

Date	Session	Time	Authors	Title
11/7 (Thr.) Room A	TA1-1	9:30 - 9:45	Naoya Hasegawa and Makoto Terashita	Positioning airbrushes for cleaning bag filters infiltration-type dust collectors of waste incinerators using image recognition
	TA1-2	9:45 - 10:00	Yuma Yabuki, Sunao Nakamaru, Aki Yokoyama, Naoyuki Takesue, Hiroyuki Kaneko, Muhammad Fauzan Mahfuzh, Kenichi Nakamura, Kenichi Mizuno, Takahiro Sakai and Satoshi Suzuki	Path Following and Obstacle Avoidance for Omnidirectional Unmanned Surface Vehicle
	TA1-3	10:00 - 10:15	Yukie Kiriya, Daichi Nishio, Kenichi Ohara, Kazuki Moriya, Masato Iijima, Koji Hayashi	Development of individual identification system based on handrail vibration information
	TA1-4	10:15 - 10:30	Masaki Abe and Nobuhiro Okada	Proposal for a mobility mechanism for a window cleaning robot using soft vinyl chloride suction cups
	TA1-5	10:30 - 10:45	Soshiro Maruoka, Masayoshi Ozawa, Samuel Amar Julien, Tadahiro Oyama, Masahiro Sakai, Shuhei Ikemoto and Toshihiko Shimizu	Indoor and outdoor autonomous work robots for the lap challenge
	TA1-6	10:45 - 11:00	Daigo Katayama, Shinsuke Yasukawa, Yuya Nishida and Kazuo Ishii	Evaluation of A Self-Positioning System Using A Smartphone for Inspection Inside A Box-Girder Bridge
	TA2-2	13:25 - 13:40	Chi Jie Tan, Titan Janthori and Eiji Hayashi	Autonomous Driving: Semantic Mapping and Costmap in Shore Area
	TA2-3	13:40 - 13:55	Rut Yatigul, Chi Jie Tan and Eiji Hayashi	Innovative Approaches to Seashore Cleanup: Instance Segmentation in Marine Garbage Detection and Tracking for Beach Cleaning Robot
	TA2-4	13:55 - 14:10	Weizheng Pan, Chi Jie Tan and Eiji Hayashi	Autonomous Transport Robots Using AI Technology for Marine Debris—Development of Interactive Interface—Analytical Formulation of Coupled Path and Speed Planning for Speed Adjustment and Lane Changing on Straight Sections
	TA2-5	14:10 - 14:25	Tohru Yoshioka and Keisuke Suzuki	—Study of Application for Driving Assist and Autonomous Driving —
	TA3-1	14:50 - 15:05	Md Abul Munjer, Chi Jie Tan and Eiji Hayashi	Real-Time Tree Pose Map Estimation using Forestry Robot
	TA3-2	15:05 - 15:20	Weeraphat Wongbunnak and Eiji Hayashi	A Facial Expression Recognition and Robotic Assistance System for Bedridden Elderly Care
	TA3-3	15:20 - 15:35	Trane Janthori, Chi Jie Tan and Eiji Hayashi	Drone-Based Autonomous Navigation and Garbage Detection System on Seashores
	TA3-4	15:35 - 15:50	Atsufumi Hashiba, Mami Tanaka and Takeshi Okuyama	Study on Estimating the Tip Force of an Object in a Pen Grip Posture
	TA3-5	15:50 - 16:05	Nobuo Sakai, Yuki Takasugi, Fumiya Kitaoka, Kaori Kaneko and Katsuki Hayashi	Development of robotic musculoskeletal walking simulator for biomechanism analysis of human walk
	TA4-1	16:30 - 16:45	Sayaka Shima, Takeshi Okuyama and Mami Tanaka	Study on elucidate the relationship between body surface vibration and muscle condition of the lower leg during running
	TA4-2	16:45 - 17:00	Yugo Matsui, Shota Yoshida, Chihiro Nakagawa and Atsuhiko Shintani	Enhancing stability and safety in autonomous driving on a hands-free standing vehicle using AR goggles-based information systems
	TA4-3	17:00 - 17:15	Shota Kawaminami, Takeshi Okuyama and Mami Tanaka	Designing a Slider System Controlled by 3D Motion Capturing Data
	TA4-4	17:15 - 17:30	Chihiro Nakagawa, Yugo Matsui and Atsuhiko Shintani	Can equations of motion be derived using LLMs? Exploring future possibilities
	11/7 (Thr.) Room B	TB1-1	9:30 - 9:45	Rikuto Suzuki, Yutaka Hiroi and Akinori Ito
TB1-2		9:45 - 10:00	Tianyi Wang, Yuko Ohno and Keisuke Shima	Comparative Analysis of Effort-Reward Imbalance in Passive and Proactive Human-Robot Interaction During Sit-To-Stand Transition with Assistance Robots
TB1-3		10:00 - 10:15	Prem Gamolped, Nattapat Koomklang and Eiji Hayashi	Dual-Arm Robotic Systems for Autonomous Food Handling on a Moving Conveyor
TB1-4		10:15 - 10:30	Kohki Nomura and Masahiro Shibuya	Study of an Interactive Robot Teaching Method
TB1-5		10:30 - 10:45	Kosei Yamao, Daiju Kanaoka, Kosei Isomoto and Hakaru Tamukoh	Task Planning System for Home Service Robots Capable of Commands Containing Abstract Nouns
TB1-6		10:45 - 11:00	Tomoya Shiba and Hakaru Tamukoh	Validation of a Robot Vision System for Home Rule Enforcement Using AI Models: Lessons from RoboCup@Home 2023
TB2-1		13:10 - 13:25	Kakeru Yamasaki and Tomohiro Shibata	Reducing the Degrees of Freedom of a Dressing Assistance Robot
TB2-2		13:25 - 13:40	Daisuke Shionoiri and Yukiko Osawa	Fluid-Based Contact Detection and Thermal Display
TB2-3		13:40 - 13:55	Ryota Kashiwagi, Takayuki Mukaeda and Keisuke Shima	Electromyogram Control of prosthetic hand on FPGA with Approximate Gaussian Mixture Open-Set Recognition Model
TB2-4		13:55 - 14:10	Kun Qi and Yasumichi Aiyama	Development of a Vacuum Hand for Dense Arrangement of Various Objects in a Narrow Space
TB2-5		14:10 - 14:25	Juan Daniel Manzano Salas, Wataru Fujita and Tomohiro Shibata	The Development of an Adaptive Lower Limb Exoskeleton to Reduce Physical Strain During Prolonged Standing Activities
TB2-6		14:25 - 14:40	Kazuaki Aoto, Nobutaka Mukae, Kotaro Yoshikai, D.S.V. Bandara, Keisuke Osawa and Jumpei Arata	An exploratory study on quantitative assessment of stroke patients using an objective method based on myopotential output
TB3-1		14:50 - 15:05	Yuki Odagiri, Yuki Fukatu, Hiroki Kawagishi and Hiroki Shigemune	Investigation of thick paper self-folding method focusing on weighting
TB3-2		15:05 - 15:20	Moe Iida, Ryo Takashima, Yugo Takashima and Hiroki Shigemune	Investigation of Automatic Derivation Methods for Design Patterns in Self-folding of Paper Using Parametric Design
TB3-3		15:20 - 15:35	Shin Yonemoto, Hiroki Kawagishi and Hiroki Shigemune	Flattening and Non-Contact Transformation Methods of Self-folded Origami Structure
TB3-4		15:35 - 15:50	Toshihiko Shimizu, Souta Niga, Masayoshi Ozawa, Samuel Amar Julien and Shuhei Ikemoto	Jamming robotics based on powder figures drawn by vibration
TB3-5		15:50 - 16:05	Souta Niga, Masayoshi Ozawa, Samuel Amar Julien, Shuhei Ikemoto and Toshihiko Shimizu	Comb-shaped linear jamming transition with composite material fiber
TB3-6		16:05 - 16:20	Riku Kikuchi, Keisuke Osawa, D.S.V. Bandara and Jumpei Arata	Film-Finger—Underactuated, self-adaptable and sheet-like finger mechanism—
TB4-1		16:30 - 16:45	Yutaka Hara, Samuel Amar Julien, Toshihiko Shimizu, Masayoshi Ozawa, Ikuto Fujimoto and Shuto Mogi	Development of a tensegrity prism module for robotic arm conception
TB4-2		16:45 - 17:00	Tufail Ahmad Bhat, Yuhei Yoshimitsu, Kazuki Wada and Shuhei Ikemoto	Shape Estimation of Tensegrity Based on Posture Information of Each Strut
TB4-3	17:00 - 17:15	Yuhei Yoshimitsu and Shuhei Ikemoto	Improvement of range of motion of a hyper-redundant tensegrity manipulator	
TB4-4	17:15 - 17:30	Kazuki Wada, Yuhei Yoshimitsu and Shuhei Ikemoto	Direct teaching of tensegrity manipulators based on posture information of each strut	
TC1	TC1-1	9:30 - 9:45	Chang-Wen Wang, Yue Zhang, Keisuke Osawa, Kei Nakagawa and Eiichiro Tanaka	Emotion Recognition Feedback System for Rehabilitation Using Wavelet Transform and LSTM
	TC1-2	9:45 - 10:00	Kazuhiro Noguchi, Yasunori Takemura, Sora Nakaza, Kotaro Nakano, Wataru Kaishita, Shuhei Nohara, Moeko Tominaga, Masakatsu Nagae and Yoshiyuki Taira	Analysis of Consumer Behavior Patterns Using In-Store Video Data in the Apparel Industry

11/7 (Thr.) Room C	TC1-3	10:00 - 10:15	Yuto Sugai, Tatsuya Nakayama and Yutaka Uchimura	Deep Reinforcement Learning of Construction Path by NetworkModel of Sediment Dynamics
	TC1-4	10:15 - 10:30	Akinobu Mizutani, Yuichiro Tanaka, Hakaru Tamukoh, Osamu Nomura, Katsumi Tateno and Takashi Morie	A Brain-Inspired Environment-Specific Knowledge System withCommon Knowledge from Large Language Model for Home ServiceRobots
	TC1-5	10:30 - 10:45	Takumi Yoshihara, Shun Yonehara and Yuma Yoshimoto	The Effectiveness of Using LLMs for Action Plan Generation
	TC1-6	10:45 - 11:00	Yuichiro Tanaka and Hakaru Tamukoh	A Preliminary Study toward Reinforcement Learning ofMultiple Continual Tasks based on Reservoir Computing
	TC2-1	13:10 - 13:25	Gaku Takasawa, Jun Miura and Kenji Koide	Elevator-Based Multi-Story Navigation for Personal MobilitySystems
	TC2-2	13:25 - 13:40	Kazuma Sakakibara, Yuga Yano, Yukiya Fukuda and Hakaru Tamukoh	Evaluation of Lane Detection Using a Dataset Specific toMissing Lane Scenarios
	TC2-3	13:40 - 13:55	Tsubasa Abe and Hanwool Woo	Path Planning in Unknown Environments Considering TerrainRoughness and Dead Ends
	TC2-4	13:55 - 14:10	Yuta Murakami, Tomohito Takubo and Tetsuo Tsujioka	Wrong FIX detection of RTK-GNSS positioning using the shapeof the surrounding environment
	TC2-5	14:10 - 14:25	Obada Al Aama, Davaanyam Jargal, Takahiro Koga, Tomoki Taniguchi, Junya Oishi, Shigeru Nemoto, Wataru Mizushina, Kazuki Hirao, Hakaru Tamukoh and Hiroaki Wagatsuma	Lanelet2 and Ontology Integration for Decision-Making inAutonomous Driving Systems
	TC2-6	14:25 - 14:40	Ryosuke Takeda, Satoko Abiko, Teppei Tsujita and Daisuke Sato	Force-based Airflow Disturbance Compensation Using ModelPredictive Control by Sharing External Forces Informationin Vertical Crossing Flights
	TC3-1	14:50 - 15:05	Nesma Ahmed, Higashi Ariaki and Kurita Yuichi	Smartphone Camera Based Motion Assessment InvolvingReference Systems
	TC3-2	15:05 - 15:20	Ayuko Saito, Natsuki Sai and Satoru Kizawa	A study on characteristics of shank accelerations duringnormal gait
	TC3-3	15:20 - 15:35	Kosuke Murakami, Akihisa Ohya and Ayanori Yorozu	Space-Time-Separable Graph Convolutional Network basedLower Limb Motion Prediction for Robot Following
	TC3-4	15:35 - 15:50	Tatsuya Ueta, Masaki Nagai, Masaru Ito, Yoichiro Yamazaki, Seiji Saiki and Yuichi Kurita	Effect of Motion Seat Information Presentation on TiltPerception in Hydraulic Excavators for TeleoperatedExcavators
	TC3-5	15:50 - 16:05	Shunsuke Ikeda and Motomu Nakashima	Stabilization of rolling in crawl swimming for the swimminghumanoid robot
	TC3-6	16:05 - 16:20	Maho Yamamoto and Daisuke Sato	Human Motion Analysis of Rotational Jump With Arm SwingUtilizing the Whole-Body Motion Controller for Humanoidrobots
TC4-1	16:30 - 16:45	Masaharu Komori, Rintaro Koyano, Yuya Suematsu and Tatsuro Terakawa	Ability mining of manipulation by foot postural change-Fundamental investigation into the operatingcharacteristics of the heel-supported foot-	
TC4-2	16:45 - 17:00	Yuma Ito, Takayuki Tanaka and Takashi Kusaka	Motor Imagery Training System based on the EquilibriumTrajectory Hypothesis	
TC4-3	17:00 - 17:15	Saizo Kamei, Takashi Kusaka, Taro Nakamura, Fumio Ito, Takashi Itsuno, Riku Takakuwa and Takayuki Tanaka	Development of Augmented Jump SLIP model and ItsOptimization based on Impulse Analysis	
TC4-4	17:15 - 17:30	Hiroaki Kawamoto and Atsuhiko Kamo	Design of a Prototype Impulse Stimulation System Utilizinga Stepper for Bone Strengthening	