

Date	Session	Time	Authors	Title
	FA1-1	9:00 - 9:15	Junbo Zhang, Weiwei Wan, Nobuyuki Tanaka, Miki Fujita, Koichi Takahashi and Kensuke Harada	Robotic experiment for chemical stimulation on single-leaf samples in plant biology
	FA1-2	9:15 - 9:30	Mami Akaike, Jun Hatakeyama, Yoichi Saito, Kenji Shimamura, Yoshitaka Nakanishi and Yuta Nakashima	Development of a pressure measurement device for microspace within biological systems
	FA1-3	9:30 - 9:45	Rafia Inaam, Shalini Nagabooshanam, Okamoto Shunya, Shibata Takayuki and Moeto Nagai	Gradient Generation in Ellipsoidal Microwells with PDMS-based SlipChip for Chemical and Pharmaceutical Applications
	FA1-4	9:45 - 10:00	Yuriya Ishikawa, Takashi Kusaka, Asahi Matsuda, Takayuki Mukaeda, Shiho Ishikawa, Ryotaro Inoguchi and Takayuki Tanaka	HSMM based dairy cows behavior model capable of capturing changes due to food intake
	FA1-5	10:00 - 10:15	Ryo Suzuki, Yuta Nakashima and Yoshitaka Nakanishi	Microfluidic Devices through Surface Microfabrication
	FA1-6	10:15 - 10:30	Momoko Kumemura and Mehmet C. Tarhan	MEMS tweezers for molecular manipulation and biomechanical characterization
	FA2-1	10:40 - 10:55	Naoki Takeishi, Tomohiro Nishiyama and Masako Sugihara-Seki	Estimation of the deformability of human red blood cells from rheometrical data - Numerical-experimental integrated analysis-
	FA2-2	10:55 - 11:10	Yuudai Aokusa, Yibo Ma and Yoko Yamanishi	On-demand perforation using electrically induced microbubble for improvement of needle-free reagent injection volume
	FA2-3	11:10 - 11:25	Hiroki Ota, Yuji Isano, Yuta Kurotaki, Ryosuke Matsuda, Yusuke Miyake, Tamami Takano, Yutaka Isoda and Kentaro Kuribayashi	Wearable Smart Stretchable Device with Machine Learning for Motion Sensing
11/8 (Fri.) Room A	FA2-4	11:25 - 11:40	Kaori Kuribayashi-Shigetomi, Takashi Horiyama and Ryuhei Uehara	What is the ideal origami development diagram for cells?—3D tissues produced by origami and micro/nano technologies—
	FA2-5	11:40 - 11:55	Aniket Mishra, Shunya Okamoto, Takayuki Shibata and Moeto Nagai	Integrating nanosecond pulsed laser and motorized stages with photoabsorber micropatterns for high-throughput site-specific cell processing
	FA3-1	13:10 - 13:25	Abdullah Alraee, Hussam Alraie, Mohammad Albaroudi, Raji Alahmad and Kazuo Ishii	Tennis Ball Detection using YOLOv8 for Mobile Robot Ball Collection
	FA3-2	13:25 - 13:40	Hayato Osaki and Kiichiro Ishikawa	Automated common point group extraction using scene graphs
	FA3-3	13:40 - 13:55	Koyomi Tagomori and Takashi Yoshimi	Estimation of size and distance of objects on the road using eye-level of a monocular camera
	FA3-4	13:55 - 14:10	Maiku Kawamata and Yuma Yoshimoto	Development of an Algorithm for Estimating Hand-Raising States
	FA3-5	14:10 - 14:25	Ryuta Toyoda, Ninnart Fuengfusin and Hakaru Tamukoh	Developing Spatio-Temporal-Mode Filter Circuit for Event-based Vision Sensors
	FA3-6	14:25 - 14:40	Saito Hiramatsu, Tomohito Takubo, Tetsuo Tuijoka and Hiroto Sakahara	6D pose estimation by bottom surface estimation of simple shaped objects using RGB Images
	FA4-1	14:50 - 15:05	Noritaka Yokoi, Risa Morishima, Yudai Yamoto and Junichi Meguro	Reducing Body Discrepancy in VR Experiences in the Lying Down Position Using Posture Adjustment Devices —Basic Verification Focusing on Physical Change and Speed—
	FA4-2	15:05 - 15:20	Risa Morishima, Noritaka Yokoi and Junichi Meguro	Verification of Effects of Postural Discrepancies on VR Fall Experience
	FA4-3	15:20 - 15:35	Rin Kaneko, Satoko Abiko and Teppei Tsujita	Real-Time Deformation Computation Using DNN for Retraction of the Cerebral Fissure in Neurosurgical Simulators
	FA4-4	15:35 - 15:50	Takuya Fujinaga	Simulation of an Autonomous Navigation Method for Agricultural Robots in a Virtual Environment
	FA4-5	15:50 - 16:05	Shogo Fujita and Satoshi Suzuki	Aerodynamics and Flight Data Analysis of Small Multi-rotor UAVs in Confined Spaces
	FA4-6	16:05 - 16:20	Masato Ishii, Satoko Abiko, Ryosuke Takeda, Teppei Tsujita and Daisuke Sato	Airflow Disturbance Compensation for Entering a Veranda Based on Airflow Mapping in a Narrow Space
	FB1-1	9:00 - 9:15	Kaito Hirae, Geunho Lee and Hayato Kawadu	Movement Control of Mobile Platform for Autonomous Infrastructure Inspection Robot
	FB1-2	9:15 - 9:30	Kazuaki Itoya and Takahiro Inoue	Thermal Image-based Human Tracking Using an Improved Bicubic Interpolation
	FB1-3	9:30 - 9:45	Shiryu Kuroda, Koki Aoki, Tomoya Sato, Yoshiki Ninomiya and Junichi Meguro	Integrated Position Estimation Method of Scan Matching and RTK-GNSS Considering Environmental Uncertainty
	FB1-4	9:45 - 10:00	Rintaro Ozaki, Kosei Takanezawa, Naoyuki Takesue, Junichi Hiruma and Joshua Mikado	Detecting and Overcoming Step by Wheeled Mobile Robot with Step Overcoming Mechanism
	FB1-5	10:00 - 10:15	Yuuka Iwamura and Yoji Kuroda	Avoidance of moving obstacles based on predictions of future pose by a differential drive robot with steering
	FB1-6	10:15 - 10:30	Kosei Isomoto, Yuichiro Tanaka, Hakaru Tamukoh, Katsumi Tateno, Osamu Nomura and Takashi Morie	A Hippocampus-Inspired System to Memorize Event Sequences for Autonomous Mobile Robots
	FB2-1	10:40 - 10:55	Kenji Kimura, Shota Chikushi and Kazuo Ishii	Study on the Comprehensiveness of the Sphere General Kinematics by Driving Rollers
	FB2-2	10:55 - 11:10	Tomotoshi Fukushima and Takahiro Inoue	Collaborative Running of Multiple Mobile Robots Using Image-Based Machine Learning and WiFi communication
	FB2-3	11:10 - 11:25	Akinori Fukushima, Renato Miyagusuku and Koichi Ozaki	Accuracy Evaluation Considering Resampling Threshold Using ESS for Running Stops to Realize Luggage Transport by LRT
	FB2-4	11:25 - 11:40	Gaku Suyama, Tomohito Takubo and Tetsuo Tsujioka	Path planning based on passable area symbol detection
	FB2-5	11:40 - 11:55	Yuki Koyama, Hiroaki Kawamoto, Akira Uehara, Akihisa Ohya and Ayanori Yoroze	Dynamic Obstacle Avoidance in Crowded Environment Using Deep Reinforcement Learning for Autonomous Mobile Robot
	FB2-6	11:55 - 12:10	Haruka Nakamura and Genya Ishigami	Towards Collaborative Object Transportation Control by Tethered Mobile Robot Twins
	FB3-1	13:10 - 13:25	Kensho Osugi, Reo Nishio, Yuta Hanazawa and Shinichi Sagara	Impedance control of a dual arm 3-link underwater robot-Improved control performance with model error compensator-
11/8 (Fri.) Room B	FB3-2	13:25 - 13:40	Raji Alahmad, Dominic Solpico, Shoun Masuda, Takahito Ishizuka, Kenta Naramura, Zhangchi Dong, Zongru Li and Kazuo Ishii	Enhancement of Underwater Videos to Improve Recognition and Tracking of Fish in Marine Aquaculture
	FB3-3	13:40 - 13:55	Masayoshi Ozawa and Toshihiko Shimizu	Evaluation Method of the Adhesion Performance of Underwater Adhesion Drones in Turbulent Flow

	FB3-4	13:55 - 14:10	Hiroshi Yoshida, Shinnosuke Sakaya, Masaharu Takahashi and Makoto Sugawara	An Electromagnetic Navigation of the Underwater Robot for Under-ice Survey in Polar region
	FB3-5	14:10 - 14:25	Riku Okamoto, Masayoshi Ozawa, Huka Masai, Toshihiko Shimizu, Masahiko Sakai, Tadahiyo Oyama, Julien Amar and Hirotaka Tahara	Improved identification evaluation of side-scan sonar for blue carbon on land
	FB3-6	14:25 - 14:40	Han Xu and Yuya Nishida	Applying a Model Combining Attention Mechanism and CycleGAN for Underwater Image Enhancement
	FB4-1	14:50 - 15:05	Toru Kuga, Toshiyuki Yokoue, Miyuki Saiki and Hisashi Sugiura	A Cutting-Suctioning-Feeding end effector for large tomato harvesting
	FB4-2	15:05 - 15:20	Hiroyuki Terai and Shinsuke Yasukawa	3D Reconstruction of Plant Structures Covered by Leaves—Toward a Simulator to Assist Agricultural Automation—
	FB4-3	15:20 - 15:35	Ryotaro Inoguchi, Asahi Matsuda, Takayuki Tanaka, Takashi Kusaka, Takayuki Mukaeda, Shiho Ishikawa and Yuriya Ishikawa	An Image-based Measurement for Estimating Feed Intake in Daily Cows
	FB4-4	15:35 - 15:50	Hikaru Sato and Kazuo Ishii	Basic study of an agricultural robot system designed to adopt its on-board equipment depending on working tasks
	FB4-5	15:50 - 16:05	Renta Makishima, Masayuki Ozawa, Samuel Amar Julien, Shuhei Ikemoto and Toshihiko Shimizu	Tomato harvesting robot with universal vacuum hand
	FB4-6	16:05 - 16:20	Moeko Tominaga, Yasunori Takemura, Takashi Sonoda, Atsushi Sanada and Kazuo Ishii	Report on the Junior League at the Tomato Robotics Competition
	FC1-1	9:00 - 9:15	Tatsuya Shirai and Sousuke Nakano	Development of Multi-Motor Power Unit
	FC1-2	9:15 - 9:30	Kazuyuki Ouchi	Light Transmission System
	FC1-3	9:30 - 9:45	Ayumu Yamamoto, Kota Taoka, Koh Hirakawa, Yoshiki Yanagita, Yuko Miyamura, Yohji Yamamoto, Takeshi Tachibana, Tetsuya Kimura and Masaaki Tamagawa	Development of Measuring Method for Continuous Blood Pressure by Camera and Impinging Jet Flow
	FC1-4	9:45 - 10:00	Wen Chiang Lim and Masahiro Takaiwa	High Precision Compensator-based Control System for Standard Rotary Pneumatic Actuator with Rubber Packing
	FC1-5	10:00 - 10:15	Yuki Usami, Kouki Kimizuka, Saman Azhari, Syoshi Tokuno, Shuhei Ikemoto, Hakaru Tamukouh and Hirofumi Tanaka	In-sensor computing device made of CNT-PDMS porous nanocomposites
	FC1-6	10:15 - 10:30	Hiroyuki Harada, Yuto Nozawa, Soki Ito, Yusuke Tajima and Takamitsu Wakui	A Trial for Waveform Optimization with Reinforcement Learning in Sound Generation with SMA Actuators
	FC2-1	10:40 - 10:55	Julien Amar, Toshihiko Shimizu, Masayoshi Ozawa, Shuto Mogi, Yutaka Hara, Ikuto Fujimoto and Kazuto Imai	Grasping contact point position optimization for object orientation control using Exponential Coordinates and Genetic Algorithms
	FC2-2	10:55 - 11:10	Hao Zhou, Masahiro Miyazaki and Kazuhiro Shimonomura	NailTact: Tactile Fingertip that Senses Contact at FingerPad and Nail
	FC2-3	11:10 - 11:25	Yuki Nakadera, Kakeru Yamasaki and Tomohiro Shibata	Picking of Piled Clothing Using Deep Reinforcement Learning and Active Object Recognition Method
	FC2-4	11:25 - 11:40	Shuya Wada, Masayoshi Ozawa, Julien Amar, Shuhei Ikemoto and Toshihiko Shimizu	In-Hand Manipulation with Soft Grippers using Pressure Distribution Control and Torsion
	FC2-5	11:40 - 11:55	Satoshi Makita, Aoi Hayashida and Takuya Otsubo	A Discrete Exploration of Object Configuration for Three-dimensional Caging Grasps
11/8	FC2-6	11:55 - 12:10	Sou Izumi and Shuhei Ikemoto	Development of an attachment device to directly measure the effective suction force of suction grippers
(Fri.)	FC3-1	13:10 - 13:25	Peter Panorel and Nagaoka Kenji	XCLIMBER: Design and Development of an Energy-Efficient Free-Climbing Robot with Self-Locking Mobility for Extreme Terrain
Room C	FC3-2	13:25 - 13:40	Jorge Ruben Casir Ricano, Ryota Hino, Tomoki Koshi, Yuzuki Fukata, Taichi Nakamura and Kenji Nagaoka	Dynamic Fault Detection and Reconfiguration System for Planetary Exploration Rovers
	FC3-3	13:40 - 13:55	Akio Toyoshima and Akio Yamamoto	Single CMG-driven Quasi-Passive Dynamic Walker
	FC3-4	13:55 - 14:10	Ikuto Fujimoto, Julien Amar, Shuto Mogi, Yutaka Hara, Toshihiko Shimizu and Masayoshi Ozawa	Torque Control of Tree-type Manipulator Using Exponential Coordinates
	FC3-5	14:10 - 14:25	Ryuto Sakamoto, Yoshinori Fujihira, Takuma Mizutani, Naohiko Hanajima and Masato Mizukami	Proposal and Basic Verification of Variable Stiffness Pin Array Finger using Powder Aeration
	FC3-6	14:25 - 14:40	Ayumu Tominaga, Moeko Tominaga, Yasunori Takemura and Kazuo Ishii	Development of a Non-Contact Plunger Displacement Measurement System for Direct Impact Solenoids
	FC4-1	14:50 - 15:05	Shreyas Sharma and Hiroyuki Harada	Design and Analysis of 3D printed Adaptive Compliant Gripper based on Segmented Antagonistic Actuation Mechanism
	FC4-2	15:05 - 15:20	Takamasa Kominami and Kazuhiro Shimonomura	Two-fingers passive perching mechanism for multirotor UAV that perches on horizontal cylindrical objects
	FC4-3	15:20 - 15:35	Shota Chikushi, Kenji Kimura and Kazuo Ishii	Design of Sphere Transport Mechanism with Controllable Roller Orientation
	FC4-4	15:35 - 15:50	Yuma Kumaido, Kenta Tabata, Renato Miyagusuku and Koichi Ozaki	Trot Gait Generation for a Quadruped Robot on a Slope with Simulation Environment
	FC4-5	15:50 - 16:05	Akito Nagai, Satoko Abiko, Tomoharu Sekine and Teppi Tsujita	Experimental Evaluation of an MR Damper for Realizing Both Landing Impact Absorption and Position Control for Legged Robots
	FC4-6	16:05 - 16:20	Maximilien Sonnic, Tomohiro Shibata and Natchanon Suppaadirek	Vision-based Load-Sharing Process Designed for Post-Stroke Individuals Working in a Smart Workcell