Kyoosik Shin, Prof. Wansoo Kim
TA5-4	Nov. 29	09:45-10:00	Oral	P00179	Augmented Reality Display of Robot with Graphs of Property Response Using Its USD Model	Mr. Kazuki Tsukamoto, Prof. Masanobu Koga
TA5-5	Nov. 29	10:00-10:15	Oral	P00173	Linear lateral motion model for urban delivery skid steering robot	Mr. Taewon Kang, Mr. Sungwoo Cho, Mr. Changhyeon Park, Mr. Sangmin Lee
TA5-6	Nov. 29	10:15-10:30	Oral	P00120	Deorbiting of Satellites by a Free-Flying Space Robot by Combining Positioning Control and Impedance Control	Mr. Kohei Koga, Dr. Yoshiro Fukui
TA5-7	Nov. 29	10:30-10:45	Oral	P00429	Structural Analysis on Flexible Skin of Emotional Support Robot	Dr. Moon Woo Park
TA6-1	Nov. 29	09:00-09:15	Oral	0	Various approaches for estimating tire states in vehicle driving condition	Prof. Dongwook Lee
TA6-2	Nov. 29	09:15-09:30	Oral	P00423	Characterizing performance of attitude sensor in agricultural tasks	Dr. Wonpil Yu, Mr. Eulgyoon Lim
TA6-3	Nov. 29	09:30-09:45	Oral	P00355	Simultaneous use of Autonomy Guidance Haptic Feedback and Obstacle Avoiding Force Feedback for Mobile Robot	Dr. Kwang-Hyun Lee, Dr. Harsimran Singh, Dr. Thomas Hulin, Prof. Jee-Hwan Ryu
TA6-4	Nov. 29	09:45-10:00	Oral	P00190	A Vision-based Target Tracking and Intuitive Control Strategy for a Mobile Robot: An Application to Worker Following Systems	Mr. Hyeongrok Yoo, Graduate Student Konchanok Vorasawad, Mr. Junseo Lee, Prof. Changwon Kim
TA6-5	Nov. 29	10:00-10:15	Oral	P00124	Development of Volumetric Image Descriptor for Urban Object Classification Using 3D LiDAR Based on Convolutional Neural	Prof. Sejin Lee
TA7-1	Nov. 29	09:00-09:15	Oral	P00327	Real time optimization using on-line data and modifier adaptation scheme	Prof. Dong Hwi Jeong, Graduate Student Sung Hun Kim
TA7-2	Nov. 29	09:15-09:30	Oral	P00318	Nonlinear MPC with reference optimization for battery thermal management	Mr. Sanghoon Shin, Mr. Changbeom Hong, Prof. Yeonsoo Kim
TA7-3	Nov. 29	09:30-09:45	Oral	P00289	Stochastic Hybrid Model Predictive Control for Parallel Hybrid Electric Vehicle	Mr. Hyun Min Park, Prof. Jong Min Lee
TA7-4	Nov. 29	09:45-10:00	Oral	P00269	Zone-Model Predictive Control for Efficient Thermal Management of Battery Submodule	Mr. Hyeonwoo Cho, Graduate Student Changbeom Hong, Dr. Se-Kyu Oh, Dr. Daeki Hong, Prof. Yeonsoo Kim

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TA7-5	Nov. 29	10:00-10:15	Oral	P00213	Optimal Control of Polymer Grade Change in LDPE Autoclave Reactor based on Nonlinear Model Predictive Control	Mr. Joonsoo Park, Prof. Jong Min Lee
TA8-1	Nov. 29	09:00-09:15	Oral	P00358	Vibration Control of Suspended Load System by Bias Momentum Method	Dr. Toshihiko Nakano
TA8-2	Nov. 29	09:15-09:30	Oral	P00092	Operational Capabilities on the Nanosatellite Attitude Control Actuated by Electropermanent Magnetorquer	Dr. Youngho Eun, Mr. Zhicheng Xie, Mr. Zihao Wang, Dr. Xiaofeng Wu
TA8-3	Nov. 29	09:30-09:45	Oral	P00338	Forward Matching Fusion Algorithm for PDR based on Geomagnetic Fingerprint Map	Mr. Yuke Li, Mr. Pengju Wang, Graduate Student Tong Li, Dr. Yinxuan Liu, Prof. Shigeyuki Tateno
TA8-4	Nov. 29	09:45-10:00	Oral	P00163	Automatic Structural Identification and Vibration Suppression of Industrial Robots using a Custom Active Damper	Mr. Michael Newman, Dr. Matt Khoshdarregi
TA8-5	Nov. 29	10:00-10:15	Oral	P00339	Magnetic Gear Based Actuator: Design and Optimization	Mr. Hangyeol Song, Mr. Edgar Lee, Prof. Seokhwan Jeong
TA8-6	Nov. 29	10:15-10:30	Oral	P00064	A Novel Technique For Indoor Object Distance Measurement By Using 3D Point Cloud and LiDAR	Ms. Jisoo Kim, Prof. Dongik Lee
TA9-1	Nov. 29	09:00-09:15	Oral	P00255	Data-driven Modeling and Control for Lane Keeping System of Automated Driving Vehicles: Koopman Operator Approach	Mr. Jin Sung Kim, Ms. Ying Shuai Quan, Prof. Chung Choo Chung
TA9-2	Nov. 29	09:15-09:30	Oral	P00317	Model Predictive Control of Robot Arm Using Momentum-Based Disturbance Observer	Mr. Jehwi Yoo, Prof. Back Juhoon, Mr. Lee Seungmin
TA9-3	Nov. 29	09:30-09:45	Oral	P00112	Relative distance estimate between railway vehicles from the perspective of multi-agent network localization based on sign	Dr. Seong-Ho Kwon, Dr. Byung-Hun Lee, Prof. Hyo-Sung Ahn
TA9-4	Nov. 29	09:45-10:00	Oral	P00090	Stability Analysis of a Singularly Perturbed System based on INDI	Dr. Tito J. L. Cervantes, Dr. Yoonsoo Kim
TA9-5	Nov. 29	10:00-10:15	Oral	P00067	Network-Based Goal Selection for Multi-Goal Reinforcement Learning Based on Maximum Entropy Framework	Dr. Myoung Hoon Lee, Prof. Hyun Jong Yang, Prof. Jun Moon
TP-1	Nov. 29	13:20-14:50	Poster	P00374	FPGA-based fast eye detection method for edge device	Ms. Jin Young Byun, Prof. Jae Wook Jeon
TP-2	Nov. 29	13:20-14:50	Poster	P00221	Visual-Inertial Odometry Priors for Bundle-Adjusting Neural Radiance Fields	Ms. Hyunjin Kim, Ms. Minkyong Song, Ms. Daekyeong Lee, Prof. Pyojin Kim
TP-3	Nov. 29	13:20-14:50	Poster	P00197	A Monocular Camera Bird-Eye-View Generation using Lane Markers Prior	Dr. Muhammad Aasim Rafique, Graduate Student Muhammad Ishfaq Hussain, Graduate Student Shikha Dubey, Graduate Student Khurbaev
TP-4	Nov. 29	13:20-14:50	Poster	P00170	Multimodal Fusion and Data Augmentation for 3D Semantic Segmentation	Mr. Dong He, Mr. Furqan Abid, Prof. Jonghwan Kim
TP-5	Nov. 29	13:20-14:50	Poster	P00145	Range-view (RV) Based Semantic Segmentation of Outdoor Point Cloud with Data Augmentation	Mr. Furqan Abid, Mr. Dong He, Prof. Jonghwan Kim
TP-6	Nov. 29	13:20-14:50	Poster	P00077	Multi-modal Transformer for Indoor Human Action Recognition	Mr. Jeonghyeok Do, Prof. Munchurl Kim
TP-7	Nov. 29	13:20-14:50	Poster	P00030	Performance Enhancement Step for Motion Estimation via Feature-based Image Matching	Mr. Keita Miyaura, Dr. Armagan Elibol, Prof. Nak-Young Chong
TP-8	Nov. 29	13:20-14:50	Poster	P00476	Monocular Depth Estimation with SimpleGate and ASPP	Prof. Hyo-Sung Ahn, Mr. Jaewoo Jeong, Prof. Hyun-Duk Choi
TP-9	Nov. 29	13:20-14:50	Poster	P00176	A Study on Kimchi Picking Recognition for Flexible Packaging	Mr. Dongin Shin, Mr. Buiminh Trung, Ms. Min-Young Cho, Mr. Bong-Seok Kim, Dr. Youngouk Kim
TP-10	Nov. 29	13:20-14:50	Poster	P00065	Object-aware Anomaly Generation for Anomaly Detection on Real-World Dataset	Mr. Minsung Kim, Prof. Euntai Kim
TP-11	Nov. 29	13:20-14:50	Poster	P00253	Survey on Emotion Recognition Databases	Ms. Juyoung Hong, Ms. Yujin Hwang, Mr. Gwangjin Lee, Prof. Yukyung Choi

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TP-12	Nov. 29	13:20-14:50	Poster	P00421	LSTM-based Temperature Modeling for Cooling Control used by Smartplug	Mr. Jeong-Hwan Kim, Mr. Sung Been Jang, Mr. Hyun Woo Lim, Prof. Taesam Kang, Prof. Jungkeun Park
TP-13	Nov. 29	13:20-14:50	Poster	P00039	State Estimation and Monitoring Method for Micro E-mobilities based on IoT and AI	Dr. Koog-Hwan Oh, Graduate Student Ki Hyeon Kim, Dr. Hyun-Chang Cho
TP-14	Nov. 29	13:20-14:50	Poster	P00011	Distillation Column Machine Learning Model Controlled By Optimized DMC	Dr. Haitham Osman, Dr. Amir Arabi
TP-15	Nov. 29	13:20-14:50	Poster	P00351	Conceptual Design of Safe and Intelligent Personal Mobility : SiKick	Graduate Student Beom Jin Lee, Prof. Seul Jung
TP-16	Nov. 29	13:20-14:50	Poster	P00228	Improved Dynamic Window Approach using the jerk model	Mr. Ziang Lin, Mr. Ryo Taguchi
TP-17	Nov. 29	13:20-14:50	Poster	P00202	Toward an automatic diagnostic scanning robotic system using ultrasound images	Mr. Siheon An, Prof. Seong Young Ko
TP-18	Nov. 29	13:20-14:50	Poster	P00165	Force Control of a Foldable Robot Arm in a Drone for a Solar Panel Cleaning Task	Graduate Student Ye Jin Choi, Prof. Seul Jung
TP-19	Nov. 29	13:20-14:50	Poster	P00464	Deep Reinforcement Learning based Modified Dynamic Window Approach	Ms. Yaeohn Kim, Graduate Student Sungjun Wang, Graduate Student Junghyun Seo, Graduate Student Hyeonjae Jeon, Prof. Yongseob Lim
TP-20	Nov. 29	13:20-14:50	Poster	P00461	Cable-driven Redundant Flexible Manipulator	Prof. Sooyeong Yi
TP-21	Nov. 29	13:20-14:50	Poster	P00435	An Experimental Study of Sequential Collaboration for Robot Manipulation Task	Dr. Seonghyun Kim, Mr. Samyeul Noh, Dr. Ingoon Jang
TP-22	Nov. 29	13:20-14:50	Poster	P00414	Analysis of Wave Generator Stiffness Tendency Based on the Position of Bearing Balls	Mr. Hankun Yeon, Dr. Joo Han Kim, Dr. Myungsung Lee
TP-23	Nov. 29	13:20-14:50	Poster	P00380	An Experimental Study of Collaborative Robot Manipulation via Multi-Agent Reinforcement Learning	Dr. Ingoon Jang, Dr. Hyunseok Kim, Dr. Seonghyun Kim
TP-24	Nov. 29	13:20-14:50	Poster	P00258	An Efficient Sampling-based Path Planner with Progressively-Generated Local Goals in Corridor Environments	Mr. Seokyoung Kim, Prof. Heoncheol Lee
TP-25	Nov. 29	13:20-14:50	Poster	P00241	Design of Active Knee-type Prosthetic Leg using Worm Gear for Lower Limb Amputee	Mr. Ji Woon Lee, Prof. Hak Yi, Dr. Hyun Soo Woo
TP-26	Nov. 29	13:20-14:50	Poster	P00215	Multi-joint dummy robot for the performance evaluation of the lower-limb wearable robot	Mr. Chang-Hwan Lee, Prof. Kwan-Woong Gwak
TP-27	Nov. 29	13:20-14:50	Poster	P00193	Magnetically Actuated Capsule for Multiple-Sampling of Gut Microbiota	Mr. Sang Hyeon Park, Prof. Sukho Park
TP-28	Nov. 29	13:20-14:50	Poster	P00114	Drug-Loaded Mucoadhesive Patch with Active Delivery and Controlled Releasing Ability	Mr. Jihun Lee, Prof. Sukho Park
TP-29	Nov. 29	13:20-14:50	Poster	P00480	Novel Design of Series Elastic Actuator for High Precision Measurement with High Torque Capacity	Mr. Wonbum Yun, Dr. Junyoung Kim, Prof. Sehoon Oh
TP-30	Nov. 29	13:20-14:50	Poster	P00502	Development and verification of a novel localization method of magnetic Maker	Mr. Jiho Park, Prof. Jungwon Yoon
TP-31	Nov. 29	13:20-14:50	Poster	P00471	Design of Multi-channel Load Cell Amplifier for 3-axis Ground Reaction Force Measurement of Powered Exoskeleton for	Mr. Eunseok Song, Ms. Jihun Seong, Prof. Hyunjin Choi
TP-32	Nov. 29	13:20-14:50	Poster	P00470	A Robust Slip-Adaptive Radar Ego-Speed Estimation Against Dynamic Objects for UAVs	Mr. Ji Woo Kim, Mr. Lim Hyung Goo, Mr. Jun Oh Choi, Mr. Hoang Viet Do, Prof. Jin Woo Song
TP-33	Nov. 29	13:20-14:50	Poster	P00455	A Robust State Estimator for Legged Robots using Visual-Inertial-Leg Kinematics Information in the Wild	Mr. Byeongho Yu, Mr. Yeeun Kim, Graduate Student Jinwoo Jeon, Mr. I Made Aswin Nahrendra, Mr. Hyun Myung
TP-34	Nov. 29	13:20-14:50	Poster	P00346	Multi-folding system by using arc-shaped SMA actuator units	Mr. Hangyeol Baek, Prof. Youngshik Kim

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TP-35	Nov. 29	13:20-14:50	Poster	P00343	SMA-based jellyfish robot by using a multiple-circle pattern	Mr. Sangmin Jeon, Prof. Youngshik Kim
TP-36	Nov. 29	13:20-14:50	Poster	P00159	Flexible Haptic Interface with Localized Feedback	Dr. Dongbum Pyo
TP-37	Nov. 29	13:20-14:50	Poster	P00142	Magnetically Steerable Asymmetric Magnetized Soft Continuum Robot (AMSCR) for Minimally Invasive Surgery	Mr. Joowon Park, Mr. Hyoryong Lee, Prof. Sukho Park
TP-38	Nov. 29	13:20-14:50	Poster	P00095	Design of Proprioceptive Flexible Robotic Fingers with Integrated Soft Optoelectronic Sensors	Mr. Hyunje Ahn, Dr. Babar Jamil, Prof. Hugo Rodrigue
TP-39	Nov. 29	13:20-14:50	Poster	P00093	Design and Performance Evaluation of Hybrid Suction Cup	Mr. Yeongjae Park, Mr. Jiseong Shin, Prof. Hugo Rodrigue
TP-40	Nov. 29	13:20-14:50	Poster	P00091	Bending, Extension, and Twisting Actuators by Variable Arrangements of Inflatable Tubes	Mr. Haneol Lee, Prof. Hugo Rodrigue
TP-41	Nov. 29	13:20-14:50	Poster	P00058	Development of Soft Foldable Bidirectional Bending Actuator for Robotic Joint	Mr. Namsoo Oh, Prof. Hugo Rodrigue
TP-42	Nov. 29	13:20-14:50	Poster	P00051	Vibration-informed Force Sensing using Machine Learning for Vacuum Artificial Muscle	Mr. Gijun Park, Prof. Hugo Rodrigue
TP-43	Nov. 29	13:20-14:50	Poster	P00029	Folding Method for Pneumatically Inflatable Link using a Tendon Driven System	Dr. Useok Jeong, Graduate Student Sung-Yol Yu, Graduate Student Minjo Park, Dr. Woongbae Kim, Prof. Kyu-Jin Cho
TP-44	Nov. 29	13:20-14:50	Poster	P00025	Development of In-Drum Motor Winch System for Cable Driven Parallel Robot	Mr. Min-Cheol Kim, Dr. Chang-Sei Kim
TP-45	Nov. 29	13:20-14:50	Poster	P00054	Workpiece surface defects recognition based on improved lightweight YOLOv4	Mr. Donghua Hu, Mr. Defu Chen, Prof. Kun Yan, Mr. Yu Cao
TP-46	Nov. 29	13:20-14:50	Poster	P00340	Metallurgy Model based Feature Reduction for Predicting Yield-Point of Metal Bars	Ms. Yejin Kim, Mr. Jungi Kim, Prof. Young-Keun Kim
TP-47	Nov. 29	13:20-14:50	Poster	P00277	An Empirical Evaluation of SAC and DDPG on Robotic Manipulation Tasks	Mr. Samyeul Noh, Dr. Seonghyun Kim, Dr. Ingoon Jang
TP-48	Nov. 29	13:20-14:50	Poster	P00238	The First Study of Local Defocus Automatic Control System for Industry4.0 of Semiconductor Manufacturing	Mr. Taesu Shin
TP-49	Nov. 29	13:20-14:50	Poster	P00204	Development of a Safety Monitoring System for Hazardous Areas in the Manufacturing Environments	Mr. Sangseung Kang
TP-50	Nov. 29	13:20-14:50	Poster	P00189	Process of Gripping and Placing for Cylindrical Objects using a 2-Jaw Gripper and RGB-D Camera	Mr. Keunhwan Kim, Dr. Byung-Jin Jung, Mr. Dongin Shin, Dr. Jung-Hoon Hwang
TB3-1	Nov. 29	16:00-16:15	Oral	P00415	Analysis of eventual trajectories of a Zeta-converter under Lyapunov-function-based switched control	Prof. Yoshito Ohta, Mr. Naoki Gen
TB3-2	Nov. 29	16:15-16:30	Oral	P00389	On Use of Output Redefinition in Disturbance Observer Design for Non-square Systems: A Preliminary Study	Prof. Gyunghoon Park, Mr. Sang-Muk Kang, Graduate Student Sunseok Byeon
TB3-3	Nov. 29	16:30-16:45	Oral	P00368	Comparative Study of Static Stabilizing Controller Design by Nuclear Norm Minimization and Alternating Projection	Mr. Yu Iwai, Prof. Masaaki Nagahara, Prof. Noboru Sebe
TB3-4	Nov. 29	16:45-17:00	Oral	P00345	Computing Spectrum of Monodromy Operators via Generalized Hermite Interpolation	Mr. Dohyeok Kwak, Prof. Jung Hoon Kim, Prof. Tomomichi Hagiwara
TB3-5	Nov. 29	17:00-17:15	Oral	P00305	The L_{∞} -Gain Analysis for Time-Delay Systems via Ellipsoidal D -invariance	Mr. Hyung Tae Choi, Prof. Jung Hoon Kim
WA1-1	Nov. 30	09:00-09:15	Oral	P00432	Analyzing Angle detection in aerial image	Mr. Donyung Kim, Prof. Sungho Kim
WA1-2	Nov. 30	09:15-09:30	Oral	P00416	ROI area that can increase SNR of non-contact heart rate measurement based on face image using 2D camera	Ms. Seongryeong Lee, Prof. Sungho Kim

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WA1-4	Nov. 30	09:45-10:00	Oral	P00400	A comparative survey on SAR image segmentation using deep learning	Mr. Ohtae Jang, Ms. Sangho Jo, Prof. Sungho Kim
WA1-5	Nov. 30	10:00-10:15	Oral	P00393	Image classification using DETR based object-level feature	Ms. Chung-Gi Ban, Ms. Dayoung Park, Prof. Youngbae Hwang
WA1-6	Nov. 30	10:15-10:30	Oral	P00391	Infrared Dataset Training using Swin Transformer model	Ms. Yeonha Shin, Prof. Sungho Kim
WA2-1	Nov. 30	09:00-09:15	Oral	P00424	Thrust Control of Biomimetic Micro Air Vehicle with Flapping Wings Directly Driven by Motors in Resonant Frequency	Mr. Seunghee Jeong, Prof. Taesam Kang, Prof. Jungkeun Park, Mr. Daewook Kim, Mr. Seungik Choi
WA2-2	Nov. 30	09:15-09:30	Oral	P00342	Real-Time Trajectory Generation of a Quadrotor UAV with Load Suspended from a Pulley	Mr. Donggeon David Oh, Mr. Jeonghyun Byun, Graduate Student Dongjae Lee
WA2-3	Nov. 30	09:30-09:45	Oral	P00337	Microphone System Based Path Following Control of Quadrotor Unmanned Vehicle Autonomous Flight	Mr. Taeyoung Yoon, Prof. Chang Hyuk-Jun
WA2-4	Nov. 30	09:45-10:00	Oral	P00247	Minimalistic in-flight odometry based on two optic flow sensors along a bouncing trajectory	Ms. Lucia Bergantin, Dr. Charles Coquet, Dr. Amaury Negre, Dr. Thibaut Raharijaona, Dr. Nicolas Marchand, Dr. Franck Ruffier
WA2-5	Nov. 30	10:00-10:15	Oral	P00139	FCPNet : A novel model to predict forward collision based-upon CNN	Mr. Hervé B. Olou, Prof. Eugène C. Ezin, Prof. Jean Marie Dembele, Prof. Christophe Cambier
WA2-6	Nov. 30	10:15-10:30	Oral	P00040	A Maneuver Control Method for Stealthy Engagement in Beyond-visual-range Air Combat Based on Sliding Mode Control	Ms. Yue Liu, Dr. Zhen Yang
WA3-1	Nov. 30	09:00-09:15	Oral	P00311	Efficacy of Local Cache for Performance Improvement of Reliable Data Transmission in Aggregated Robot Processing	Mr. Abdul Jalil, Mr. Jun Kobayashi
WA3-2	Nov. 30	09:15-09:30	Oral	P00136	Event-triggered control approach to a ball-and-beam system	Ms. Ji-Sun Park, Prof. Sang-Young Oh, Prof. Ho-Lim Choi
WA3-3	Nov. 30	09:30-09:45	Oral	P00129	Finite-time stability of uncertain singular systems based on time-varying Lyapunov	Ms. Mei Meng, Dr. Yuangong Sun
WA3-4	Nov. 30	09:45-10:00	Oral	P00073	Nonlinear PDE control of flexible robotic arms for state tracking and link-deflection mitigation	Dr. Sadeq Yaqubi, Prof. Jouni Mattila
WA3-5	Nov. 30	10:00-10:15	Oral	P00033	Dwell time stability of discrete-time positive linear switching delay systems with interval uncertainties	Mr. Chao Wang, Dr. Yuangong Sun
WA3-6	Nov. 30	10:15-10:30	Oral	P00026	Fault detection asynchronous filter design for discrete-time Takagi–Sugeno fuzzy systems under cyber attacks	Dr. Ramalingam Sakthivel, Dr. Ramasamy Kavikumar, Prof. Ohmin Kwon
WA3-7	Nov. 30	10:30-10:45	Oral	P00012	Design of nonlinear controller based on ADAR method for wedge balancing	Dr. Nguyen Xuan Chiem, Dr. Le Tran Thang
WA4-1	Nov. 30	09:00-09:15	Oral	P00169	Volumetric Vegetation Monitoring from LiDAR Scans with Ground Estimation	Graduate Student Alex Junho Lee, Graduate Student Hyungtae Lim, Graduate Student Minho Oh, Graduate Student Wonho Song, Prof. Hyun
WA4-2	Nov. 30	09:15-09:30	Oral	P00281	Semantic SLAM-based Autonomous Tributary Navigation System Using 3D LiDAR Point Cloud for UAV	Ms. Jeonghyeon Pak, Prof. Hyoung Il Son
WA4-3	Nov. 30	09:30-09:45	Oral	P00282	Modeling and Control of Multi-UAV System for Tributary Mapping based on Hybrid Automata	Mr. Jaehwi Seol, Ms. Jeonghyeon Pak, Prof. Hyoung Il Son
WA4-4	Nov. 30	09:45-10:00	Oral	P00320	A Path Planning and Coordination Algorithm for Heterogeneous Tasks of Multi-UGV in Smart Farm: Work in Progress	Mr. Yuseung Jo, Prof. Hyoung Il Son
WA4-5	Nov. 30	10:00-10:15	Oral	P00428	Wheeled Vehicle Teleoperation Method for Unstructured Environment Using Haptic Rendering Algorithm	Mr. Yongjun Kim, Mr. Shin-Woo Park, Mr. Jee-Hwan Ryu
WA6-1	Nov. 30	09:00-09:15	Oral	P00495	A Comparative Study of Several pH Control Laws Implemented to a Smart Hydroponics Farm	Dr. Tanagorn Jennawasin, Mr. Thienrawit Tongskulroongruang

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WA6-2	Nov. 30	09:15-09:30	Oral	P00286	A Regression Method with Conditional Generative Adversarial Network for Pedestrian Walking Distance Estimation using a Lur'e Type Analysis of Computed Torque Method for Robot Manipulator	Mr. Thanh Tuan Pham, Prof. Young Soo Suh
WA6-3	Nov. 30	09:30-09:45	Oral	P00184	Design of Supervisory Model Predictive Control for Building HVAC System Subject to Time-Varying Operating Points	Mr. Geunil Song, Prof. Jung Hoon Kim
WA6-4	Nov. 30	09:45-10:00	Oral	P00113	Development of identification based fuzzy supervisory control for pressure tank system	Mr. Sitthiphat Promchaiwattana, Prof. David Banjerdpongchai
WA6-5	Nov. 30	10:00-10:15	Oral	P00096	Membership-Function-Dependent Stability Conditions Using Fuzzy Lyapunov Functions	Graduate Student Natcha Suwatanamala, Dr. Napasool Wongvanich
WA6-6	Nov. 30	10:15-10:30	Oral	P00057	Group Estimation for Social Robot Navigation in Crowded Environments	Mr. Kyung Soo Kim, Prof. Hosub Lee, Prof. Poogyeon Park
WA7-1	Nov. 30	09:00-09:15	Oral	P00367	Open Arms: Open-Source Arms, Hands & Control	Mr. Mincheul Kim, Dr. Youngsun Kwon, Prof. Sung-Eui Yoon
WA7-2	Nov. 30	09:15-09:30	Oral	P00365	Development of Cleaning Module for Wall Climbing Drone with Bio-inspired Watering Mechanism	Ms. Alishba Imran, Dr. David Hanson, Mr. Gerardo Morales, Mr. Vytas Krisciunas
WA7-3	Nov. 30	09:30-09:45	Oral	P00354	PTZ Camera Control on Robot Telemedicine Service for Infectious Diseases	Mr. Taewan Kim, Mr. Byeongho Yu, Mr. Christian Tirtawardhana, Mr. I Made Aswin Nahrendra, Prof. Hyun Myung
WA7-4	Nov. 30	09:45-10:00	Oral	P00308	Sliding Mode Control for Nonlinear Characteristic of Hydraulic Manipulators in Teleoperated Control Configuration	Ms. Seongah Park, Dr. Youngsun Kwon, Dr. Yoonseob Lim
WA7-5	Nov. 30	10:00-10:15	Oral	P00211	Monitoring and Controlling the Multiple Mobile Robots in Outdoor Environments Based on IoT	Graduate Student Dohyun Lim, Graduate Student Jaebeom Park, Dr. Jongwon Park, Prof. Seul Jung
WA7-6	Nov. 30	10:15-10:30	Oral	P00118	Vision-based Tactile Sensor using Random Pattern	Dr. Wittaya Koodtalang, Mr. Satit Mangkalajan, Mr. Thosapron Supsatien, Mr. Phanu Thammalangka, Mr. Wongpaisarn Darawan, Dr. Thaksin
WA8-1	Nov. 30	09:00-09:15	Oral	P00492	Development of FPGA-based deep learning orthosis actuating system using bio signal data	Mr. Jinhuk Lee, Dr. Suwoong Lee, Prof. Min Young Kim
WA8-2	Nov. 30	09:15-09:30	Oral	P00431	Walk Error Compensation of ToF LiDAR using Zero Crossing Discriminator with Auto Gain Control Amplifier	Mr. Ji-Hun Jo, Mr. Mustapha Deji Dere, Prof. Boreom Lee, Mr. Hyeong-Jun Park
WA8-3	Nov. 30	09:30-09:45	Oral	P00386	Pressure measurement device via a wireless network for the seat cushion	Mr. Young Hwan Choi, Prof. Kuc Tae Yong
WA8-4	Nov. 30	09:45-10:00	Oral	P00224	Requirement Analysis of Lidar Sensor Setups for Self-Localization in Automated Valet Parking	Dr. Sirichai Tammaruckwattana, Mr. Chanchai Hewchaiyapum, Mr. Noppakoon Seangsuwan, Mr. Pasawit Techahongsa, Dr. Narin
WA8-5	Nov. 30	10:00-10:15	Oral	P00210	Model-Free Sensor Fusion for Redundant Measurements Using Sliding Window Variance	Mr. Marcel Kascha
WA8-6	Nov. 30	10:15-10:30	Oral	P00021	Epersist: A Two-Wheeled Self Balancing Robot Using PID Controller And Deep Reinforcement Learning	Mr. Petri Makinen, Mr. Pauli Mustalahti, Ms. Sirpa Launis, Prof. Jouni Mattila
WA8-7	Nov. 30	10:30-10:45	Oral	P00146	The Improvement of 1D Gaussian Blur Filter using AVX and OpenMP	Mr. Ghanta Sai Krishna, Graduate Student Dyavat Sumith, Graduate Student Garika Akshay
WA9-1	Nov. 30	09:00-09:15	Oral	P00434	The estimation of VaR and ES based on Gaussian mixture model	Ms. Nwe Zin Oo
WA9-2	Nov. 30	09:15-09:30	Oral	P00245	Prediction of Dangerous Pedestrians using Distance and Stance Estimation	Ms. Yue Li, Mr. Jianhua Wu
WA9-3	Nov. 30	09:30-09:45	Oral	P00168	Body Part Detection in Smoky Environments with Thermal Camera Using Deep Learning	Dr. Stephanie Nix, Ms. Kana Koishi, Dr. Hirokazu Madokoro, Dr. Takashi K. Saito, Dr. Kazuhito Sato
WA9-4	Nov. 30	09:45-10:00	Oral	P00102	Prediction of Time-Series Brain Activity Changes Before and After Near-Miss Events in Snow Traffic Conditions	Mr. Sebastian Gelfert
WA9-5	Nov. 30	10:00-10:15	Oral	P00062		Mr. Yuto Shoji, Dr. Hirokazu Madokoro, Dr. Stephanie Nix, Prof. Kazuki Saruta, Prof. Takashi K. Saito, Prof. Kazuhito Sato

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WA9-7	Nov. 30	10:30-10:45	Oral	P00049	Prediction of Local PM2.5 Concentrations Based on Time-Series Feature Learning Using Multivariate LSTM	Dr. Hirokazu Madokoro, Ms. Saki Nemoto, Dr. Stephanie Nix, Prof. Osamu Kiguchi, Dr. Atsushi Suetsugu, Dr. Takeshi Nagayoshi, Prof. Kazuhito Sato
WA10-1	Nov. 30	09:00-09:15	Oral	P00325	Cable Instance Segmentation with Synthetic Data Generation	Mr. Assefa Seyoum Wahd, Dr. Donghyung Kim, Dr. Seung-Ik Lee
WA10-2	Nov. 30	09:15-09:30	Oral	P00267	Qualitative Analysis of Single Object and Multi Object Tracking Models	Ms. Sumaira Manzoor
WA10-3	Nov. 30	09:30-09:45	Oral	P00150	Nonlinear Regression of Ink Spreading Using a General Ellipse Model	Dr. Hyungtae Kim, Dr. Juhea Kim, Ms. Miyeon Kwon
WA10-4	Nov. 30	09:45-10:00	Oral	P00104	Working Time and Self-Assessment on Nut Size Distinction Skill of Marine Engineers	Prof. Kazumitsu Kikuchi
WA10-5	Nov. 30	10:00-10:15	Oral	P00009	The development and application of image classification techniques to analyze the hair amount for hair transplantation	Dr. Anuntapat Anuntachai, Ms. Sirinada Sukserm, Ms. Nattakarn Chaiyotmanon
WA10-6	Nov. 30	10:15-10:30	Oral	P00008	Development of Self-Training Algorithm for Predicting Mango Maturity	Mr. Nguyen Minh Trieu, Prof. Nguyen Truong Thinh
WA10-7	Nov. 30	10:30-10:45	Oral	P00443	Multi-sensor-based Target Pose Estimation for Autonomous Precision Perching of Nano Aerial Vehicles	Mr. Truong-Dong Do, Mr. Nguyen Xuan Hung, Dr. Ngoc-Hai Nguyen, Ms. Ji-Won Lee, Mr. Yong-Seok Lee, Mr. Seok-Tae Lee, Prof. Sung-Kyung Hong
WA11-1	Nov. 30	09:00-09:15	Oral	P00497	Cleaning Up Mislabeled Data via Image Plotting Method and Self-Attention Module	Mr. Seung Hyun Ryu, Ms. Hyejin Lee, Mr. Chan Park, Prof. Poogyeon Park
WA11-2	Nov. 30	09:15-09:30	Oral	P00496	Stability analysis of time-varying delay system based on a novel generalized integral inequality utilizing finite-interval quadratic	Mr. Hae Seong Lee, Mr. Jun Hui Lee, Ms. Hyeseung Hong, Prof. Poogyeon Park
WA11-3	Nov. 30	09:30-09:45	Oral	P00463	Application to fractional-delayed state approach for sampled-data multi-agent systems	Prof. Junmin Park
WA11-4	Nov. 30	09:45-10:00	Oral	P00460	Stability analysis of a network controlled helicopter system with asynchronous sampling times	Prof. Seok Young Lee
WA11-5	Nov. 30	10:00-10:15	Oral	P00402	Frequency-Domain Data Augmentation of Vibration Data for Fault Diagnosis using Deep Neural Networks	Ms. Minseon Gwak, Mr. Seung Hyun Ryu, Mr. Yongbeom Park, Mr. Hyeon-Woo Na, Prof. Poogyeon Park
WB1-1	Nov. 30	16:00-16:15	Oral	P00387	Trend Analysis of Registration Technology Between Infrared Images	Mr. Hyeokmin Kwon, Prof. Sungho Kim
WB1-2	Nov. 30	16:15-16:30	Oral	P00384	Explainable artificial intelligence (XAI): How to make image analysis deep learning models transparent	Mr. Haekang Song, Prof. Sungho Kim
WB1-3	Nov. 30	16:30-16:45	Oral	P00363	Comparative Analysis of IR-IR Image Matching Using Classical Techniques	Mr. Seungeon Lee, Mr. Ohtae Jang, Prof. Wangheon Lee, Prof. Sungho Kim
WB1-4	Nov. 30	16:45-17:00	Oral	P00322	IR/EO ship detection and tracking using SiamMask	Ms. Manar Ahmad Alnaasan, Prof. Sungho Kim
WB1-5	Nov. 30	17:00-17:15	Oral	P00234	Semantic Segmentation with Perceiver IO	Graduate Student Keoung Hun Choi, Prof. Jong-Eun Ha
WB1-6	Nov. 30	17:15-17:30	Oral	P00233	Random Swin Transformer	Graduate Student Keoung Hun Choi, Prof. Jong-Eun Ha
WB1-7	Nov. 30	17:30-17:45	Oral	P00194	Scene Text Recognition with Multi-Encoders	Ms. Wang Yao, Prof. Jong-Eun Ha
WB2-1	Nov. 30	16:00-16:15	Oral	P00486	Nonlinear Path-Tracking Control for Unmanned Ground Vehicle	Mr. Kwankyun Byeon, Prof. Wonhee Kim
WB2-2	Nov. 30	16:15-16:30	Oral	P00485	Path Following Control for Unmanned Ground Vehicle	Mr. Hojin Lee, Prof. Wonhee Kim

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WB2-3	Nov. 30	16:30-16:45	Oral	P00375	Emergency Steering Collision Avoidance and Path Tracking System for City Bus Considering Yaw Response	Mr. Sangwon Han, Prof. Kunsoo Huh, Mr. Jaeun Ryu, Mr. Gihoon Kim, Mr. Jaeho Choi
WB2-4	Nov. 30	16:45-17:00	Oral	P00287	Iterative LQR with Discrete Barrier States for Efficient Collision Avoidance of Autonomous Vehicle	Mr. Minsu Cho, Mr. Yeongseok Lee, Prof. Kyung-Soo Kim
WB2-5	Nov. 30	17:00-17:15	Oral	P00261	GRU-Attention based TD3 Network for Mobile Robot Navigation	Mr. Jiayao Jia, Mr. Xiaowei Xing, Prof. Dong Eui Chang
WB2-6	Nov. 30	17:15-17:30	Oral	P00249	Lidar SLAM Comparison in a Featureless Tunnel Environment	Mr. Iulian Filip, Dr. Juhyun Pyo, Mr. Meungsuk Lee, Prof. Hangil Joe
WB3-1	Nov. 30	16:00-16:15	Oral	P00390	Adaptive Sequential Gaussian Sum Approximation for High-Resolution Radar Target Tracking with Non-Gaussian Multi-	Mr. Chan-Seok Lee, Prof. Won-Sang Ra, Graduate Student Hyong-Chan Cho, Graduate Student Bo-Yong Jung
WB3-2	Nov. 30	16:15-16:30	Oral	P00381	Improved Combined Step-size Sign Subband Adaptive Filter Algorithms with Variable Mixing Factors	Mr. Minhoo Lee, Mr. Seongrok Moon, Prof. Poogyeon Park
WB3-3	Nov. 30	16:30-16:45	Oral	P00160	Online Fault Detection for Skid Steered UGV using Neural Network	Mr. Youngwoo An, Prof. Yongsoon Eun
WB3-4	Nov. 30	16:45-17:00	Oral	P00079	Equivalent-Input-Disturbance-Estimator-based Control Design for Polynomial Fuzzy Systems	Dr. Palanisamy Selvaraj, Prof. Oh-Min Kwon
WB3-5	Nov. 30	17:00-17:15	Oral	P00017	System Identification of Rotor/Radial Magnetic Bearing Dynamics	Prof. Hsin-Lin Chiu
WB3-6	Nov. 30	17:15-17:30	Oral	P00230	Design of a Multipurpose Combat Mobile Robot using Localization Sensor	Mr. Rahul Ranjan, Prof. Joongeup Kye, Prof. Kyung-Oh Lee, Prof. Guhyun Kang
WB4-1	Nov. 30	16:00-16:15	Oral	P00180	Multi-Object Perception for Object Grasping on Construction Robots	Mr. Myunghwan Jeon, Prof. Ayoung Kim
WB4-2	Nov. 30	16:15-16:30	Oral	P00283	Human-centered Robot System for Autonomous Cucumber Harvesting: Preliminary Result	Mr. Yonghyun Park, Mr. Jaehwi Seol, Ms. Jeonghyeon Pak, Mr. Yuseung Jo, Mr. Changjo Kim, Prof. Hyoung Il Son
WB4-3	Nov. 30	16:30-16:45	Oral	P00359	Design of a Fruit Harvesting Gripper Specialized in Grasping Arbitrary Spherical and Cylindrical Object	Mr. Seongmo Choi, Prof. Myun Joong Hwang
WB4-4	Nov. 30	16:45-17:00	Oral	P00422	A Multi-Antenna-based Active Tracking System for Localization of Invasive Hornet <i>Vespa velutina</i>	Mr. Bosung Kim, Ms. Jeonghyeon Pak, Graduate Student Chanyoung Ju, Prof. Hyoung Il Son
WB5-1	Nov. 30	16:00-16:15	Oral	P00369	A Resiliency Coordinator Against Malicious Attacks for Cyber-Physical Systems	Prof. Yongsoon Eun, Graduate Student Jaegeun Park, Mr. Yechan Jeong, Prof. Daehoon Kim, Prof. Kyung-Joon Park
WB5-2	Nov. 30	16:15-16:30	Oral	P00316	Resource Allocation for Analog Network Coding Based Bidirectional Relaying	Dr. Kundan Kandhway
WB5-3	Nov. 30	16:30-16:45	Oral	P00257	Symbolic Fault Injection for Plan-based Robotics	Mr. Tim Meywerk, Dr. Vladimir Herdt, Prof. Rolf Drechsler
WB5-4	Nov. 30	16:45-17:00	Oral	P00161	Empowering The Eclipse Arrowhead Framework with a Digital Twin as a Proxy Service	Mr. Abdullah Aziz, Prof. Olov Schelén, Prof. Ulf Bodin, Mr. Lukas Römer, Mr. Sven Erik Jeroschewski, Dr. Johannes Kristan
WB5-5	Nov. 30	17:00-17:15	Oral	P00010	Generation of multiphysical state variables in parallel to kinematic motion simulations by means of co-simulation	Mr. Patrick Eyring, Dr. Jochen Merhof
WB5-6	Nov. 30	17:15-17:30	Oral	P00509	Design and Kinematics Modeling of Flexible Continuum Manipulator for Endoscopic Surgery	Mr. Seong Hyeok Jang, Mr. Junhyun Park, Prof. Minhoo Hwang
WB5-7	Nov. 30	17:30-17:45	Oral	P00508	Design of a Multi-bending Flexible Manipulator for Gastrointestinal Surgery	Mr. Hyojae Park, Prof. Minhoo Hwang
WB6-1	Nov. 30	16:00-16:15	Oral	P00439	Cooperative Gradient-Free Localization and Tracking of Moving Environmental Boundaries by Teams of Nonholonomic Robots	Prof. Alexey S. Matveev
WB6-2	Nov. 30	16:15-16:30	Oral	P00295	Efficient Decentralized Multirobot Task Allocation for Maximizing Total Assignments	Dr. Shengli Wang, Prof. Youjiang Liu

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WB6-3	Nov. 30	16:30-16:45	Oral	P00278	Reliable Distributed Fuzzy Control for Leader-Following Consensus of Nonlinear Multi-Agent Systems with Time-Varying	Mr. Yong Hoon Jang, Prof. Han Sol Kim
WB6-4	Nov. 30	16:45-17:00	Oral	P00250	A Multi-robot Navigation Framework using Semantic Knowledge for Logistics Environment	Mr. Jun-Hyeon Choi, Graduate Student Sang-Hyeon Bae, Graduate Student Sung-Hyeon Joo, Graduate Student Ye-Chan An, Prof. Hyunjin
WB6-5	Nov. 30	17:00-17:15	Oral	P00135	Pinning synchronization for nonlinear multi-agent system via edge betweenness centrality	Mr. Yonggwon Lee, Mr. Yeongjae Kim, Prof. Myeongjin Park, Prof. Ohmin Kwon
WB6-6	Nov. 30	17:15-17:30	Oral	P00006	Self-organized aggregation in swarm robots driven by virtual expectation	Graduate Student Phan Gia Luan, Prof. Nguyen Truong Thinh
WB7-1	Nov. 30	16:00-16:15	Oral	P00420	Localization for mobile robots with a multi-ToF camera system	Ms. Chaewon Park, Dr. Junwoo Jason Son, Prof. Soohye Han
WB7-2	Nov. 30	16:15-16:30	Oral	P00360	Design for Voltage Control Board of AC Magnetic Coil and its Application to 2D Pose Estimation	Mr. Jaehyun Yun, Prof. Sangkyung Sung
WB7-3	Nov. 30	16:30-16:45	Oral	P00262	An Improvement of 3D DR/INS/GNSS Integrated System using Inequality Constrained EKF	Mr. Hoang Viet Do, Ms. Yeong Seo Kwon, Graduate Student Hak Ju Kim, Prof. Jin Woo Song
WB7-4	Nov. 30	16:45-17:00	Oral	P00236	An Integrated Vision/INS/GNSS/Altimeter System for Improved Urban Positioning	Dr. Yu Dam Lee, Graduate Student Taek Geun Lee, Prof. Hyung Keun Lee
WB7-5	Nov. 30	17:00-17:15	Oral	P00156	Performance Analysis of Visual-Inertial Navigation System with Feature Track Parameters	Mr. Jaehyung Jung, Mr. Hanyeol Lee, Prof. Chan Gook Park
WB8-1	Nov. 30	16:00-16:15	Oral	P00514	Optimization Algorithm-based Control of an Electromagnetic Actuation System for a Medical Microrobot Manipulation	Mr. Cuong Manh Hoang, Dr. Jong Oh Park, Dr. Jayoung Kim
WB8-2	Nov. 30	16:15-16:30	Oral	P00513	Stimuli responsive microrobot for medical approaches	Dr. Bobby Aditya Darmawan, Prof. Jong-Oh Park, Prof. Eunpyo Choi
WB8-3	Nov. 30	16:30-16:45	Oral	P00512	Feasibility study of Magnetic Particle Imaging in Anisotropic Magnetic Navigation System	Dr. Kim Tien Nguyen, Graduate Student Phu Minh Bui, Dr. Tuan-Anh Le, Prof. Jungwon Yoon, Prof. Jong-Oh Park, Dr. Jayoung Kim
WB8-4	Nov. 30	16:45-17:00	Oral	P00511	Microparticle Targeting Control using Ultrasound Single Beam : A Preliminary Feasibility Study	Mr. Daewon Jung, Mr. Hiep Xuan Cao, Mr. Han-Sol Lee, Mr. Ho-Yong Kim, Dr. Jong-Oh Park, Prof. Byungjeon Kang
WB9-1	Nov. 30	16:00-16:15	Oral	P00399	Design of 5-DOF Mobile Haptic Interface for Upper Extremity Rehabilitation	Ms. Jueun Choi, Dr. Usman Mehmood, Ms. Sangeun Park, Prof. Youngjin Moon, Mr. Jaesoon Choi
WB9-2	Nov. 30	16:15-16:30	Oral	P00330	Preliminary study of AR navigation-guided core-needle breast biopsy	Graduate Student Nova Eka Diana, Ms. Jegyeong Ryu, Dr. Hee Ryung Lee, Mr. Youngseok O, Dr. Deukhee Lee
WB9-3	Nov. 30	16:30-16:45	Oral	P00280	An Estimation Model of Nasopharyngeal Specimen Collection Path for Non-face-to-face Automatic Sampling Robot	Mr. Yonghwan Moon, Mr. Jihoon Kim, Dr. Suhun Jung, Dr. Sang Kyung Kim, Dr. Jeongryul Kim, Dr. Keri Kim
WB9-4	Nov. 30	16:45-17:00	Oral	P00229	Preliminary Simulation Study of Hyper-Articulated Two-Wire Continuum Interface	Dr. Usman Mehmood, Mr. Jaesoon Choi, Prof. Youngjin Moon
WB10-1	Nov. 30	16:00-16:15	Oral	P00487	Implementation of 100CMM Thermal Storage Combustion Oxidizer for VOCs Reduction	Prof. Dal Hwan Yoon, Prof. Beom-Soon Han, Mr. Hyeon Woo An, Mr. Tae Yeung Lim, Mr. Eun Chan Yang, Mr. Young Woong Kwon, Mr. Chan-Ho
WB10-2	Nov. 30	16:15-16:30	Oral	P00404	Guide for wavelength selection of LEDs for fNIRS systems	Mr. Eugene Jeong, Mr. Minseok Seo, Prof. Kyung-Soo Kim
WB10-3	Nov. 30	16:30-16:45	Oral	P00347	Linear time-varying modeling of inter-organ regulatory system	Mr. Daisuke Eto, Prof. Takashi Nakakuki, Prof. Jun-Ichi Imura
WB10-4	Nov. 30	16:45-17:00	Oral	P00144	A New Metric to Evaluate Material Anisotropy Based on Ultrasound Transverse Wave Imaging	Mr. Seungyeop Lee, Prof. Lucy Youngmin Eun, Prof. Jae Youn Hwang, Prof. Yongsoo Eun
WB10-5	Nov. 30	17:00-17:15	Oral	P00061	Effect of adjusting the height of an LED light source on plant yields in cultivation systems	Prof. Yoshihiko Takahashi, Mr. Kotarou Aihara, Mr. Ryota Tomioka
WB10-6	Nov. 30	17:15-17:30	Oral	P00048	Online Competition of Small Electric Vehicle as an Exercise in Design Education - pico-EV Eco Challenge –	Dr. Takeharu Hayashi, Prof. Yoshihiko Takahashi, Prof. Keigo Hara, Dr. Yasunori Takemura, Mr. Satoru Yamaguchi

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WB10-7	Nov. 30	17:30-17:45	Oral	P00007	An Extended Plant Circadian Clock Model for Characterising Flowering Time under Different Light Quality Conditions	Ms. Miao Lin Pay, Dr. Jesper Christensen, Dr. Fei He, Dr. Laura Roden, Dr. Hafiz Ahmed, Dr. Mathias Foo
WB11-1	Nov. 30	16:00-16:15	Oral	P00294	Improved Stability Criteria for Delay Neural Networks: High-order Matrix-valued Polynomial Approach	Mr. Yongbeom Park, Mr. Hyeon-Woo Na, Mr. Chan Park, Prof. Poogyeon Park
WB11-2	Nov. 30	16:15-16:30	Oral	P00256	An improved stability criterion for systems with time-varying delays via a new Lyapunov-Krasovskii functional	Prof. Seok Young Lee, Prof. Won Il Lee
WB11-3	Nov. 30	16:30-16:45	Oral	P00166	A novel NLMS algorithm based on the joint-optimization scheme	Prof. Jaewook Shin, Prof. Bum Yong Park, Prof. Jinwoo Yoo
WB11-4	Nov. 30	16:45-17:00	Oral	P00122	Local stabilization approach of continuous-time hidden Markovian nonlinear systems	Mr. Bao Gia Hong, Prof. Sung Hyun Kim
WB11-5	Nov. 30	17:00-17:15	Oral	P00121	Improved stabilization criterion for sampled-data linear systems via a refined looped-functional and novel time-integrated states	Graduate Student Khanh Hieu Nguyen, Prof. Sung Hyun Kim
WP-1	Nov. 30	13:20-14:50	Poster	P00436	Object Detection based on R-CNN for Investigating Disaster Sites	Prof. Sun Young Kim, Mr. Devin Lee, Mr. Haven Lee, Prof. Chang Ho Kang
WP-2	Nov. 30	13:20-14:50	Poster	P00427	Classification of Missiles by Optimized 1D-CNN Using Radar Data	Ms. A Ran Kim, Mr. Ha Seon Kim, Prof. Chang Ho Kang, Prof. Sun Young Kim
WP-3	Nov. 30	13:20-14:50	Poster	P00395	Hybrid Deep Learning Model for Spatiotemporal Photovoltaic Power Generation Forecasting	Mr. Won-Hyeon Lee, Mr. Giancarlo Eder Guerra Padilla, Dr. Kun-Jung Kim, Prof. Kee-Ho Yu
WP-4	Nov. 30	13:20-14:50	Poster	P00252	4mCPred-Caps: Identification of DNA N4-methylcytosine sites using CapsuleNet	Mr. Zeeshan Abbas, Prof. Kil To Chong
WP-5	Nov. 30	13:20-14:50	Poster	P00251	i4mC-NN: Identification of 4mC sites in Rosaceae Genome Using Neural Network Architecture With Multiple Encoding	Mr. Mobeen Ur Rehman, Prof. Kil To Chong
WP-6	Nov. 30	13:20-14:50	Poster	P00501	Restored Action Generative Adversarial Imitation Learning from observation for robot manipulator	Mr. Sejun Park, Mr. Junyeong Kim, Mr. Jongcheon Park, Dr. Seungyong Han, Prof. Sangmoon Lee
WP-7	Nov. 30	13:20-14:50	Poster	P00314	Design of Smart Hospital Guide Robot for Elderly Patients	Mr. Byeongseon Choi, Prof. Jaebyung Park
WP-8	Nov. 30	13:20-14:50	Poster	P00503	A study on map-based outdoor positioning through bumper-mounted dual 3D lidar	Mr. Jaehun Jang, Mr. Jihwan Kim, Prof. Kyung Chang Lee
WP-9	Nov. 30	13:20-14:50	Poster	P00298	A Study on Robust Decoupling Control System Design for 6-DoF Active Vibration Isolation Table	Prof. Youngbok Kim, Graduate Student Tan-Ngoc Nguyen, Dr. Huynh Thinh, Dr. Dong Hun Lee
WP-10	Nov. 30	13:20-14:50	Poster	P00297	A Study on Control System Design of A Flying-type Firefighting Robot Using Waterpower and Weight-shifting Mechanism	Prof. Youngbok Kim, Graduate Student Cao-Tri Dinh, Dr. Huynh Thinh, Dr. Dong Hun Lee
WP-11	Nov. 30	13:20-14:50	Poster	P00290	Gait analysis using dual foot-mounted IMUs and waist-mounted RGB-D camera	Mr. Duc Cong Dang, Prof. Young Soo Suh
WP-12	Nov. 30	13:20-14:50	Poster	P00449	Adaptive AHP based Mobile Robot Path Planning Algorithm	Mr. Junseo Lee, Prof. Changwon Kim
WP-13	Nov. 30	13:20-14:50	Poster	P00299	Research on Optimization of End Effector Posture for Welding Robot	Dr. Cheolsu Jeong, Graduate Student Youqiang Zhang, Prof. Sangrok Jin
WP-14	Nov. 30	13:20-14:50	Poster	P00366	Authentication method by time group of CAN message applying lightweight hash chain	Mr. Hyunjun Jang, Dr. Hyeongjun Kim, Dr. Hyun Hee Kim, Prof. Kyung Chang Lee
WP-15	Nov. 30	13:20-14:50	Poster	P00500	Design of dead fish recognition algorithm for farmed fish based on Deep Sort	Mr. Jung-Ho Kang, Ms. Tatiana Keruzel, Dr. Hyeong-Jun Kim, Dr. Hyun-Hee Kim, Prof. Kyung-Chang Lee
WP-16	Nov. 30	13:20-14:50	Poster	P00310	Design of Fishing Net Damage Detection Algorithm using Mesh Hole Grouping	Ms. Suyeon Baek, Mr. Jung-Ho Kang, Ms. Keruzel Tatiana, Dr. Hyeongjun Kim, Dr. Hyun Hee Kim, Prof. Kyung Chang Lee
WP-17	Nov. 30	13:20-14:50	Poster	P00301	Reduction of Vibration Due to Fast Motion of SCARA Robot	Prof. Min Cheol Lee, Graduate Student Songqi Han, Graduate Student Chengqian Li, Graduate Student Jaehyung Kim

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WP-19	Nov. 30	13:20-14:50	Poster	P00192	Robust Feature Tracking for Better Visual-Inertial System using Dynamic Mask	Mr. Gyuhyeon Pak, Mr. Taeyoung Kim, Prof. Euntai Kim
WP-20	Nov. 30	13:20-14:50	Poster	P00341	Test Scenarios of 5G NR-U Transceiver Performance Using Two Mobile Robots	Mr. Dong Yeop Kim, Mr. Keunhwan Kim, Mr. Okjoon Lee, Mr. Seungwon Lee, Dr. Jung-Hoon Hwang, Dr. Young-Ouk Kim
WP-21	Nov. 30	13:20-14:50	Poster	P00105	RGB-D Semantic Segmentation for Mobile Robots	Ms. Suyeon Kim, Ms. Suhyeon Lee, Prof. Euntai Kim
WP-22	Nov. 30	13:20-14:50	Poster	P00362	Application of A Reliable Dynamic Friction Model for Accurate Dynamic Model Parameters Estimation of Robot Manipulators	Mr. Meseret Abayebas Tadese, Dr. Francisco Yumbla, Dr. Nabih Pico, Prof. Hyungpil Moon
WP-23	Nov. 30	13:20-14:50	Poster	P00268	Geometric Recognition of Diverse Terrain in Real-Time for a Six-Wheeled Robot based on Laser Scanning Sensors	Mr. Nabih Pico, Mr. Eui-Chan Kim, Mr. Sang-Heyon Park, Mr. Meseret Tadese, Mr. Huy Nguyen Tran, Mr. Beomjoon Lee, Prof. Hyungpil Moon
WP-24	Nov. 30	13:20-14:50	Poster	P00382	Manufacturing Intelligence Collaboration Framework for Autonomous Manipulation System	Dr. Hyonyoung Han, Dr. Joonmyun Cho, Dr. Junhee Park
WP-25	Nov. 30	13:20-14:50	Poster	P00272	Mobile Manipulator Based Autonomous Transport System for Intelligent Factory Manufacturing Logistics.	Mr. Ji-Hyun Park, Dr. Taeyoung Uhm, Ms. Na-Hyun Lee, Mr. Gi-Deok Bae, Mr. Jong-Deuk Lee
WP-26	Nov. 30	13:20-14:50	Poster	P00499	Deep learning based physical property estimation of an object using gripper with tactile sensor	Mr. Hyunsuk Huh, Dr. Jeong-Jung Kim, Dr. Doo-Yeol Koh, Dr. Chang-Hyun Kim, Prof. Seungchul Lee
WP-27	Nov. 30	13:20-14:50	Poster	P00232	In-hand Objects Classification Through Sparse Tactile Point Clouds for Robot Manipulation	Mr. Sanghoon Yang, Graduate Student Won Dong Kim, Prof. Jung Kim
WP-28	Nov. 30	13:20-14:50	Poster	P00459	Conversion of mesh map using surface parameterization for 3D coverage path planner	Mr. Duckyu Choi, Prof. Hyun Myung
WP-29	Nov. 30	13:20-14:50	Poster	P00450	Control of Mobile Cable-Tensioning Platform for Assisting Crouch Gait	Mr. Seongyun Cho, Prof. Hyung-Soon Park
WP-30	Nov. 30	13:20-14:50	Poster	P00457	Robotic assembly strategy with compliance control for wiring harness manufacturing	Dr. Youngsu Cho, Dr. Dong Il Park, Dr. Jongwoo Park, Dr. Seonghyuk Song, Dr. Joonho Lee, Dr. Byung-Kil Han
WP-31	Nov. 30	13:20-14:50	Poster	P00458	Study of Ground penetrating radar(GPR) based on morphology dependent resonance(MDR) phenomenon for monitoring of self-	Mr. Taeuk Lim, Mr. Yeong Jun Lee, Mr. Hao Cheng, Mr. Jie Hu, Prof. Wonsuk Jung
WP-32	Nov. 30	13:20-14:50	Poster	P00182	Unsupervised Sim-Real Synchronization of the Soft Robot with Proprioceptive Sensors using Latent Representation Learning	Ms. Chaeree Park, Mr. Hyunkyung Park, Prof. Jung Kim
WP-33	Nov. 30	13:20-14:50	Poster	P00484	Lightweight Room Layout Estimation using a Single Panoramic Image	Graduate Student Dayoung Kil, Prof. Seong-Heum Kim
WP-34	Nov. 30	13:20-14:50	Poster	P00235	Target speaker recognition in the cocktail party	Dr. Dae-Jin Jung, Dr. Sunyoung Cho, Dr. Tae Yoon Chun, Mr. Soo Sung Yoon
WP-35	Nov. 30	13:20-14:50	Poster	P00110	A Consideration of Mechanical Kansei: Latent Representation of Topology-Optimized Structures in Variational Autoencoder	Prof. Toshio Hira
WP-36	Nov. 30	13:20-14:50	Poster	P00055	Improving Vision Transformer with Multi-Task Training	Mr. Woo Jin Ahn, Graduate Student Geun Yeong Yang, Prof. Hyun Duck Choi, Prof. Myo Taeg Lim, Prof. Tae-Koo Kang, Ms. Yu Jin Kim
WP-37	Nov. 30	13:20-14:50	Poster	P00050	Adversarial Domain Adaptation for Noisy Speech Emotion Recognition	Dr. Sunyoung Cho, Mr. Soosung Yoon, Mr. Hyunseung Song
WP-38	Nov. 30	13:20-14:50	Poster	P00396	Perceptual Object-centric Learning for High-level Representation	Mr. Donghun Lee, Dr. Hyunsoek Kim
WP-39	Nov. 30	13:20-14:50	Poster	P00075	Improvement of Denoising Performance of the Micro-Doppler Radar Spectrogram Image based on the cycleGAN	Mr. Kwangyong Jung, Dr. Nammoon Kim, Mr. Jeongwoo Kim, Mr. Sawon Min
WP-40	Nov. 30	13:20-14:50	Poster	P00046	Automatic Segmentation of Hemorrhage Regions in Laparoscopic Surgery for Bleeding Monitoring System	Graduate Student Dan Yoon, Mr. Byeongsoo Kim, Mr. Dong Hyun Choi, Dr. Min Hyuk Lim, Prof. Minwoo Cho, Ms. Mira Yoo, Ms. Eunju Lee, Dr. Yun-

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WP-41	Nov. 30	13:20-14:50	Poster	P00401	Automatic Lane Change System with Double Loop PID Algorithm	Mr. Junki Hong, Mr. Jaehwan Choi, Mr. Sooho Woo, Mr. Jeahong Lee, Prof. Soon-Geul Lee, Mr. Jaehyeong Kim, Mr. Kyungsu Cha
WP-42	Nov. 30	13:20-14:50	Poster	P00271	Autonomous Indoor Proximity Flight of a Quadcopter Drone Using a Directional 3D Lidar and VIO Sensor	Dr. Jong Tai Jang, Prof. Wonkeun Youn
WP-43	Nov. 30	13:20-14:50	Poster	P00264	Range-only Relative Position Estimation for Multi-UAV	Mr. Junho Choi, Mr. Eungchang Lee, Mr. Myeongwoo Jeong, Mr. Duckyu Choi, Prof. Hyun Myung
WP-44	Nov. 30	13:20-14:50	Poster	P00217	Development of an Autonomous Mobile Robot in the Outdoor Environments with a Comparative Survey of LiDAR SLAM	Mr. Minsu Kim, Mr. Miaojun Zhou, Mr. Seoungwoo Lee, Prof. Hyeonbeom Lee
WP-45	Nov. 30	13:20-14:50	Poster	P00209	Development of the Autonomous Navigation Algorithm based on the Geometric Method for Skid Steering Vehicles: Convergence	Mr. Junghyun Kim, Prof. Carl D. Crane, Prof. Jungha Kim
WP-46	Nov. 30	13:20-14:50	Poster	P00130	Data-driven Design of Model Error Compensator and Fictitious Reference Signals for Vehicle Velocity Control of Autonomous	Dr. Motoya Suzuki, Dr. Shuichi Yahagi
WP-47	Nov. 30	13:20-14:50	Poster	P00510	Scalable, Real-time, and Remotely Controlled vehicles using Cloud Computing for Emergency Intervention Situations	Dr. Hisham Khalifa Khalifa Mahmoud Abdalla, Mr. Yoonha Ryu, Prof. Deokjin Lee
WP-48	Nov. 30	13:20-14:50	Poster	P00056	Data-driven Intelligent Feeding System for Pet Care	Mr. Ravi Ghimire, Prof. Jae Weon Choi