

Nr	Corr Au	Title	Presentation Type	Session	Presentation Date
42	Jonschkowski, Rico	Probabilistic Multi-Class Segmentation for the Amazon Picking Challenge	Highlight	Highlight 1: Robot Vision / Learning in Robotics	Oct. 11
1013	Baishya, Shiv Sankar	Robust Material Classification with a Tactile Skin Using Deep Learning	Highlight	Highlight 1: Robot Vision / Learning in Robotics	Oct. 11
1053	Gallego, Guillermo	Event-based Feature Tracking for Low-latency Visual Odometry	Highlight	Highlight 1: Robot Vision / Learning in Robotics	Oct. 11
1056	Ireta Munoz, Fernando	Point-to-hyperplane RGB-D Pose Estimation: Fusing Photometric and Geometric Measurements	Highlight	Highlight 1: Robot Vision / Learning in Robotics	Oct. 11
1563	Yu, Kuan-Ting	More than a Million Ways to Be Pushed. A High-Fidelity Experimental Data Set of Planar Pushing	Highlight	Highlight 1: Robot Vision / Learning in Robotics	Oct. 11
723	Hutter, Marco	ANYmal - A Highly Mobile and Dynamic Quadrupedal Robot	Highlight	Highlight 2: Robot Applications	Oct. 11
1103	Tosun, Tarik	Design and Characterization of the EP-Face Connector	Highlight	Highlight 2: Robot Applications	Oct. 11
1283	Wang, Shiquan	A Palm for a Rock Climbing Robot Based on Dense Arrays of Micro-Spines	Highlight	Highlight 2: Robot Applications	Oct. 11
1560	Plochl, Christopher	Haptic Skin Stretch on a Steering Wheel for Displaying Preview Information in Autonomous Cars	Highlight	Highlight 2: Robot Applications	Oct. 11
1634	Sadigh, Dorsa	Information Gathering Actions over Human Internal State	Highlight	Highlight 2: Robot Applications	Oct. 11
86	Racca, Mattia	Learning in-contact control strategies from demonstration	Interactive	Human Robot Interaction	Oct. 11
184	Petric, Tadej	Augmentation of Human Arm Motor Control by Isotropic Force Manipulability	Interactive	Human Robot Interaction	Oct. 11
247	Abroug, Neil	Human Force Augmentation : Optimal Control Parameters Tuning using Structured Hoo Synthesis	Interactive	Human Robot Interaction	Oct. 11
248	YANG, Chenguang	Development of a Robotic Teaching Interface for Human to Human Skill Transfer based on EMG and IMU Sensor	Interactive	Human Robot Interaction	Oct. 11
331	DallaLibera, Fabio	Analysis of velocity's influence on forces and muscular activity in the context of sit-to-stand motion assisted by an	Interactive	Human Robot Interaction	Oct. 11
467	Kim, David Inkyu	Human Centric Spatial Affordances for Improving Human Activity Recognition	Interactive	Human Robot Interaction	Oct. 11
471	Eppe, Manfred	Exploiting Deep Semantics and Compositionality of Natural Language for Human-Robot-Interaction	Interactive	Human Robot Interaction	Oct. 11
494	Tang, Wenbin	Studying of rectilinear locomotion for a two-segment system with anisotropic dry friction model	Interactive	Human Robot Interaction	Oct. 11
628	Song, Jae-Bok	Torque Control based Sensorless Hand Guiding for Direct Robot Teaching	Interactive	Human Robot Interaction	Oct. 11
687	Huang, Bidan	A Vision-guided Dual Arm Sewing System for Stent Graft Manufacturing	Interactive	Human Robot Interaction	Oct. 11
749	Cruz, Francisco	Multi-modal Integration of Dynamic Audiovisual Patterns for an Interactive Reinforcement Learning Scenario	Interactive	Human Robot Interaction	Oct. 11
901	Martius, Georg	Compliant control for soft robots: emergent behavior of a tendon driven anthropomorphic arm	Interactive	Human Robot Interaction	Oct. 11
941	Deimel, Raphael	Mass Control of Pneumatic Soft Continuum Actuators with Commodity Components	Interactive	Human Robot Interaction	Oct. 11
966	Saccarese, Lorenzo	iT-Knee: An Exoskeleton with Ideal Torque Transmission Interface for Ergonomic Power Augmentation	Interactive	Human Robot Interaction	Oct. 11
1022	Hu, Ninghang	Human Intent Forecasting Using Intrinsic Kinematic Constraints	Interactive	Human Robot Interaction	Oct. 11
1123	De Luca, Alessandro	Combining Real and Virtual Sensors for Measuring Interaction Forces and Moments Acting on a Robot	Interactive	Human Robot Interaction	Oct. 11
1127	Kim, Min Jun	A Passivity-Based Admittance Control Design using Feedback Interconnections	Interactive	Human Robot Interaction	Oct. 11
1142	Louie, Wing-Yue Geoff	A Persuasive Learning from Demonstration System Architecture for Social Group Recreational Activities	Interactive	Human Robot Interaction	Oct. 11
1219	Guo, Yi	Robot-Assisted Pedestrian Regulation in an Exit Corridor	Interactive	Human Robot Interaction	Oct. 11
1422	Pronobis, Andrzej	Autonomous Question Answering with Mobile Robots in Human-Populated Environments	Interactive	Human Robot Interaction	Oct. 11
1428	Pellegrinelli, Stefania	Human-Robot Shared Workspace Collaboration via Hindsight Optimization	Interactive	Human Robot Interaction	Oct. 11
1499	Yamawaki, Tasuku	Iterative Learning of Variable Impedance Control for Human-Robot Cooperation	Interactive	Human Robot Interaction	Oct. 11
1644	Choi, Hyouk Ryeol	Development of a Grasping Force-Feedback User Interface for Surgical Robot System	Interactive	Human Robot Interaction	Oct. 11
1648	Fitter, Naomi	Using IMU Data to Demonstrate Hand-Clapping Games to a Robot	Interactive	Human Robot Interaction	Oct. 11
1659	De Luca, Alessandro	Hybrid Force/Velocity Control for Physical Human-Robot Collaboration Tasks	Interactive	Human Robot Interaction	Oct. 11
30	Iversen, Thomas Fridol	Kernel Density Estimation based Self-learning Sampling Strategy for Motion Planning of Repetitive Tasks	Interactive	Human Robot Interaction / Planning	Oct. 11
51	Scherbatyuk, Alexandre	Goal Navigation and Control for Marine Autonomous Robotic Complex Based on Hydroacoustic Communication	Interactive	Human Robot Interaction / Planning	Oct. 11
63	Perreira, Aaron	Overapproximative Arm Occupancy Prediction for Human-Robot Co-existence Built from Archetypal Movements	Interactive	Human Robot Interaction / Planning	Oct. 11
75	Rajamäki, Joose	Sampled Differential Dynamic Programming	Interactive	Human Robot Interaction / Planning	Oct. 11
354	Campana, Mylène	Ballistic motion planning	Interactive	Human Robot Interaction / Planning	Oct. 11
395	Borkar, Aseem	Collision-free Trajectory Planning on Lissajous Curves for Repeated Multi-agent Coverage and Target Detection	Interactive	Human Robot Interaction / Planning	Oct. 11
533	Chen, Yufan	Motion Planning with Diffusion Maps	Interactive	Human Robot Interaction / Planning	Oct. 11
537	Fourie, Dehann	A Nonparametric Belief Solution to the Bayes Tree	Interactive	Human Robot Interaction / Planning	Oct. 11
683	Meli, Leonardo	Multi-Contact Bilateral Telemanipulation using Wearable Haptics	Interactive	Human Robot Interaction / Planning	Oct. 11
751	Oswald, Stefan	Foresighted Navigation Through Cluttered Environments	Interactive	Human Robot Interaction / Planning	Oct. 11
836	Wang, Yue	Trust-Based Human-Robot Interaction for Multi-Robot Symbolic Motion Planning	Interactive	Human Robot Interaction / Planning	Oct. 11
854	Pepe, Alberto	An Hybrid Teleoperation Control Scheme for a Single-Arm Mobile Manipulator with Omnidirectional Wheels	Interactive	Human Robot Interaction / Planning	Oct. 11
872	Choi, Sungjoon	Gaussian Random Paths for Real-Time Motion Planning	Interactive	Human Robot Interaction / Planning	Oct. 11
955	Yi, Daqing	Expressing Homotopic Requirements for Mobile Robot Navigation through Natural Language Instructions	Interactive	Human Robot Interaction / Planning	Oct. 11
1030	Ferraguti, Federica	Optimizing the use of power in wave based bilateral teleoperation	Interactive	Human Robot Interaction / Planning	Oct. 11
1054	Knight, Heather	Expressive Path Shape: Simple Features that Illustrate a Robot's Attitude toward its Goal in Real Time	Interactive	Human Robot Interaction / Planning	Oct. 11
1222	Selvaggio, Mario	Enhancing Bilateral Teleoperation using Camera-Based Online Virtual Fixture Generation	Interactive	Human Robot Interaction / Planning	Oct. 11
1235	Holtzen, Steven	Inferring Human Intent from Video by Sampling Hierarchical Plans	Interactive	Human Robot Interaction / Planning	Oct. 11
1296	Khalil, Ali Abdul	Point-to-Point Safe Navigation of a Mobile Robot using Stigmergy and RFID Technology	Interactive	Human Robot Interaction / Planning	Oct. 11
1323	Cho, Jang Ho	Admittance Shaping in Delayed Bilateral Teleoperation Control	Interactive	Human Robot Interaction / Planning	Oct. 11
1334	Wray, Kyle	Log-Space Harmonic Function Path Planning	Interactive	Human Robot Interaction / Planning	Oct. 11
1354	Muthugala, Muthugala	Interpretation of Uncertain Information in Mobile Service Robots by Analyzing Surrounding Spatial Arrangement	Interactive	Human Robot Interaction / Planning	Oct. 11
1399	Ryu, Jee-Hwan	Development of the Human Interactive Autonomy for the Shared Teleoperation of Mobile Robots	Interactive	Human Robot Interaction / Planning	Oct. 11
1540	Suh, Il Hong	A Scene-based Dependable Indoor Navigation System	Interactive	Human Robot Interaction / Planning	Oct. 11
1632	Jun, Youngbum	A Humanoid Doing an Artistic Work - Grafﬁ,ti on the Wall	Interactive	Human Robot Interaction / Planning	Oct. 11
66	Ozawa, Ryuta	Design of Low-Cost and Easy-Assemblable Robotic Hands with Stiff and Elastic Gear Trains	Interactive	Manipulation and Grasping	Oct. 11
134	Suomalainen, Markku I	Learning compliant assembly motions from demonstration	Interactive	Manipulation and Grasping	Oct. 11
145	Rojas de Silva Gonzale	Grasping Bulky Objects with Two Anthropomorphic Hands	Interactive	Manipulation and Grasping	Oct. 11
156	Stoyanov, Todor	Grasp Envelopes: Extracting Constraints on Gripper Postures from Online Reconstructed 3D Models	Interactive	Manipulation and Grasping	Oct. 11
160	Nguyen, Anh	Preparatory Object Reorientation for Task-Oriented Grasping	Interactive	Manipulation and Grasping	Oct. 11
175	Cerruti, Giulio	ALPHA: A hybrid self-adaptable hand for a social humanoid robot	Interactive	Manipulation and Grasping	Oct. 11
189	Ghalamzan Esfahani,	Task-relevant grasp selection: a joint solution to planning grasps and manipulative motion trajectories	Interactive	Manipulation and Grasping	Oct. 11
230	Fromm, Tobias	Physics-Based Damage-Aware Manipulation Strategy Planning Using Scene Dynamics Anticipation	Interactive	Manipulation and Grasping	Oct. 11
322	Wang, Shuai	Control and Modeling for Direct Teaching of Industrial Articulated Robotic Arms	Interactive	Manipulation and Grasping	Oct. 11
352	Park, H. Andy	Dual-Arm Coordinated-Motion Task Specification and Performance Evaluation	Interactive	Manipulation and Grasping	Oct. 11
365	Crozet, Sébastien	Fast Computation of Contact Points for Robotic Simulations Based on CAD Models Without Tessellation	Interactive	Manipulation and Grasping	Oct. 11
378	Takizawa, Masaru	Implementation of Twisting Skill to Robot Hands for Manipulating Linear Deformable Objects	Interactive	Manipulation and Grasping	Oct. 11
415	Petric, Vladimir	Physical Model of Rectangular Garment for Robotic Folding	Interactive	Manipulation and Grasping	Oct. 11
546	Rose, Cameron	Modeling and Control of an Ornithopter for Diving	Interactive	Manipulation and Grasping	Oct. 11
674	VASQUEZ, Alex	In-hand Object Shape Identification Using Invariant Proprioceptive Signatures	Interactive	Manipulation and Grasping	Oct. 11
778	Kujala, Janne V.	Classifying and sorting cluttered piles of unknown objects with robots: a learning approach	Interactive	Manipulation and Grasping	Oct. 11
933	Casalino, Andrea	Online planning of optimal trajectories on assigned paths with dynamic constraints for robot manipulators	Interactive	Manipulation and Grasping	Oct. 11
1238	Choi, Inrak	Wolfvine: A Wearable Haptic Interface for Grasping in Virtual Reality	Interactive	Manipulation and Grasping	Oct. 11
1261	Kim, Jun-Sik	Direct and Realistic Handover of a Virtual Object	Interactive	Manipulation and Grasping	Oct. 11
1297	Guiffo Kaigom, Eric	Towards Physics-based Virtual Reality Testbeds for Intelligent Robot Manipulators - An eRobotics Approach	Interactive	Manipulation and Grasping	Oct. 11
1419	Dadkhah Tehrani, M	A Self-Aligning Gripper Using a Novel Electrostatic/Gecko-Like Adhesive	Interactive	Manipulation and Grasping	Oct. 11
1465	Calli, Berk	Vision-based Precision Manipulation with Underactuated Hands: Simple and Effective Solutions for Dexterity	Interactive	Manipulation and Grasping	Oct. 11
1480	Bae, Joonbum	Development of a Dual-Cable Hand Exoskeleton System for Virtual Reality	Interactive	Manipulation and Grasping	Oct. 11
1581	Kwon, Taesoo	Real-Time Grasp Planning based on Motion Field Graph for Human-Robot Cooperation	Interactive	Manipulation and Grasping	Oct. 11
1655	Sarakoglou, Ioannis	HEXOTRAC: A highly Under-Actuated Hand Exoskeleton for Finger Tracking and Force Feedback.	Interactive	Manipulation and Grasping	Oct. 11
47	KAJIKAWA, Shinya	Fundamental performances and characteristics of a new VSJ mechanism for quick response of a humanoid robot	Interactive	Mechanism Design and Control	Oct. 11
107	Klimchik, Alexandr	Machining with serial and quasi-serial industrial robots: comparison analysis and architecture limitations	Interactive	Mechanism Design and Control	Oct. 11
162	Palli, Gianluca	Twisted String Actuation with Sliding Surfaces	Interactive	Mechanism Design and Control	Oct. 11
202	SARIYILDIZ, Emre	An Active Disturbance Rejection Controller Design for the Robust Position Control of Series Elastic Actuators	Interactive	Mechanism Design and Control	Oct. 11
277	Bae, Joonbum	An Asymmetric Cable-driven Mechanism for Force Control of Exoskeleton Systems	Interactive	Mechanism Design and Control	Oct. 11
285	Kimmel, Melanie	Towards Safe Robot Control Using Control Barrier Functions	Interactive	Mechanism Design and Control	Oct. 11
517	Sun, Lei	Nonlinear Disturbance Observer based Torque Control for Series Elastic Actuator	Interactive	Mechanism Design and Control	Oct. 11
528	Umedachi, Takuya	Autonomous Decentralized Control for Soft-bodied Caterpillar-like Modular Robot Exploiting Large and Continuous	Interactive	Mechanism Design and Control	Oct. 11
545	Bai, Yang	Backstepping Trajectory Tracking Control for a Spherical Rolling Robot	Interactive	Mechanism Design and Control	Oct. 11
603	larbi, med amine	A Complete Methodology to Design a Safety Mechanism for Prismatic Joint Implementation	Interactive	Mechanism Design and Control	Oct. 11
634	li, zheng	Design and Kinematic Modeling of A Concentric Wire-driven Mechanism Targeted for Minimally Invasive Surgery	Interactive	Mechanism Design and Control	Oct. 11
665	Cammarata, Alessand	Closed-Form Solutions for the Inverse Kinematics of the Agile Eye with Constraint Errors on the Revolute Joint Ax	Interactive	Mechanism Design and Control	Oct. 11
694	Awad, Mohammad I.	Modeling, Design & Characterization of A Novel Passive Variable Stiffness Joint (pVSJ)	Interactive	Mechanism Design and Control	Oct. 11
759	Higgins, James	The Waterbug Sub-Surface Sampler: Design, Control and Analysis	Interactive	Mechanism Design and Control	Oct. 11
810	Kwon, Dong-Soo	Gravity compensation mechanism for Roll-pitch rotation of a robotic arm	Interactive	Mechanism Design and Control	Oct. 11
1137	Nakamoto, Hideichi	High-speed and Compact Depalletizing Robot Capable of Handling Packages Stacked Complicatedly	Interactive	Mechanism Design and Control	Oct. 11
1252	Aguirre Dominguez, G	Design Optimisation and Performance Evaluation of a Toroidal Magneto-rheological Hydraulic Piston Head	Interactive	Mechanism Design and Control	Oct. 11
1333	Yi, Byung-Ju	Kinematic Modeling, Analysis, and Load Distribution Algorithm for a Redundantly Actuated 4-DOF Parallel Mecha	Interactive	Mechanism Design and Control	Oct. 11
1381	Yi, Byung-Ju	Impulse Modeling and Analysis of Dual Arm Hammering Task: Human-like Manipulator	Interactive	Mechanism Design and Control	Oct. 11
1436	Lee, Woonyong	Joint Torque Servo Control of Electro-Hydrostatic Actuators for High Torque-to-Weight Ratio Robot Control	Interactive	Mechanism Design and Control	Oct. 11
1493	Lawrence, Austin	Mechanical Implementation of a Variable-Stiffness Actuator for a Softly Strummed Ukulele	Interactive	Mechanism Design and Control	Oct. 11
132	Schiebener, David	Heuristic 3D Object Shape Completion based on Symmetry and Scene Context	Interactive	Sensing	Oct. 11
190	Escalada Navarro, Ste	3D Contour Following for a Cylindrical End-Effector Using Capacitive Proximity Sensors	Interactive	Sensing	Oct. 11
219	Zhang, Yizhai	Pose Estimation with Partial Absolute Attitude Identification of a Rigid Body and Its Supporting Moving Platform U	Interactive	Sensing	Oct. 11

256	Ma, Fangchang	Sparse Sensing for Resource-Constrained Depth Reconstruction	Interactive	Sensing	Oct. 11
267	Hoshino, Satoshi	Adaptive Patrolling by Mobile Robot for Changing Visitor Trends	Interactive	Sensing	Oct. 11
328	Chen, Xiangyu	Development of a Low-cost Ultra-tiny Line Laser Range Sensor	Interactive	Sensing	Oct. 11
740	He, Mengwen	Precise and Efficient Model-Based Vehicle Tracking Method Using Rao-Blackwellized and Scaling Series Particle	Interactive	Sensing	Oct. 11
763	Tamjidi, Amir Hossein	Unifying Consensus and Covariance Intersection for Decentralized State Estimation	Interactive	Sensing	Oct. 11
840	Hernandez Bennetts, V	Towards occupational health improvement in foundries through dense dust and pollution monitoring using a comp	Interactive	Sensing	Oct. 11
857	MeiSner, Pascal	Scene Recognition for Mobile Robots by Relational Object Search using Next-Best-View Estimates from Hierarchi	Interactive	Sensing	Oct. 11
916	Hoffmann, Alwin	Environment-aware Proximity Detection with Capacitive Sensors for Human-Robot-Interaction	Interactive	Sensing	Oct. 11
1014	Mees, Olier	Choosing Smartly: Adaptive Multimodal Fusion for Object Detection in Changing Environments	Interactive	Sensing	Oct. 11
1055	Takami, Kuya	Non-Field-of-View Sound Source Localization Using Diffraction and Reflection Signal	Interactive	Sensing	Oct. 11
1098	Bogoslavskiy, Igor	Fast Range Image-Based Segmentation of Sparse 3D Laser Scans for Online Operation	Interactive	Sensing	Oct. 11
1188	Konstantinova, Jelizaw	Fingertip Proximity Sensor with Realtime Visual-based Calibration	Interactive	Sensing	Oct. 11
1195	Berger, Erik	Estimating Perturbations from Experience using Neural Networks and Information Transfer	Interactive	Sensing	Oct. 11
1225	Gawel, Abel Roman	Structure-based Vision-Laser Matching	Interactive	Sensing	Oct. 11
1258	Hepp, Benjamin	Omni-directional person tracking on a flying robot using occlusion-robust ultra-wideband signals	Interactive	Sensing	Oct. 11
1278	Ciocarlie, Matei	Contact Localization through Spatially Overlapping Piezoresistive Signals	Interactive	Sensing	Oct. 11
1308	Noh, Yohan	A New Miniaturised Multi-Axis Force/Torque Sensors based on Optoelectronic Technology	Interactive	Sensing	Oct. 11
1542	Yuan, Wenzhen	Measurement Object Hardness with a GelSight Touch Sensor	Interactive	Sensing	Oct. 11
1578	Molchanov, Artem	Point of Contact Localization for Manipulated Objects using Tactile Sensing	Interactive	Sensing	Oct. 11
1585	Choi, Yukyung	Thermal Image Enhancement using Convolutional Neural Network	Interactive	Sensing	Oct. 11
95	Jamieson, Jonathan	Minimum-time trajectories for quadrotor UAVs in complex environments	Interactive	Unmanned Aerial Vehicle	Oct. 11
101	Roelofsen, Steven	Vision-Based Unmanned Aerial Vehicle Detection and Tracking for Sense and Avoid Systems	Interactive	Unmanned Aerial Vehicle	Oct. 11
104	Mueller, Matthias	Persistent Aerial Tracking System for UAVs	Interactive	Unmanned Aerial Vehicle	Oct. 11
213	Lee, Dongjun	Design, Modeling and Control of Omni-Directional Aerial Robot	Interactive	Unmanned Aerial Vehicle	Oct. 11
436	Mintchev, Stefano	A drone with insect-inspired folding wings	Interactive	Unmanned Aerial Vehicle	Oct. 11
447	Recchiuto, Carmine Tc	A new approach in real-time path generation with obstacle avoidance for multicopters in complex environments	Interactive	Unmanned Aerial Vehicle	Oct. 11
459	Sanfelix, Alberto	Learning the Human Hidden Knowledge of UAV Pilots when navigating in a cluttered environment for improving P	Interactive	Unmanned Aerial Vehicle	Oct. 11
593	Shimonomura, Kazuhiro	Aerial torsional manipulation employing multirotor flying robot	Interactive	Unmanned Aerial Vehicle	Oct. 11
610	Karrer, Marco	Real-time Dense Surface Reconstruction for Aerial Manipulation	Interactive	Unmanned Aerial Vehicle	Oct. 11
698	Papanikolopoulos, Niki	SUAV-Q - An Improved Design For Hybrid Solar-Powered Flight	Interactive	Unmanned Aerial Vehicle	Oct. 11
731	Houben, Sebastian	Efficient Multi-camera Visual-Inertial SLAM for Micro Aerial Vehicles	Interactive	Unmanned Aerial Vehicle	Oct. 11
757	Masone, Carlo	Cooperative Transportation of a Payload using Quadrotors: a Reconfigurable Cable-Driven Parallel Robot	Interactive	Unmanned Aerial Vehicle	Oct. 11
786	Laickacker, Maximilian	High Accuracy Visual Servoing for Aerial Manipulation using a 7 Degrees of Freedom Industrial Manipulator	Interactive	Unmanned Aerial Vehicle	Oct. 11
825	Tomic, Teodor	The Flying Anemometer: Unified Estimation of Wind Velocity from Aerodynamic Power and Wrenches	Interactive	Unmanned Aerial Vehicle	Oct. 11
965	Vásárhelyi, Gábor	Self-organized UAV Traffic in Realistic Environments	Interactive	Unmanned Aerial Vehicle	Oct. 11
996	Vemprala, Sai	Vision Based Collaborative Localization for Multirotor Vehicles	Interactive	Unmanned Aerial Vehicle	Oct. 11
999	Hermann, Garrett	Long-range GPS-denied Aerial Inertial Navigation with LIDAR Localization	Interactive	Unmanned Aerial Vehicle	Oct. 11
1003	Yuksel, Burak	Aerial Robots with Rigid/Elastic-joint Arms: Single-joint Controllability Study and Preliminary Experiments	Interactive	Unmanned Aerial Vehicle	Oct. 11
1174	Feng, Lu	Human-Interpretable Diagnostic Information for Robotic Planning Systems	Interactive	Unmanned Aerial Vehicle	Oct. 11
1190	Loianno, Giuseppe	A Swarm of Flying Smartphones	Interactive	Unmanned Aerial Vehicle	Oct. 11
1302	Ryll, Markus	Mechanical Design and Control of FAST-Hex: a Fully Actuated by Synchronized Flapping Hexarotor	Interactive	Unmanned Aerial Vehicle	Oct. 11
1373	Papanikolopoulos, Niki	Two Meter Solar UAV: Design Approach and Performance Prediction for Autonomous Sensing Applications	Interactive	Unmanned Aerial Vehicle	Oct. 11
1375	Tognon, Marco	Exploiting a Passive Tether for Robust Takeoff and Landing on Slopes: Methodology and Experiments	Interactive	Unmanned Aerial Vehicle	Oct. 11
1462	SALAAN, CARL JOHN	Improvement of UAV's Flight Performance by Reducing the Drag Force of Spherical Shell	Interactive	Unmanned Aerial Vehicle	Oct. 11
1690	Bandala, Argel	Implementation of Varied Particle Container for Smoothed Particle Hydrodynamics -Based Aggregation for Unma	Interactive	Unmanned Aerial Vehicle	Oct. 11
460	Tonneau, Steve	HPP: a new software for constrained motion planning	Interactive_Demo	Mechanism Design and Control	Oct. 11
1293	Yun, Youngmok	Accurate Torque Control of Finger Joints with UT Hand Exoskeleton through Bowden Cable SEA	Interactive_Demo	Mechanism Design and Control	Oct. 11
1392	Shim, David Hyunchul	Toward Autonomous Aircraft Piloting by a Humanoid Robot: Hardware and Control Algorithm Design	Interactive_Demo	Mechanism Design and Control	Oct. 11
1464	KISHI, Tatsuhiro	One DoF robotic hand that makes human laugh by tickling through rubbing underarm	Interactive_Demo	Mechanism Design and Control	Oct. 11
260	He, Li	M2DP: A Novel 3D Point Cloud Descriptor and Its Application in Loop Closure Detection	Interactive_Demo	Sensing	Oct. 11
305	Ho, Van	Fabric Interface with Proximity and Tactile Sensation for Human-Robot Interaction	Interactive_Demo	Sensing	Oct. 11
671	Kumar Hari Shankar Li	Controlling a multi-joint arm actuated by pneumatic muscles with quasi-DDP optimal control	Oral	Actuator	Oct. 11
684	Wolf, Sebastian	Modeling and benchmarking energy efficiency of Variable Stiffness Actuators on the example of the DLR FSJ	Oral	Actuator	Oct. 11
1158	Carloni, Raffaella	Elastic Energy Storage in Leaf Springs for a Lever-Arm Based Variable Stiffness Actuator	Oral	Actuator	Oct. 11
1521	Wada, Akira	Untethered Three Arms Pneumatic Robot using Hose-free Pneumatic Actuator	Oral	Actuator	Oct. 11
17	Martinson, Eric	Augmenting Deep Convolutional Neural Networks with Depth-Based Layered Detection for Human Detection	Oral	Detection and Segmentation	Oct. 11
179	Papanikolopoulos, Niki	3D Region Segmentation Using Topological Persistence	Oral	Detection and Segmentation	Oct. 11
308	Kim, Ayoun	Simultaneous Segmentation, Estimation and Analysis of Articulated Motion from Dense Point Cloud Sequence	Oral	Detection and Segmentation	Oct. 11
397	Romanoni, Andrea	Robust Moving Objects Detection in Lidar Data Exploiting Visual Cues	Oral	Detection and Segmentation	Oct. 11
1012	Pinggera, Peter	Lost and Found: Detecting Small Road Hazards for Self-Driving Vehicles	Oral	Detection and Segmentation	Oct. 11
813	Ficuciello, Fanny	Synergy-based Policy Improvement with Path Integrals for Anthropomorphic Hands	Oral	Grasping	Oct. 11
952	Malvezzi, Monica	Grasp Quality Evaluation in Underactuated Robotic Hands	Oral	Grasping	Oct. 11
967	Brock, Oliver	A Compact Representation of Human Single-Object Grasping	Oral	Grasping	Oct. 11
975	Chebatar, Yevgen	Self-Supervised Regrasping using Spatio-Temporal Tactile Features and Reinforcement Learning	Oral	Grasping	Oct. 11
1148	Bernardino, Alexandre	Unscented Bayesian Optimization for Safe Robot Grasping	Oral	Grasping	Oct. 11
1369	Patoglu, Volkan	A Six Degrees of Freedom Haptic Interface for Laparoscopic Training	Oral	Haptics	Oct. 11
1458	Munawar, Adnan	Towards a Haptic Feedback Framework for Multi-DOF Robotic Laparoscopic Surgery Platforms	Oral	Haptics	Oct. 11
1609	Bodie, Karen	ANYupulator: Design and Control of a Safe Robotic Arm	Oral	Haptics	Oct. 11
1628	Nagano, Hikaru	Visuo-haptic Transmission of Contact Information Improve Operation of Active Scope Camera	Oral	Haptics	Oct. 11
1661	Kim, Kyung-Soo	Two-Channel Electrotactile Stimulation for Sensory Feedback of Fingers of Prosthesis	Oral	Haptics	Oct. 11
180	Kottege, Navinda	Proprioceptive Control of an Over-Actuated Hexapod Robot in Unstructured Terrain	Oral	Legged Robots 1	Oct. 11
216	Asano, Fumihiro	Generation of Underactuated Bipedal Gait Configuration in One Step	Oral	Legged Robots 1	Oct. 11
803	Lin, Pei-Chun	Model-based Bounding in a Quadruped Robot with Waist Actuation	Oral	Legged Robots 1	Oct. 11
1075	Ha, Sehoon	Task-based Limb Optimization for Legged Robots	Oral	Legged Robots 1	Oct. 11
1227	Nakata, Yoshihiro	Adaptive Locomotion by Two Types of Legged Robots with an Actuator Network System	Oral	Legged Robots 1	Oct. 11
115	Xanthidis, Marios	Active Localization with Dynamic Obstacles	Oral	Localization	Oct. 11
463	Wang, Sen	Keyframe based Large-Scale Indoor Localisation using Geomagnetic Field and Motion Pattern	Oral	Localization	Oct. 11
1221	Paton, Michael	Bridging the Appearance Gap: Multi-Experience Localization for Long-Term Visual Teach & Repeat	Oral	Localization	Oct. 11
1246	Caseltz, Tim	Monocular Camera Localization in 3D LiDAR Maps	Oral	Localization	Oct. 11
1337	Goeddel, Robert	FLAT2D: Fast Localization from Approximate Transformation into 2D	Oral	Localization	Oct. 11
139	Lodi Rizzini, Dario	Efficient Loop Closure based on FALKO LIDAR Features for Online Robot Localization and Mapping	Oral	Localization and Mapping	Oct. 11
208	Dharmasiri, Thanuja	MO-SLAM: Multi Object SLAM with Run-Time Object Discovery through Duplicates	Oral	Localization and Mapping	Oct. 11
530	Yang, Shichao	Pop-up SLAM: a Semantic Monocular Plane SLAM for Low-texture Environments	Oral	Localization and Mapping	Oct. 11
1024	Li, Jie	Utilizing High-dimensional Features for Real-time Robotic Applications: Reducing the Curse of Dimensionality for	Oral	Localization and Mapping	Oct. 11
1517	Meier, Kevin	Visual-Inertial Curve Slam	Oral	Localization and Mapping	Oct. 11
98	Ng, Wu Xin Charles	Programming Robotic Tool-Path and Tool-Orientations for Conformance Grinding based on Human Demonstrati	Oral	Manufacturing and Automation	Oct. 11
297	Nisser, Martin	Feedback-Controlled Self-Folding of Autonomous Robot Collectives	Oral	Manufacturing and Automation	Oct. 11
1285	Boesl, Dominik B. O.	4 Robotic Revolutions - Proposing a holistic phase model describing future disruptions in the evolution of robotics	Oral	Manufacturing and Automation	Oct. 11
1568	Lee, Kimoon	An Assembly Sequence Generation of a Product Family for Robot Programming	Oral	Manufacturing and Automation	Oct. 11
366	Hernández, Juan Davit	Planning Feasible and Safe Paths Online for Autonomous Underwater Vehicles in Unknown Environments	Oral	Marine Robots 1	Oct. 11
396	Salumae, Taavi	Motion control architecture of a 4-fin U-CAT AUV using DOF prioritization	Oral	Marine Robots 1	Oct. 11
571	Toda, Masayoshi	A Nonlinear Disturbance Observer Using Delayed Estimates -Its Application to Motion Control of an Underwater V	Oral	Marine Robots 1	Oct. 11
819	Munafó, Andrea	Supporting AUV localisation through next generation underwater acoustic networks: results from the field	Oral	Marine Robots 1	Oct. 11
198	Cui, Lei	A Discrete Dipole Approximation Approach to Underwater Active Electro-sense Problems	Oral	Marine Robots 1	Oct. 11
934	Skinner, Katherine	Towards Real-time Underwater 3D Reconstruction with Plenoptic Cameras	Oral	Marine Robots 2	Oct. 11
981	Duda, Alexander	Refractive Forward Projection For Underwater Flat Port Cameras	Oral	Marine Robots 2	Oct. 11
982	Huang, Tiffany A.	On Automatic Data Association for Acoustic Structure from Motion	Oral	Marine Robots 2	Oct. 11
1040	Barker, Laughlin David A	Preliminary Survey of Underwater Robotic Vehicle Design and Navigation for Under-Ice Operations	Oral	Marine Robots 2	Oct. 11
1130	Constantinou, Christos	An Underwater Laser Vision System for Relative 3-D Posture Estimation to Mesh-like Targets	Oral	Marine Robots 2	Oct. 11
99	Houchine, Nazim	Image-driven boundary conditions for elastic registration during minimally invasive hepatic surgery	Oral	Medical Robot and Systems 1	Oct. 11
109	Wu, Liao	Towards Hybrid Control of a Flexible Curvilinear Surgical Robot With Visual/Haptic Guidance	Oral	Medical Robot and Systems 1	Oct. 11
419	Virga, Salvatore	Automatic Force-Compliant Robotic Ultrasound Screening of Abdominal Aortic Aneurysms	Oral	Medical Robot and Systems 1	Oct. 11
513	Baltes, Max	System Design and Development of a Robotic Device for Automated Venipuncture and Diagnostic Blood Cell Ana	Oral	Medical Robot and Systems 1	Oct. 11
1214	Taddese, Addisu	Nonholonomic Closed-loop Velocity Control of a Soft-tethered Magnetic Endoscope	Oral	Medical Robot and Systems 2	Oct. 11
1385	Chikhaoui, Mohamed	Design and Closed-loop Control of a Tri-layer Polypyrrole based Telescopic Soft Robot	Oral	Medical Robot and Systems 2	Oct. 11
1475	Yi, Byung-Ju	A Robotic System for Percutaneous Coronary Intervention Equipped with a Steerable Catheter and Force Feedba	Oral	Medical Robot and Systems 2	Oct. 11
1479	Leibrandt, Konrad	Implicit Active Constraints for Safe and Effective Guidance of Unstable Concentric Tube Robots	Oral	Medical Robot and Systems 2	Oct. 11
1680	Shaw-Cortez, Wencesl	Towards Dynamics Object Manipulation with Tactile Sensing for Prosthetic Hands	Oral	Medical Robot and Systems 2	Oct. 11
55	Li, Haoxiang	An Egocentric Computer Vision based Co-Robot Wheelchair	Oral	Medical Robot and Systems 3	Oct. 11
116	Dillon, Neal P	Making Robots Mill Bone More Like Human Surgeons: Using Bone Density and Anatomic Information to Mill Safe	Oral	Medical Robot and Systems 3	Oct. 11
940	Gordillo Chaves, Camil	Automatic Channel Selection in Neural Microprobes: A Combinatorial Multi-Armed Bandit Approach	Oral	Medical Robot and Systems 3	Oct. 11

1342	Kuhner, Andreas	Performance Measure on Parkinson's Motion Capture Data with Probability Distributions through Random Forests	Oral	Medical Robot and Systems 3	Oct. 11
1637	Sheng, Weihua	AutoHydrate: A Wearable Hydration Monitoring System	Oral	Medical Robot and Systems 3	Oct. 11
149	Shareef, Zeeshan	Generalizing the Inverse Dynamic Model of KUKA LWR IV+ for Load Variations using Regression in the Model Sp	Oral	Model Learning	Oct. 11
733	Polydoros, Athanasios	A Reservoir Computing Approach for Learning Forward Dynamics of Industrial Manipulators	Oral	Model Learning	Oct. 11
1036	Tallavajhula, Abhijeet	Nonparametric Distribution Regression Applied to Sensor Modeling	Oral	Model Learning	Oct. 11
1534	Koppel, Alec	Online Learning for Characterizing Unknown Environments in Ground Robotic Vehicle Models	Oral	Model Learning	Oct. 11
40	Wasik, Alicja	Graph-Based Distributed Control for Adaptive Multi-Robot Patrolling using Local Formation Reconfiguration	Oral	Motion Planning & Obstacle Avoidance	Oct. 11
82	Soares, Jorge M.	Distributed Graph-Based Formation Control for 3-D Odor Source Localization	Oral	Motion Planning & Obstacle Avoidance	Oct. 11
529	Choi, Sungjoon	Robust Modeling and Prediction in Dynamic Environments Using Recurrent Flow Networks	Oral	Motion Planning & Obstacle Avoidance	Oct. 11
782	Daftny, Shreyansh	Introspective Perception: Learning to Predict Failures in Vision Systems	Oral	Motion Planning & Obstacle Avoidance	Oct. 11
962	Brafman, Ronen	Performance Level Profiles: A Formal Language for Describing the Expected Performance of Functional Modules	Oral	Motion Planning & Obstacle Avoidance	Oct. 11
245	Hausman, Karol	Occlusion-Aware Multi-Robot 3D Tracking	Oral	Multiple Robot Path Planning	Oct. 11
422	Hoenig, Wolfgang	Dynamic Multi-Target Coverage with Robotic Cameras	Oral	Multiple Robot Path Planning	Oct. 11
811	Meghjani, Malika	Fast and Efficient Rendezvous in Street Networks	Oral	Multiple Robot Path Planning	Oct. 11
1466	Tang, Sarah	Safe and Complete Trajectory Generation for Large Teams of Robots with Higher-Order Dynamics	Oral	Multiple Robot Path Planning	Oct. 11
761	Riccio, Francesco	Multi-Robot Search for a Moving Target: Integrating World Modeling, Task Assignment and Context	Oral	Multiple Robot Path Planning	Oct. 11
355	Nardi, Lorenzo	Experience-Based Path Planning for Mobile Robots Exploiting User Preferences	Oral	Navigation	Oct. 11
910	Kojima, Shotaro	Motion Control of Tracked Vehicle based on Contact Force Model	Oral	Navigation	Oct. 11
1010	Wermelinger, Martin	Navigation Planning for Legged Robots in Challenging Terrain	Oral	Navigation	Oct. 11
1159	Mehta, Dhanvin	Autonomous Navigation in Dynamic Social Environments using Multi-Policy Decision Making	Oral	Navigation	Oct. 11
1431	Twigg, Jeffrey	Online Characterization of Autonomously Navigating Robotic Systems in Unstructured Environments	Oral	Navigation	Oct. 11
510	Li, Chi	Incremental Scene Understanding on Dense SLAM	Oral	Perception for Grasping and Manipulation	Oct. 11
584	Caccamo, Sergio	Active Exploration Using Gaussian Random Fields and Gaussian Process Implicit Surfaces	Oral	Perception for Grasping and Manipulation	Oct. 11
799	Shin, Seunghak	Object Proposal Using 3D Point Cloud for DR-C-HUBO+	Oral	Perception for Grasping and Manipulation	Oct. 11
1058	Gualtieri, Marcus	High precision grasp pose detection in dense clutter	Oral	Perception for Grasping and Manipulation	Oct. 11
495	Shakeri, Moein	Illumination Invariant Representation of Natural Images for Visual Place Recognition	Oral	Recognition	Oct. 11
963	Westfchel, Thomas	3D Graph Based Stairway Detection and Localization for Mobile Robots	Oral	Recognition	Oct. 11
1018	Kwon, Dong-Soo	User-Adaptive Fall Detection for Patients using Wristband	Oral	Recognition	Oct. 11
1260	Suh, Il Hong	Effective Place Scene Clustering Using Straight Lines	Oral	Recognition	Oct. 11
8	Sekiguchi, Kouhei	Online Simultaneous Localization and Mapping of Multiple Sound Sources and Asynchronous Microphone Arrays	Oral	Robot Audition	Oct. 11
177	Kumon, Makoto	Position Estimation of Sound Source on Ground by Multirotor Helicopter with Microphone Array	Oral	Robot Audition	Oct. 11
849	Nguyen, Van Quan	Localizing an Intermittent and Moving Sound Source Using a Mobile Robot	Oral	Robot Audition	Oct. 11
932	Magassouba, Aly	Audio-based robot control from interaural level difference and sound energy	Oral	Robot Audition	Oct. 11
1363	Su, Daobillige	Split Conditional Independent Mapping for Sound Source Localisation with Inverse-Depth Parametrisation	Oral	Robot Audition	Oct. 11
239	Balachandran, Ribin	Performance Comparison of Wave Variable Transformation and Time Domain Passivity Approaches for Time-Deli	Oral	Robot Control Systems	Oct. 11
435	Ben Said, Hela	Sensor-based control using finite time observer of visual signatures: Application to corridor following	Oral	Robot Control Systems	Oct. 11
685	Ogren, Petter	How Behavior Trees Generalize the Teleo-Reactive Paradigm and And-Or-Trees	Oral	Robot Control Systems	Oct. 11
1089	Somani, Nikhil	Task Level Robot Programming Using Prioritized Non-Linear Inequality Constraints	Oral	Robot Control Systems	Oct. 11
659	Shen, Xiaotong	Fast Joint Compatibility Branch and Bound for Feature Cloud Matching	Oral	Robot Vision	Oct. 11
726	Dewan, Ayush	Rigid Scene Flow for 3D LiDAR Scans	Oral	Robot Vision	Oct. 11
771	Ling, Yonggen	High-Precision Online Markerless Stereo Extrinsic Calibration	Oral	Robot Vision	Oct. 11
1345	Lamers, Kevin	Self-Supervised Monocular Distance Learning on a Lightweight Micro Air Vehicle	Oral	Robot Vision	Oct. 11
1476	Kochanov, Dayvid	Scene Flow Propagation for Semantic Mapping and Object Discovery in Dynamic Street Scenes	Oral	Robot Vision	Oct. 11
131	Kopitkov, Dmitry	Computationally Efficient Decision Making Under Uncertainty in High-Dimensional State Spaces	Oral	Sensor_based Planning	Oct. 11
222	Bayat, Behzad	Optimal Search Strategies for Pollutant Source Localization	Oral	Sensor_based Planning	Oct. 11
271	Jing, Wei	Sampling-Based View Planning for 3D Visual Coverage Task with Unmanned Aerial Vehicle	Oral	Sensor_based Planning	Oct. 11
864	Englot, Brendan	Information-Theoretic Exploration with Bayesian Optimization	Oral	Sensor_based Planning	Oct. 11
1305	Ramaswamy, Vinod	Mutual Information based communication aware path planning: A game theoretic perspective	Oral	Sensor_based Planning	Oct. 11
653	Liu, Yong	Robust Object Tracking with a Hierarchical Ensemble Framework	Oral	Tracking	Oct. 11
951	Chen, Jing	Tracking a Moving Target in Cluttered Environments Using a Quadrotor	Oral	Tracking	Oct. 11
1141	Scheggli, Stefano	Model-based Tracking of Miniaturized Grippers Using Particle Swarm Optimization	Oral	Tracking	Oct. 11
1145	Laguna, Guillermo	Target Tracking On Triangulation Graphs	Oral	Tracking	Oct. 11
453	Yu, Hongnian	Modelling and Dynamic Analysis of Underactuated Capsule Systems with Friction-Induced Hysteresis	Oral	Underactuated Robots	Oct. 11
921	Powell, Matthew	Mechanics-Based Control of Underactuated 3D Robotic Walking: Dynamic Gait Generation Under Torque Constr	Oral	Underactuated Robots	Oct. 11
1039	Yuksel, Burak	Differential Flatness and Control of Proto-centric Aerial Manipulators with Mixed Rigid- and Elastic-Joints	Oral	Underactuated Robots	Oct. 11
1267	Wenger, Garrett	Frontal Plane Stabilization and Hopping with a 2DOF Tail	Oral	Underactuated Robots	Oct. 11
535	Becerra, Hector M.	Robust trajectory tracking controllers for pose-regulation of wheeled mobile robots	Oral	Wheeled System Control	Oct. 11
645	Komura, Hirotsuka	Eccentric Crank Rover : A Novel Crank Wheel Mechanism with Eccentric Wheels	Oral	Wheeled System Control	Oct. 11
850	Ozgür, Ayberk	Permanent Magnet-Assisted Omnidirectional Ball Drive	Oral	Wheeled System Control	Oct. 11
1360	Endo, Gen	R-Crank: Amphibious all terrain mobile robot	Oral	Wheeled System Control	Oct. 11
79	Davidson, Joseph	Proof-of-Concept of a Robotic Apple Harvester	Special S	(Special Session) Autonomous Farming Technolog	Oct. 11
930	Bell, Jamie	Row Following in Pergola Structured Orchards	Special S	(Special Session) Autonomous Farming Technolog	Oct. 11
974	Kusumam, Keerthy	Can You Pick a Broccoli? 3D-Vision Based Detection and Localisation of Broccoli Heads in the Field	Special S	(Special Session) Autonomous Farming Technolog	Oct. 11
1649	Yaguchi, Hiroaki	Development of An Autonomous Tomato Harvesting Robot with Rotational Plucking Gripper	Special S	(Special Session) Autonomous Farming Technolog	Oct. 11
621	Ishi, Carlos Toshinori	Hearing support system using environment sensor network	Special S	(Special Session) New Horizon for Robot Audition .	Oct. 11
656	Schmidt, Alexander	Ego-Noise Reduction Using a Motor Data-Guided Multichannel Dictionary	Special S	(Special Session) New Horizon for Robot Audition .	Oct. 11
679	Kojima, Ryoosuke	Semi-Automatic Bird Song Analysis by Spatial-Cue-Based Integration of Sound Source Detection, Localization, Si	Special S	(Special Session) New Horizon for Robot Audition .	Oct. 11
1325	Sasaki, Yoko	Probabilistic 3D Sound Sources Mapping from the Moving Microphone Array	Special S	(Special Session) New Horizon for Robot Audition .	Oct. 11
1449	Nakada, Kazuhiro	Partially Shared Deep Neural Network in Sound Source Separation and Identification Using a UAV-Embedded Mi	Special S	(Special Session) New Horizon for Robot Audition .	Oct. 11
884	Do, Chau	A Probabilistic Approach to Liquid Level Detection in Cups Using an RGB-D Camera	Highlight	Highlight 3: Motion and Path Planning	Oct. 12
1099	Wagner, Glenn	Multirobot Sequential Composition	Highlight	Highlight 3: Motion and Path Planning	Oct. 12
1253	Wulfmeier, Markus	Watch This: Scalable Cost-Function Learning for Path Planning in Urban Environments	Highlight	Highlight 3: Motion and Path Planning	Oct. 12
1259	Pfeiffer, Mark	Prediction Actions to Act Predictably: Cooperative Partial Motion Planning with Maximum Entropy Models	Highlight	Highlight 3: Motion and Path Planning	Oct. 12
1492	Liu, Lantao	An Information-Driven and Disturbance-Aware Planning Method for Long-Term Ocean Monitoring	Highlight	Highlight 3: Motion and Path Planning	Oct. 12
1613	Kim, Justin Yonghui	mROBERTO: A Modular Millirobot for Swarm-Behavior Studies	Highlight	Highlight 4: Bio-related and Medical Robotics	Oct. 12
225	Kakogawa, Atsushi	Design of a Multilink-articulated Wheeled Inspection Robot for Winding Pipelines: Cassiopeia-II	Highlight	Highlight 4: Bio-related and Medical Robotics	Oct. 12
1429	Back, Jungwhan	New Kinematic Multi-Section Model for Catheter Contact Force Estimation and Steering	Highlight	Highlight 4: Bio-related and Medical Robotics	Oct. 12
1457	Li, Chen	Cockroach-inspired robot reveals principles of ground-based, dynamic self-righting	Highlight	Highlight 4: Bio-related and Medical Robotics	Oct. 12
1703	Kozuki, Toyotaka	Skeletal Structure with Artificial Perspiration for Cooling by Latent Heat for Musculoskeletal Humanoid Kengoro	Highlight	Highlight 4: Bio-related and Medical Robotics	Oct. 12
53	Sikkel, Lodewijk Nicole A	A Novel Online Model-Based Wind Estimation Approach for Quadrotor Micro Air Vehicles Using Low Cost MEMS	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
195	De Alwis, Charika	Urban Scene Segmentation With Laser-Constrained CRFs	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
209	Liu, Yong-Jin	Delta DLP 3D Printing with Large Size	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
211	Spangenberg, Robert	Pole-based Localization for Autonomous Vehicles in Urban Scenarios	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
380	Maeda, Yusuke	From CAD Models to Toy Brick Sculptures: A 3D Block Printer	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
444	Balkcom, Devin	Interlocking Structure Assembly with Voxels	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
455	Maddern, Will	Real-time probabilistic fusion of sparse 3D LIDAR and dense stereo	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
673	Shi, Ran	An Approximation Method Based on Position-Loop Cross-Coupled Control for Biaxial Servo Systems	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
794	Wong, Kai Weng	Need-based Coordination for Decentralized High-level Robot Control	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
888	Cano Reyes, Jose	Automatic configuration of ROS applications for near-optimal performance	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1052	Bartlett, Oliver	Enabling Intelligent Energy Management for Robots using Publicly Available Maps	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1149	Bachrach, Jonathan	JITPCB	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1223	Naegel, Tobias	Duo-VIO: Fast, Light-weight, Stereo Inertial Odometry	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1279	Schneemann, Friederik	Context-based detection of pedestrian crossing intention for autonomous driving in urban environments	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1433	Kraft, Kory	Real-time Contamination Modeling for Robotic Health Care Support	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1645	Shenoi, Ashwin A	A CRF that Combines Tactile Sensing and Vision for Haptic Mapping	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
1647	Zhu, Haifei	Strategy-based Robotic Item Picking from Shelves	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
750	Glover, Arren	Event-driven Ball Detection and Gaze Fixation in Clutter	Interactive	Advanced Automation/Sensor Fusion	Oct. 12
25	Veiga, Tiago	Efficient Object Search for Mobile Robots in Dynamic Environments: Semantic Map as an Input for the Decision M	Interactive	AI-Based Robot Systems	Oct. 12
65	Lee, Hyungtae	Task-conversions for Integrating Human and Machine Perception in a Unified Task	Interactive	AI-Based Robot Systems	Oct. 12
84	Lu, Ming	A deep-network solution towards model-less obstacle avoidance	Interactive	AI-Based Robot Systems	Oct. 12
159	Nguyen, Anh	Detecting Object Affordances with Convolutional Neural Networks	Interactive	AI-Based Robot Systems	Oct. 12
289	Su, Daobillige	Robust Sound Source Mapping using Three-layered Selective Audio Rays for Mobile Robots	Interactive	AI-Based Robot Systems	Oct. 12
357	Haghighat, Bahar	Characterization and Validation of a Novel Robotic System for Fluid-Mediated Programmable Stochastic Self-Ass	Interactive	AI-Based Robot Systems	Oct. 12
358	Wigness, Maggie	Reducing Adaptation Latency for Multi-Concept Visual Perception in Outdoor Environments	Interactive	AI-Based Robot Systems	Oct. 12
440	Lee, Bhoram	Online Learning of Visibility and Appearance for Object Pose Estimation	Interactive	AI-Based Robot Systems	Oct. 12
485	Hangl, Simon	Hierarchical Haptic Manipulation for Complex Skill Learning	Interactive	AI-Based Robot Systems	Oct. 12
657	Fang, Hao	Mixed Initiative Controller for Simultaneous Intervention, a Model Predictive Control Formulation	Interactive	AI-Based Robot Systems	Oct. 12
688	Twardon, Lukas	Active Boundary Component Models for Robotic Dressing Assistance	Interactive	AI-Based Robot Systems	Oct. 12
775	Li, Xiaofei	Reverberant Sound Localization with a Robot Head Based on Direct-Path Relative Transfer Function	Interactive	AI-Based Robot Systems	Oct. 12
829	Ataka, Ahmad	Real-Time Pose Estimation and Obstacle Avoidance for Multi-segment Continuum Manipulator in Dynamic Enviro	Interactive	AI-Based Robot Systems	Oct. 12
862	Haidu, Andrei	Action Recognition and Interpretation from Virtual Demonstrations	Interactive	AI-Based Robot Systems	Oct. 12

874	Kaiser, Peter	Towards a Hierarchy of Whole-Body Loco-Manipulation Affordances	Interactive	AI-Based Robot Systems	Oct. 12
970	Reverdy, Paul	Mobile robots as remote sensors for spatial point process models	Interactive	AI-Based Robot Systems	Oct. 12
1082	Salvado, João	Contingency Planning for Automated Vehicles in Urban Traffic	Interactive	AI-Based Robot Systems	Oct. 12
1156	Fankhauser, Péter	Collaborative Navigation for Flying and Walking Robots	Interactive	AI-Based Robot Systems	Oct. 12
1212	Li, Shuai	Robust Object Detection in Industrial Environments by using a Mobile Robot	Interactive	AI-Based Robot Systems	Oct. 12
1224	Vaskevicius, Narunas	Anticipation and Attention for Robust Object Recognition with RGBD-Data in an Industrial Application Scenario	Interactive	AI-Based Robot Systems	Oct. 12
1245	Arruda, Ermano Ardile	Active vision for dexterous grasping of novel objects	Interactive	AI-Based Robot Systems	Oct. 12
1291	Pecka, Martin	Autonomous flipper control with safety constraints	Interactive	AI-Based Robot Systems	Oct. 12
1321	Shafiq, Nima	Learning to Grasp Familiar Objects using Object View Recognition and Template Matching	Interactive	AI-Based Robot Systems	Oct. 12
1409	Song, Dezhen	Visual Programming for Mobile Robot Navigation Using High-Level Landmarks	Interactive	AI-Based Robot Systems	Oct. 12
1699	zhou, guang	A Self-Stabilizing Algorithm for the Foraging Problem in Swarm Robotic Systems	Interactive	AI-Based Robot Systems	Oct. 12
182	Latulippe, Maxime	A Progressive Multidimensional Particle Swarm Optimizer for Magnetic Core Placement in Dipole Field Navigator	Interactive	Bio-related and Medical Robotics	Oct. 12
183	Ma, Qianli	A New Robotic Ultrasound System for Tracking a Catheter with an Active Piezoelectric Element	Interactive	Bio-related and Medical Robotics	Oct. 12
276	Chen, YuFeng	Influence of wing morphological and inertial parameters on flapping flight performance	Interactive	Bio-related and Medical Robotics	Oct. 12
430	OURAK, Mouloud	Partitioned Camera-OCT based 6 DOF Visual Servoing for Automatic Repetitive Optical Biopsies	Interactive	Bio-related and Medical Robotics	Oct. 12
431	Chen, Zihan	Virtual Fixture Assistance for Needle Passing and Knotting Tying	Interactive	Bio-related and Medical Robotics	Oct. 12
527	Wong, Christopher Yet	Automated micropipette control and cleavage-stage embryo rotation tracking: Towards automated cell manipulat	Interactive	Bio-related and Medical Robotics	Oct. 12
611	Pallan Rosales, Pedro	Automatic palpation for quantitative ultrasound elastography by visual sensing and force control	Interactive	Bio-related and Medical Robotics	Oct. 12
821	Haouas, Wisssem	4-DoF Spherical Parallel Wrist with Embedded Grasping Capability for Minimally Invasive Surgery	Interactive	Bio-related and Medical Robotics	Oct. 12
866	Heya, Akira	Development of Instantaneously Puncture System for CT Fluoroscopy-guided Interventional Radiology	Interactive	Bio-related and Medical Robotics	Oct. 12
989	Chevrie, Jason	Online prediction of needle shape deformation in moving soft tissues from visual feedback	Interactive	Bio-related and Medical Robotics	Oct. 12
1155	Eastwood, Kyle	Modelling and Design of Asymmetrically Cut Continuum Joints	Interactive	Bio-related and Medical Robotics	Oct. 12
1189	do, thanhho	A Procedureless Magnetic Soft Endoscopic Capsule for Overweight and Obese Treatments	Interactive	Bio-related and Medical Robotics	Oct. 12
1206	Yuan, Yixuan	A Novel Global and Local Saliency Coding Method for Polyp Recognition in WCE Videos	Interactive	Bio-related and Medical Robotics	Oct. 12
1275	Dupont, Pierre	Toward On-line Parameter Estimation of Concentric Tube Robots Using a Mechanics-based Model	Interactive	Bio-related and Medical Robotics	Oct. 12
1341	Fu, Li-Chen	Active Control with Force Sensor and Shoulder Circumduction Implemented on Exoskeleton Robot NTU-II	Interactive	Bio-related and Medical Robotics	Oct. 12
1396	Deng, Xinyan	Resonance Principle for the Design of Flapping Wing Micro Air Vehicles	Interactive	Bio-related and Medical Robotics	Oct. 12
1496	Asano, Yuki	Human Mimetic Foot Structure with Multi-DOFs and Multi-sensors for musculoskeletal humanoids	Interactive	Bio-related and Medical Robotics	Oct. 12
1508	Liu, Huaxin	Cat-inspired Mechanical Design of self-adaptive toes for a legged robot	Interactive	Bio-related and Medical Robotics	Oct. 12
1536	Gras, Gauthier	Intention Recognition For Gaze Controlled Robotic Minimally Invasive Laser Ablation	Interactive	Bio-related and Medical Robotics	Oct. 12
1555	Dong, Erbao	Locomotion and Gait Analysis of Multi-limb Soft Robots Based on Smart Actuators	Interactive	Bio-related and Medical Robotics	Oct. 12
413	Magnanimo, Vito	Safeguarding a Mobile Manipulator using Dynamic Safety Fields	Interactive	Robotic Applications	Oct. 12
15	Barrios, Luenin	Autonomous 6D-Docking and Manipulation with Non-Stationary-Base Using Self-Reconfigurable Modular Robots	Interactive	Robotic Applications	Oct. 12
35	Song, Aiguo	A Rigid and Flexible Structures Combined Deployable Boom for Space Exploration	Interactive	Robotic Applications	Oct. 12
110	Tanaka, Fumihide	A Self-Competitive Method for the Development of an Educational Robot for Children	Interactive	Robotic Applications	Oct. 12
193	Elbaum, Sebastian	Co-Diagnosing Configuration Failures in Co-Robotic Systems	Interactive	Robotic Applications	Oct. 12
215	Luo, Ren	Electroencephalogram Signal Analysis as Basis for Effective Evaluation of Robotic Therapeutic Massage	Interactive	Robotic Applications	Oct. 12
240	Haeni, Nicolai	Visual Servoing in Orchard Settings	Interactive	Robotic Applications	Oct. 12
301	Sakai, Satoru	Optimal Non-Bernoulli modeling method for experimental hydraulic robots	Interactive	Robotic Applications	Oct. 12
359	Khan, Muhammad Mu	Road Traversability Analysis Using Network Properties of Roadmaps	Interactive	Robotic Applications	Oct. 12
360	Quan, Qiquan	A Rotary-percussive Ultrasonic Drill for Planetary Rock Sampling	Interactive	Robotic Applications	Oct. 12
596	Hassan, Mahdi	Modeling and Stochastic Optimization of Complete Coverage under Uncertainties in Multi-Robot Base Placement	Interactive	Robotic Applications	Oct. 12
605	Miyazaki, Tetsuro	Robot Body Design including Degrees of Freedom and Link Parameters Maximizing Ball Throwing Performance	Interactive	Robotic Applications	Oct. 12
743	Lange, Friedrich	Robotic Simulation of On Orbit Servicing Including Hard Impacts	Interactive	Robotic Applications	Oct. 12
764	Luo, Ren	Robot Artist for Colorful Picture Painting with Visual Feedback System	Interactive	Robotic Applications	Oct. 12
832	Lau, Darwin	CASPR: A Comprehensive Cable-Robot Analysis and Simulation Platform for the Research of Cable-Driven Paral	Interactive	Robotic Applications	Oct. 12
867	Jacob, Mithun	Map-optimized Probabilistic Traffic Rule Evaluation	Interactive	Robotic Applications	Oct. 12
880	Escalera, Juan Antonic	A Symbolic Geometric Formulation of Branched Articulated Multibody Systems Based on Graphs and Lie Groups	Interactive	Robotic Applications	Oct. 12
943	Miermeister, Philipp	The CableRobot Simulator - Large Scale Motion Platform Based on Cable Robot Technology	Interactive	Robotic Applications	Oct. 12
1035	Jeon, Soo	On the Gyroscopic Force in Mechanical Manipulators and Its Artificial Shaping for Taskspace Movement Coordin	Interactive	Robotic Applications	Oct. 12
1191	Patoglu, Volkan	Gravity-Assist: A Series Elastic Body Weight Support System with Inertia Compensation	Interactive	Robotic Applications	Oct. 12
1300	Driggs-Campbell, Kath	Communicating Intent on the Road Through Human-Inspired Control Schemes	Interactive	Robotic Applications	Oct. 12
1355	Katzschmann, Robert	Cyclic Hydraulic Actuation for Soft Robotic Devices	Interactive	Robotic Applications	Oct. 12
1620	Holobut, Pawel	Internal localization algorithm based on relative positions for cubic-lattice modular-robotic ensembles	Interactive	Robotic Applications	Oct. 12
1673	ABIBULLAEV, BERDA	On Robust Classification of Hemodynamic Signals for BCIs via Multiple Kernel SVM	Interactive	Robotic Applications	Oct. 12
1733	Huang, Panfeng	Cellular Space Robot and its Interactive Model Identification for Spacecraft Takeover control	Interactive	Robotic Applications	Oct. 12
491	Zhou, Yi	Real Time Rotation Estimation for Dense Depth Senors in Piece-wise Planar Environments	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
770	Roy, Mayank	Pose Estimation of Texture Less Objects in Bin Picking using Sensor Fusion	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
977	Miller, Justin	Dynamic Arrival Rate Estimation for Campus Mobility on Demand Network Graphs	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
1152	Perzlyo, Alexander Clif	Intuitive Instruction of Industrial Robots: Semantic Process Descriptions for Small Lot Production	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
1460	Lee, Unghui	EureCar Turbo: a Self-Driving Car that can Handle Adverse Weather Conditions	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
1527	Vanegas, Fernando	UAV Based Target Finding and Tracking in GPS-Denied and Cluttered Environment	Interactive_Video	Advanced Automation/Sensor Fusion	Oct. 12
334	José Medina Hernandez	Mechanism of multiple joint stiffness for the better performance and the safety physical interaction human robot	Interactive_Video	Bio-related and Medical Robotics	Oct. 12
626	SHEN, Jiajun	A Tele-Presence Wheelchair for Elderly People	Interactive_Video	Bio-related and Medical Robotics	Oct. 12
1136	Linderoth, Lukas	Stiffness-based modelling of a hydraulically-actuated soft robotics manipulator	Interactive_Video	Bio-related and Medical Robotics	Oct. 12
1495	Côté Altard, Ulysse	A convolutional neural network for robotic arm guidance using sEMG based frequency-features	Interactive_Video	Bio-related and Medical Robotics	Oct. 12
1503	Wisaruvej, Piyamate	Hands-on reconfigurable robotic surgical instrument holder arm	Interactive_Video	Bio-related and Medical Robotics	Oct. 12
478	ADAGOLODDJO, Yinou	Inverse real-time Finite Element simulation for robotic control of flexible needle insertion in deformable tissues	Oral	Animation and Simulation	Oct. 12
725	Koch, Pierrick	Integrating Realistic Simulation Engines within the MORSE Framework	Oral	Animation and Simulation	Oct. 12
976	Tan, Jie	Design Dynamically Balanced Humanoids Using Simulation	Oral	Animation and Simulation	Oct. 12
1485	Skinner, John Robert	High-Fidelity Simulation for Evaluating Robotic Vision Performance	Oral	Animation and Simulation	Oct. 12
170	Li, Xiao Jian	Automated In-vivo Transportation of Biological Cells with A Disturbance Compensation Controller	Oral	Cell Manipulation	Oct. 12
1434	Park, Seongsik	Localizing a tip of needle using 2-D microscope images and detecting vertical approach of a needle based on foci	Oral	Cell Manipulation	Oct. 12
1057	Kim, Eunhye	Accurate Releasing of Biological Cells using Two Release Methods Generated by High Speed Motion of an End e	Oral	Cell Manipulation	Oct. 12
1633	Takeuchi, Masaru	Self-assembly of Magnetized Microstructures for in vitro Cell Systems	Oral	Cell Manipulation	Oct. 12
46	Mizutani, Naoto	Automatic Driving Control by Robotic Driver Considering the Lack of a Driving Force at Changing Gears	Oral	Field Robots 1	Oct. 12
598	Shimonomura, Kazuhit	High Precision Marker Based Localization and Movement on the Ceiling Employing an Aerial Robot with Top Mou	Oral	Field Robots 1	Oct. 12
760	Lenain, Roland	High speed path tracking application in harsh conditions: Predictive speed control to ensure the limit of the lateral	Oral	Field Robots 1	Oct. 12
1176	Prado, Romo	Probabilistic Approaches for Self-tuning Path Tracking Controllers using Prior Knowledge of the Terrain	Oral	Field Robots 1	Oct. 12
1734	Hsiung, Shih-Chieh	Stochastic Modeling and Control for Tracking the Periodic Movement of Marine Animals via AUVs	Oral	Field Robots 1	Oct. 12
44	Ortenzi, Valerio	Vision-guided state estimation and control of robotic manipulators which lack proprioceptive sensors	Oral	Field Robots 2	Oct. 12
127	Yamada, Yasuyuki	Blade-type Crawler Vehicle with Wings in Ground Effect for Traversing Uneven Terrain at High Speed	Oral	Field Robots 2	Oct. 12
493	Chiou, Manolis	Experimental Analysis of a Variable Autonomy Framework for Controlling a Remotely Operating Mobile Robot	Oral	Field Robots 2	Oct. 12
521	Lee, Sang Uk	Robust Motion Planning Methodology for Autonomous Tracked Vehicles in Rough Environment Using Online Slip	Oral	Field Robots 2	Oct. 12
944	Lee, Jihong	A Kinematic-based Rough Terrain Control for Traction and Energy Saving of an Exploration Rover	Oral	Field Robots 2	Oct. 12
482	Tang, Te	Robotic Manipulation of Deformable Objects by Tangent Space Mapping and Non-Rigid Registration	Oral	Force Control 1	Oct. 12
747	Xu, Wenfu	Coordinated Compliance Control of Dual-Arm Robot for Payload Manipulation: Master-slave and Shared Force Co	Oral	Force Control 1	Oct. 12
1359	Herzog, Alexander	Structured contact force optimization for kino-dynamic motion generation	Oral	Force Control 1	Oct. 12
1606	Senoo, Taku	Elasto-plastic Deformation Control of a Multi-joint Manipulator	Oral	Force Control 1	Oct. 12
185	Yu, Ningbo	Impedance Control of a Cable-driven Series Elastic Actuator Using the 2-DOF Control Method	Oral	Force Control 2	Oct. 12
524	Gonzales Marin, Anton	Unified Impedance and Hybrid Force-Position Controller with Kinematic Filtering for Industrial Applications	Oral	Force Control 2	Oct. 12
900	Vordamme, Jonathan	Soft Robotics for the Hydraulic Atlas Arms: Joint Impedance Control with Collision Detection and Disturbance Cor	Oral	Force Control 2	Oct. 12
1064	Parigi-Polverini, Matt	Performance Improvement of Implicit Integral Robot Force Control through Constraint-Based Optimization	Oral	Force Control 2	Oct. 12
1531	Pugach, Ganna	Touch-based Admittance Control of a Robotic Arm using Neural Learning of an Artificial Skin	Oral	Force Control 2	Oct. 12
194	Inoue, Takahiro	Force Control on Antagonistic Twist-drive Actuator Robot	Oral	Force Control 3	Oct. 12
514	Bae, Joonbum	Force-mode Control of Rotary Series Elastic Actuators in a Lower Extremity Exoskeleton using Model-inverse Tim	Oral	Force Control 3	Oct. 12
699	Roosting, Wesley	Comparison of Open-Loop and Closed-Loop Disturbance Observers for Series Elastic Actuators	Oral	Force Control 3	Oct. 12
734	Cataldi, Elisabetta	Impedance Control of an aerial-manipulator: Preliminary results	Oral	Force Control 3	Oct. 12
754	Reyes, Fabian	Snake Robots in Contact with the Environment: Influence of the Configuration on the Applied Wrench	Oral	Force Control 3	Oct. 12
268	Ahmed, Mariam	RRT Based Motion Planning for Industrial Robotic Manipulators with Application to Automated Welding of TKY Jo	Oral	Industrial Robot	Oct. 12
635	Yuan, Peijiang	Perpendicularity Adjustment End Effector for Aeronautical Drilling Robot	Oral	Industrial Robot	Oct. 12
768	Zhang, Wenxi	Vibration Control of Multilink Flexible Robotic Arm with Impulse Spectra	Oral	Industrial Robot	Oct. 12
1567	MacCurdy, Robert	Printable Programmable Viscoelastic Materials for Robots	Oral	Industrial Robot	Oct. 12
151	Wang, Ruohan	Dynamic Movement Primitives Plus: for Enhanced Reproduction Quality and Efficient Trajectory Modification Usin	Oral	Learning from Demonstration	Oct. 12
1067	Welschehold, Tim	Learning Manipulation Actions from Human Demonstrations	Oral	Learning from Demonstration	Oct. 12
1332	Paxton, Chris	Do What I Want, Not What I Did: Imitation of Skills by Planning Sequences of Actions	Oral	Learning from Demonstration	Oct. 12
1453	Gupta, Abhishek	Learning Dexterous Manipulation for a Soft Robotic Hand from Human Demonstrations	Oral	Learning from Demonstration	Oct. 12
538	Kawata, Takeyuki	Fault-tolerant Adaptive Gait Generation for Multi-limbed Robot	Oral	Legged Robots 2	Oct. 12
649	Choi, Hyouk Ryeol	Hybrid Quadruped Bounding with a Passive Compliant Spine and Asymmetric Segmented Body	Oral	Legged Robots 2	Oct. 12
1268	Brown, Travis	Gait Transitions and Disturbance Response for Planar Bipeds with Reaction Wheel Actuation	Oral	Legged Robots 2	Oct. 12
1420	Palmer III, Luther R.	Optimized Energy Addition for a Planar SLIP Model with Redundant Joints	Oral	Legged Robots 2	Oct. 12

1486	Koutsoukis, Konstantin	On Passive Quadrupedal Bounding with Translational Spinal Joint	Oral	Legged Robots 2	Oct. 12
661	Luo, Dingsheng	Biped Robot Falling Motion Control with Human-inspired Active Compliance	Oral	Legged Robots 2	Oct. 12
791	Steenkamp, Neil Franc	Minimum Time Sprinting From Rest in a Planar Quadruped	Oral	Legged Robots 3	Oct. 12
899	Hwangbo, Jemin	Probabilistic Foot Contact Estimation by Fusing Information from Dynamics and Differential/Forward Kinematics	Oral	Legged Robots 3	Oct. 12
1631	Thomas, Gray	Towards Computationally Efficient Planning of Dynamic Multi-Contact Locomotion	Oral	Legged Robots 3	Oct. 12
1717	Hubicki, Christian	Tractable Terrain-aware Motion Planning on Granular Media: An Impulsive Jumping Study	Oral	Legged Robots 3	Oct. 12
1	Liarokapis, Minas	Learning Task-Specific Models for Dexterous, In-Hand Manipulation with Simple, Adaptive Robot Hands	Oral	Manipulation	Oct. 12
1112	Or, Keung	Position-Force Combination Control with Passive Flexibility for Versatile In-Hand Manipulation Based on Posture I	Oral	Manipulation	Oct. 12
1438	Pan, Jia	An Empirical Comparison Among the Effect of Different Supports in Sequential Robotic Manipulation	Oral	Manipulation	Oct. 12
1684	Paolini, Robert	Data-Driven Statistical Modeling of a Cube Regrasp	Oral	Manipulation	Oct. 12
187	Guizilini, Vitor	Large-Scale 3D Scene Reconstruction with Hilbert Maps	Oral	Mapping	Oct. 12
204	Tang, Hengbo	Pose Graph Optimization with Hierarchical Conditionally Independent Graph Partitioning	Oral	Mapping	Oct. 12
988	Hinzmann, Timo	Robust map generation for fixed-wing UAVs with low-cost highly-oblique monocular cameras	Oral	Mapping	Oct. 12
1161	Maffei, Renan	Long-term place recognition using multi-level words of spatial densities	Oral	Mapping	Oct. 12
1241	Ekenhoff, Kevin	Decoupled, Consistent Node Removal and Edge Sparsification for Graph-based SLAM	Oral	Mapping	Oct. 12
244	Dai, Ran	Motion Planning for Persistent Traveling Solar-Powered Unmanned Ground Vehicles	Oral	Motion and Path Planning I	Oct. 12
924	Nieuwenhuisen, Matthijs	Local Multiresolution Trajectory Optimization for Micro Aerial Vehicles Employing Continuous Curvature Transition	Oral	Motion and Path Planning I	Oct. 12
984	Jia, Yan-Bin	Batting Flying Objects to a Target	Oral	Motion and Path Planning I	Oct. 12
1395	Brown, Stanley	The Constriction Decomposition Method for Coverage Path Planning	Oral	Motion and Path Planning I	Oct. 12
1523	Nagabandi, Anusha	A Path Planning Algorithm for Single-Ended Continuous Planar Robotic Ribbon Folding	Oral	Motion and Path Planning I	Oct. 12
58	Evestedt, Niclas	Motion planning for a reversing general 2-trailer configuration using Closed-Loop RRT	Oral	Motion and Path Planning II	Oct. 12
161	Noda, Shintaro	Redundancy Parameterization for Search Space Reduction: Application to Whole-body Postures Planning without	Oral	Motion and Path Planning II	Oct. 12
473	Scholz, Jonathan	Navigation Among Movable Obstacles with Learned Dynamic Constraints	Oral	Motion and Path Planning II	Oct. 12
566	Burget, Felix	Bi2RRT: An Optimal Sampling-Based Path Planning Framework for Task-Constrained Mobile Manipulation	Oral	Motion and Path Planning II	Oct. 12
1328	Tabib, Wennie	Computationally Efficient Information-Theoretic Exploration in Planetary Pits and Caves	Oral	Motion and Path Planning II	Oct. 12
3	Miraldo, Pedro	Towards an Omnidirectional Catadioptric RGB-D Camera	Oral	Omnidirectional Vision	Oct. 12
1240	Benseddik, Housseni	Camera Rotation Estimation using 3D Mesh Surfaces representation of Spherical Images	Oral	Omnidirectional Vision	Oct. 12
1447	Posada, Luis Felipe	Spatial Layout and Surface Reconstruction from Omnidirectional Images	Oral	Omnidirectional Vision	Oct. 12
1488	Jaramillo, Carlos	GUMS: A Generalized Unified Model for Stereo Omnidirectional Vision (Demonstrated via a Vertically-Folded Cat	Oral	Omnidirectional Vision	Oct. 12
296	Bagge Carlson, Fredrik	Particle Filter Framework for 6D Seam Tracking Under Large External Forces Using 2D Laser Sensors	Oral	Optimal Control and Optimization	Oct. 12
573	Wahrburg, Arne	Improving Contact Force Estimation Accuracy by Optimal Redundancy Resolution	Oral	Optimal Control and Optimization	Oct. 12
949	Choudhury, Shushman	Pareto-Optimal Search over Configuration Space Beliefs for Anytime Motion Planning	Oral	Optimal Control and Optimization	Oct. 12
1079	Koc, Okan	A New Trajectory Generation Framework in Robotic Table Tennis	Oral	Optimal Control and Optimization	Oct. 12
1100	Leong, Yoke Peng	Sequential Alternating Least Squares for Solving High Dimensional Linear Hamilton-Jacobi-Bellman Equation	Oral	Optimal Control and Optimization	Oct. 12
369	Peternel, Luka	Towards Multi-Modal Intention Interfaces for Human-Robot Co-Manipulation	Oral	Physical Human-Robot Interaction	Oct. 12
446	Saint-Bauzel, Ludovic	Implementation of haptic communication in manipulative tasks: a statistical state machine model	Oral	Physical Human-Robot Interaction	Oct. 12
481	Lin, Hsien-Chung	Human Guidance Programming on a 6-DoF Robot with Collision Avoidance	Oral	Physical Human-Robot Interaction	Oct. 12
1050	Ghadirzadeh, Ali	A Sensorimotor Reinforcement Learning Framework for Physical Human-Robot Interaction	Oral	Physical Human-Robot Interaction	Oct. 12
243	Ballesteros, Joaquin	Online estimation of rollator user condition using spatiotemporal gait parameters	Oral	Rehabilitation Robotics	Oct. 12
1125	Michaud, Hadrien Olliv	Design and Functional Evaluation of an Epidermal Strain Sensing System for Hand Tracking	Oral	Rehabilitation Robotics	Oct. 12
1272	Menychtas, Dimitrios	A Robotic Human Body Model with Joint Limits for Simulation of Upper limb Prosthesis Users	Oral	Rehabilitation Robotics	Oct. 12
1388	Yoon, Jungwon	Haptic based Gait Rehabilitation System for Stroke Patients	Oral	Rehabilitation Robotics	Oct. 12
1657	Hur, Pilwon	Upslope Walking with Transfemoral Prosthesis using Optimization based Spine Generation	Oral	Rehabilitation Robotics	Oct. 12
165	Joubair, Ahmed	Performances of Observability Indices for Industrial Robot Calibration	Oral	Robot Calibration and Modeling	Oct. 12
1284	Pachtrachai, Krittin	Hand-eye calibration for robotic assisted minimally invasive surgery without a calibration grid	Oral	Robot Calibration and Modeling	Oct. 12
1626	Fischer, Thomas	Stereo Vision-based Localization for Hexapod Walking Robots Operating in Rough Terrains	Oral	Robot Calibration and Modeling	Oct. 12
1663	Nieto-Granda, Carlos	Active Planning based Extrinsic Calibration of Exteroceptive Sensors in Unknown Environments	Oral	Robot Calibration and Modeling	Oct. 12
164	Xu, Anqi	Maintaining Efficient Collaborations with Trust-Seeking Robots	Oral	Robot Companions and Social Human-Robot Inter	Oct. 12
558	Park, Chonhyon	Hi Robot: Human Intention-aware Robot Planning for Safe and Efficient Navigation in Crowds	Oral	Robot Companions and Social Human-Robot Inter	Oct. 12
609	Ishi, Carlos Toshiro	Motion generation in android robots during laughing speech	Oral	Robot Companions and Social Human-Robot Inter	Oct. 12
947	Ji, Junyun	Autonomous Mapping between Motions and Labels	Oral	Robot Companions and Social Human-Robot Inter	Oct. 12
1400	Oishi, Meeko	Validation of Cognitive Models for Collaborative Hybrid Systems with Discrete Human Input	Oral	Robot Companions and Social Human-Robot Inter	Oct. 12
1220	Aoki, Tatsuya	Online Joint Learning of Object Concepts and Language Model Using Multimodal Hierarchical Dirichlet Process	Oral	Robot Learning	Oct. 12
1467	Abdolmaleki, Abbas	Non-parametric Contextual Stochastic Search	Oral	Robot Learning	Oct. 12
1594	Boteanu, Adrian	A Model for Verifiable Grounding and Execution of Complex Language Instructions	Oral	Robot Learning	Oct. 12
1616	Sun, Yu	Functional Object-Oriented Network for Manipulation Learning	Oral	Robot Learning	Oct. 12
664	Wang, Dangxiao	WALS-Robot: A Compact and Transformable Wheel-Arm-Leg-Sucker Hybrid Robot	Oral	Search and Rescue Robots	Oct. 12
784	Xu, Wenfu	The Design and Experiments of a Small Wheel-legged Mobile Robot System with Two Robotic Arms	Oral	Search and Rescue Robots	Oct. 12
826	Meghjani, Malika	Multi-Target Rendezvous Search	Oral	Search and Rescue Robots	Oct. 12
1416	Ichimura, Tomoya	Development of a Spherical Tether Handling Device with a Coupled Differential Mechanism for Tethered teleoper	Oral	Search and Rescue Robots	Oct. 12
122	Abramov, Alexey	Multi-Lane Perception Using Feature Fusion Based on GraphSLAM	Oral	Sensor Fusion	Oct. 12
148	Merfels, Christian	Pose Fusion with Chain Pose Graphs for Automated Driving	Oral	Sensor Fusion	Oct. 12
461	Burri, Michael	Generalized Information Filtering for MAV Parameter Estimation	Oral	Sensor Fusion	Oct. 12
542	Shi, Lei	Constrained Sampling of 2.5D Probabilistic Maps for Augmented Inference	Oral	Sensor Fusion	Oct. 12
1320	Luo, Shan	Iterative Closest Labeled Point for Tactile Object Shape Recognition	Oral	Sensor Fusion	Oct. 12
173	Jackson, Russell	Needle-Tissue Interaction Force State Estimation for Robotic Surgical Suturing	Oral	Surgical Robotics 1	Oct. 12
282	Matich, Sebastian	3-D force measurement using single axis force sensors in a new single port parallel kinematics surgical manipulat	Oral	Surgical Robotics 1	Oct. 12
627	Lee, Deukhee	Expedient Design Optimization of a Concentric Tube Robot with a Heat-shrink Plastic Tube	Oral	Surgical Robotics 1	Oct. 12
1532	Seneci, Carlo Alberto	Design of a Smart 3D-printed Wristed Robotic Surgical Instrument with Embedded Force Sensing and Modularity	Oral	Surgical Robotics 1	Oct. 12
1622	Choi, Hyouk Ryeol	Development of Surgical Forceps Integrated with Multi-Axial Force Sensor for Minimally Invasive Robotic Surgery	Oral	Surgical Robotics 1	Oct. 12
445	Pinciroli, Carlo	Buzz: An Extensible Programming Language for Heterogeneous Swarm Robotics	Oral	Swarm Robotics	Oct. 12
531	Davis, Duane	Consensus-Based Data Sharing for Large-Scale Aerial Swarm Coordination in Lossy Communications Environme	Oral	Swarm Robotics	Oct. 12
946	Antoun, Anthony	Kilogrid: A Modular Virtualization Environment for the Kilobot Robot	Oral	Swarm Robotics	Oct. 12
1417	Lu, Qi	The MPFA: A Multiple-Place Foraging Algorithm for Biologically-Inspired Robot Swarms	Oral	Swarm Robotics	Oct. 12
1437	Bandyopadhyay, Saptar	A Probabilistic Eulerian Approach for Formation Control of Large-Scale Swarms	Oral	Swarm Robotics	Oct. 12
152	Kulvicius, Tomas	Optimal trajectory generation for generalization of discrete movements with boundary conditions	Oral	Trajectory Generation I	Oct. 12
432	Kolyubin, Sergey	Planning Longest Pitch Trajectories for Compliant Serial Manipulators	Oral	Trajectory Generation I	Oct. 12
625	Best, Graeme	Multi-Robot Path Planning for Budgeted Active Perception with Self-Organising Maps	Oral	Trajectory Generation I	Oct. 12
1706	Ng, Yonhon	Non-Iterative, Fast SE(3) Path Smoothing	Oral	Trajectory Generation I	Oct. 12
186	Zanchettin, Andrea Ma	Robust constraint-based control of robot manipulators: an application to a visual aided grasping task	Oral	Trajectory Generation II	Oct. 12
908	Sterrazza, Carmelo	Numerical Search for Local (Partial) Differential Flatness	Oral	Trajectory Generation II	Oct. 12
1072	Rubenstein, Michael	Autonomous Mobile Robot with Independent Control and Externally Driven Actuation	Oral	Trajectory Generation II	Oct. 12
1327	Nasiri, Rezvan	Design A Nonlinear Adaptive Natural Oscillator: Towards Exploiting Natural Dynamics in Cyclic Tasks	Oral	Trajectory Generation II	Oct. 12
1505	Holladay, Rachel	Distance Metrics and Algorithms for Task Space Trajectory Optimization	Oral	Trajectory Generation II	Oct. 12
466	Mainprice, Jim	Warping the Workspace Geometry with Electric Potentials for Motion Optimization of Manipulation Tasks	Oral	Trajectory Generation I	Oct. 12
520	Falquez, Juan	Inertial Aided Dense and Semi-Dense Methods for Robust Direct Visual Odometry	Oral	Visual Odometry and Navigation	Oct. 12
582	Suger, Benjamin	Terrain-Adaptive Obstacle Detection	Oral	Visual Odometry and Navigation	Oct. 12
788	de Croon, Guido	Performance Evaluation in Obstacle Avoidance	Oral	Visual Odometry and Navigation	Oct. 12
1020	Suleymanov, Tarfan	The Path Less Taken: A Fast Variational Approach for Scene Segmentation Used For Closed Loop Control	Oral	Visual Odometry and Navigation	Oct. 12
1410	Taylor, Camillo Jose	Recovering Relative Orientation and Scale from Visual Odometry and Ranging Radio Measurements.	Oral	Visual Odometry and Navigation	Oct. 12
102	Brunner, Sebastian Ge	RAFCON: A Graphical Tool for Engineering Complex, Robotic Tasks	Special S	(Special Session) Robotics Software Engineering	Oct. 12
150	Wienke, Johannes	Autonomous Fault Detection for Performance Bugs in Component-Based Robotic Systems	Special S	(Special Session) Robotics Software Engineering	Oct. 12
882	Lier, Florian Hans Miel	Towards Automated System and Experiment Reproduction in Robotics	Special S	(Special Session) Robotics Software Engineering	Oct. 12
1083	Lesire, Charles	Measurement-based real-time analysis of robotic software architectures	Special S	(Special Session) Robotics Software Engineering	Oct. 12
29	Höfer, Sebastian	Coupled Learning of Action Parameters and Forward Models for Manipulation	Interactive	Learning in Robotics	Oct. 13
52	Peternel, Luka	A Shared Control Method for Online Human-in-the-Loop Robot Learning Based on Locally Weighted Regression	Interactive	Learning in Robotics	Oct. 13
303	Lee, Kyungjae	Inverse Reinforcement Learning with Leveraged Gaussian Processes	Interactive	Learning in Robotics	Oct. 13
375	Umlauf, Jonas	Gaussian Processes for Dynamic Movement Primitives with Application in Knowledge-based Cooperation	Interactive	Learning in Robotics	Oct. 13
407	Manschitz, Simon	Probabilistic Decomposition of Sequential Force Interaction Tasks into Movement Primitives	Interactive	Learning in Robotics	Oct. 13
577	van Hoof, Herke	Stable Reinforcement Learning with Autoencoders for Tactile and Visual Data	Interactive	Learning in Robotics	Oct. 13
677	Hiratsuka, Michihisa	Trajectory Learning from Human Demonstrations via Manifold Mapping	Interactive	Learning in Robotics	Oct. 13
617	Duran, Angel Juan	Initial weight estimation for learning the internal model based on the knowledge of the robot morphology	Interactive	Learning in Robotics	Oct. 13
802	de Bruin, Tim	Improved Deep Reinforcement Learning for Robotics Through Distribution-based Experience Retention	Interactive	Learning in Robotics	Oct. 13
911	Zambelli, Martina	Multimodal Imitation Learning using Self-learned Sensorimotor Contingencies	Interactive	Learning in Robotics	Oct. 13
923	Chavez-Garcia, R. Om	Discovering Affordances Through Perception and Manipulation	Interactive	Learning in Robotics	Oct. 13
954	Forestier, Sébastien	Modular Active Curiosity-Driven Discovery of Tool Use	Interactive	Learning in Robotics	Oct. 13
972	Bercci, Laszlo-Peter	It's Like Déjà Vu All Over Again: Learning Place-Dependent Terrain Assessment for Visual Teach and Repeat	Interactive	Learning in Robotics	Oct. 13
973	Berio, Daniel	Learning dynamic graffiti strokes with a compliant robot	Interactive	Learning in Robotics	Oct. 13
987	Caley, Jeffrey	Deep Learning of Structured Environments for Robot Search	Interactive	Learning in Robotics	Oct. 13
1049	Luna, Jose Marcio	Lifelong Learning for Disturbance Rejection on Mobile Robots	Interactive	Learning in Robotics	Oct. 13
1063	Goeddel, Robert	Learning Semantic Place Labels from Occupancy Grids using CNNs	Interactive	Learning in Robotics	Oct. 13

1115	Fang, Zhou	Learning Models for Constraint-Based Motion Parameterization from Interactive Physics-based Simulation	Interactive	Learning in Robotics	Oct. 13
1129	Jovan, Ferdian	A Poisson-Spectral Model for Modelling the Spatio-Temporal Patterns in Human Data Observed by a Robot	Interactive	Learning in Robotics	Oct. 13
1340	Fu, Justin	One-Shot Learning of Manipulation Skills with Online Dynamics Adaptation and Neural Network Priors	Interactive	Learning in Robotics	Oct. 13
1454	Papanikolopoulos, Niki	Active Constrained Clustering via Non-Iterative Uncertainty Sampling	Interactive	Learning in Robotics	Oct. 13
1468	Meier, Franziska	Towards Robust Online Inverse Dynamics Learning	Interactive	Learning in Robotics	Oct. 13
1501	Dhir, Neil	Nonparametric Bayesian Models for Unsupervised Human Activity Recognition and Tracking using Probabilistic P	Interactive	Learning in Robotics	Oct. 13
1525	Arenz, Oleg	Optimal Control and Inverse Optimal Control by Distribution Matching	Interactive	Learning in Robotics	Oct. 13
1693	Jeong, Heejin	Efficient Learning of Stand-up Motion for Humanoid Robots using Bilateral Symmetric Feature	Interactive	Learning in Robotics	Oct. 13
390	Ales, Pierre-Jean	3D Haptic Rendering of Tissues for Epidural Needle Insertion using an Electro-Pneumatic 7 Degrees of Freedom	Interactive	Micro Robot/Robot Intelligence	Oct. 13
394	Bartenwerfer, Malte	Exploitation of SEM Charging Effects for Automated Robotic Assembly Tasks	Interactive	Micro Robot/Robot Intelligence	Oct. 13
606	Fallahinia, Navid	A Novel Strategy for Smooth Force-Position Switching Control of Micropositioning Piezoelectric Actuators	Interactive	Micro Robot/Robot Intelligence	Oct. 13
624	Liu, Lianqing	A Design of Phase-Closed-Loop Nanomachining Control based Ultrasonic-Vibration-Assisted AFM	Interactive	Micro Robot/Robot Intelligence	Oct. 13
697	Antonelli, Marco	Unsupervised Learning of Depth during Coordinated Head/Eye Movements	Interactive	Micro Robot/Robot Intelligence	Oct. 13
712	Wang, Wenxue	AFM Measurement of the Mechanical Properties of Single Adherent Cells Based on Vibration	Interactive	Micro Robot/Robot Intelligence	Oct. 13
814	Marchand, Eric	Three-Dimensional Visual Tracking and Pose Estimation in Scanning Electron Microscopes	Interactive	Micro Robot/Robot Intelligence	Oct. 13
956	Mochiyama, Hiromi	Model Validation of Discretized Spatial Closed Elastica	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1076	Largilliere, Frederick	Stiffness rendering on soft tangible devices controlled through inverse FEM simulation	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1093	Rupprecht, Christian	Robotic Sensory Substitution for Video-based Action Recognition	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1106	Kloss, Alina	Learning Where to Search Using Visual Attention	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1126	LIU, FEI	An Energy Based Approach for Passive Dual-user Haptic Training Systems	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1257	Felt, Wyatt	Sensing the Motion of Bellows through Changes in Mutual Inductance	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1338	Kassar, Abdallah	Communication-Efficient Motion Coordination and Data Fusion in Information Gathering Teams	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1347	Kang, Junsu	On-chip Automation of Sequential Flow Switching with Serially Connectable Fluidic Monostable Multivibrator	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1352	Suh, Il Hong	Key-frame Selection based Online Object Learning and Detection	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1376	Yoon, Jungwon	Development of a Magnetic Nanoparticles Guidance System for Simultaneous Actuation and MPI-Based Monitori	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1444	Yang, Yongliang	Nanorobot Enabled In Situ Sensing Molecular Interactions for Drug Discovery	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1470	Li, Xiao	A Hardware-in-the-loop Simulator for Safety Training in Robotic Surgery	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1520	Boudaoud, Mokrane	Voltage/frequency rate dependent modeling for nano-robotic systems based on piezoelectric stick-slip actuators	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1541	Falco, Pietro	Encoding Human Actions with a Frequency Domain Approach	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1576	Wong, Jay Ming	Affordance-Based Active Belief Recognition using Visual and Manual Actions	Interactive	Micro Robot/Robot Intelligence	Oct. 13
1600	Guo, Yana	Automated Pick-up of Carbon Nanotubes inside a Scanning Electron Microscope	Interactive	Micro Robot/Robot Intelligence	Oct. 13
144	Drews-Jr, Paulo	Real-Time Monocular Obstacle Avoidance using Underwater Dark Channel Prior	Interactive	Motion and Path Planning	Oct. 13
224	Graigam, Tipakorn	Active Sensing for Continuous State and Action Spaces via Task-Action Entropy Minimization	Interactive	Motion and Path Planning	Oct. 13
297	Hirata, Yasuhisa	Motion Guidance using Haptic Feedback based on Vibrotactile Illusions	Interactive	Motion and Path Planning	Oct. 13
336	McLeod, Sterling	Real-time Adaptive Non-holonomic Motion Planning in Unforeseen Dynamic Environments	Interactive	Motion and Path Planning	Oct. 13
404	K. Narayanan, Vishnu	A semi-autonomous framework for human-aware and user intention driven wheelchair mobility assistance	Interactive	Motion and Path Planning	Oct. 13
426	Fassbender, Dennis	Motion Planning for Autonomous Vehicles in Highly Constrained Urban Environments	Interactive	Motion and Path Planning	Oct. 13
554	Hustig-Schultz, Dawn	Morphological Design for Controlled Tensegrity Quadruped Locomotion	Interactive	Motion and Path Planning	Oct. 13
591	Athar, Ali	Whole-Body Motion Planning for Humanoid Robots with Heuristic Search	Interactive	Motion and Path Planning	Oct. 13
604	Ude, Ales	Trajectory Generation with Arc Length Dynamic Movement Primitives	Interactive	Motion and Path Planning	Oct. 13
648	Park, Jaeheung	Desired Orientation RRT (DO-RRT) for Autonomous Vehicle in Narrow Cluttered Spaces	Interactive	Motion and Path Planning	Oct. 13
780	Todoran, George	Expressive Navigation and Local Path-Planning of Independent Steering Autonomous Systems	Interactive	Motion and Path Planning	Oct. 13
807	Zhang, Chongjie	Co-optimizing Task Planning with Motion Planning	Interactive	Motion and Path Planning	Oct. 13
833	Haldane, Duncan	A power modulating leg mechanism for monopodal hopping	Interactive	Motion and Path Planning	Oct. 13
896	Pothast, Christian	Online Trajectory Optimization to Improve Object Recognition	Interactive	Motion and Path Planning	Oct. 13
1151	Guzzi, Jerome	From indoor GIS maps to optimal path planning for autonomous wheelchairs	Interactive	Motion and Path Planning	Oct. 13
1164	Shu, Roberto	Optimal Control for Geometric Motion Planning of Human Diving	Interactive	Motion and Path Planning	Oct. 13
1229	Yoon, Sung-eui	Anytime RRBT for Handling Uncertainty and Dynamic Objects	Interactive	Motion and Path Planning	Oct. 13
1262	Denny, Jory	On the Theory of User-Guided Planning	Interactive	Motion and Path Planning	Oct. 13
1282	Chiang, Hao-Tien	Runtime SES Planning: Online Motion Planning in Environments with Stochastic Dynamics and Uncertainty	Interactive	Motion and Path Planning	Oct. 13
1326	Mitchell, Derek	Persistent Robot Formations via Online Substitution	Interactive	Motion and Path Planning	Oct. 13
1389	Brown, Jason	Classification of Dynamic Climbing Gaits	Interactive	Motion and Path Planning	Oct. 13
1426	Long, Xianchao	Template-Based Human Supervised Robot Task Programming	Interactive	Motion and Path Planning	Oct. 13
1512	Svinin, Mikhail	Modeling of Human-Like Reaching Movements in the Manipulation of Parallel Flexible Objects	Interactive	Motion and Path Planning	Oct. 13
1566	Hoening, Wolfgang	Formation Change for Robot Groups in Occluded Environments	Interactive	Motion and Path Planning	Oct. 13
14	Tanaka, Kanji	Self-localization from Images with Small Overlap	Interactive	Navigation/SLAM	Oct. 13
343	Mondal, Amit Kumar	Incremental Real-Time Multibody VSLAM with Trajectory Optimization Using Stereo Camera	Interactive	Navigation/SLAM	Oct. 13
356	Vysotska, Olga	Exploiting Building Information from Publicly Available Maps in Graph-Based SLAM	Interactive	Navigation/SLAM	Oct. 13
400	Sun, Dalil	Towards Effective Localization in Dynamic Environments	Interactive	Navigation/SLAM	Oct. 13
487	He, Bingwei	Vision-based Real-time 3D Mapping for UAV with Laser Sensor	Interactive	Navigation/SLAM	Oct. 13
501	Bampis, Loukas	Encoding the Description of Image Sequences: A Two-Layered Pipeline for Loop Closure Detection	Interactive	Navigation/SLAM	Oct. 13
505	Liu, Hong	Probabilistic Binaural Multiple Sources Localization Based on Time-delay Compensation Estimator and Clustering	Interactive	Navigation/SLAM	Oct. 13
613	Jung, Hojung	Multi-modal Panoramic 3D Outdoor Datasets for Place Categorization	Interactive	Navigation/SLAM	Oct. 13
622	Kubelka, Vladimir	WiFi localization in 3D	Interactive	Navigation/SLAM	Oct. 13
640	Krajník, Tomáš	Persistent Localization and Life-long Mapping in Changing Environments using the Frequency Map Enhancement	Interactive	Navigation/SLAM	Oct. 13
755	Bu, Shuhui	Map2DFusion: Real-time Incremental UAV Image Mosaicing based on Monocular SLAM	Interactive	Navigation/SLAM	Oct. 13
842	Dymczyk, Marcin Tomi	Erasing bad memories: agent-side summarization for long-term mapping	Interactive	Navigation/SLAM	Oct. 13
893	Quraishi, Anwar Ahma	Robustness to Connectivity Loss for Collaborative Mapping	Interactive	Navigation/SLAM	Oct. 13
909	Fontanelli, Daniele	Optimal Placement of Passive Sensors for Robot Localisation	Interactive	Navigation/SLAM	Oct. 13
918	Fermin-León, Leonard	Path Planning in Graph SLAM using Expected Uncertainty	Interactive	Navigation/SLAM	Oct. 13
1000	Mu, Beipeng	SLAM with Objects using a Nonparametric Pose Graph	Interactive	Navigation/SLAM	Oct. 13
1029	Miyagusuku, Renato	Improving Gaussian Processes based mapping of wireless signals using path loss models	Interactive	Navigation/SLAM	Oct. 13
1068	Schlegel, Dominik	Visual Localization and Loop Closing Using Decision Trees and Binary Features	Interactive	Navigation/SLAM	Oct. 13
1182	Sheng, Weihua	Human-guided Robot 3D Mapping using Virtual Reality Technology	Interactive	Navigation/SLAM	Oct. 13
1217	Briaies, Jesus	Fast Global Optimality Verification in 3D SLAM	Interactive	Navigation/SLAM	Oct. 13
1357	Das, Arun	Calibration of a Dynamic Camera Cluster for Multi-Camera Visual SLAM	Interactive	Navigation/SLAM	Oct. 13
1408	Nashed, Samer	Curating Long-Term Vector Maps	Interactive	Navigation/SLAM	Oct. 13
1446	Lee, Sukhan	Recalibration-Free Indoor Localization with Wi-Fi Fingerprinting of Invariant Received Signal Strength	Interactive	Navigation/SLAM	Oct. 13
1451	Arroyo, Roberto	Deep Visual Features Learned from CNNs for Robust Topological Localization across Seasons	Interactive	Navigation/SLAM	Oct. 13
1526	Chaves, Stephen	Efficient Planning with the Bayes Tree for Active SLAM	Interactive	Navigation/SLAM	Oct. 13
24	Urbann, Oliver	A Reactive Stepping Algorithm Based on Preview Controller with Observer for Biped Robots	Interactive	Robot Control and Planning	Oct. 13
214	Oleynikova, Helen	Continuous-Time Trajectory Optimization for Online UAV Replanning	Interactive	Robot Control and Planning	Oct. 13
255	Luo, Xiang	Planning and Control of Biped Robots with Upper Body	Interactive	Robot Control and Planning	Oct. 13
310	Lee, Seoung Kyoo	Distributed Deformable Configuration Control for Multi-Robot Systems	Interactive	Robot Control and Planning	Oct. 13
342	Huang, Rui	Learning Cooperative Primitives with Physical Human-Robot Interaction for a Human-Powered Lower Exoskeleton	Interactive	Robot Control and Planning	Oct. 13
345	Ren, Chao	Trajectory Tracking Control of an Omnidirectional Mobile Robot with Friction Compensation	Interactive	Robot Control and Planning	Oct. 13
391	Haninger, Kevin	Robust Impedance Control with Applications to a Series-Elastic Actuated System	Interactive	Robot Control and Planning	Oct. 13
474	Feng, Siyuan	Robust Dynamic Walking Using Online Foot Step Optimization	Interactive	Robot Control and Planning	Oct. 13
709	Tchenderli-Brahman, Sr	Dynamic Surface Control-Based Stabilization of an n^{th} Chained Systems with Application to a Car-Like Robot	Interactive	Robot Control and Planning	Oct. 13
765	Griffin, Robert J.	Disturbance Compensation and Step Optimization for Push Recovery	Interactive	Robot Control and Planning	Oct. 13
787	Kim, Jung	Analytical Investigation of the Stabilizing Function of the Musculoskeletal System using Lyapunov Stability Criteria	Interactive	Robot Control and Planning	Oct. 13
863	Maximo, Marcos Rican	Mixed-Integer Programming for Automatic Walking Step Duration	Interactive	Robot Control and Planning	Oct. 13
881	Mifsud, Alexis	Stabilization of a Compliant Humanoid Robot Using Only Inertial Measurement Units with a Viscoelastic Reaction	Interactive	Robot Control and Planning	Oct. 13
898	Mandery, Christian	Using Language Models to Generate Whole-Body Multi-Contact Motions	Interactive	Robot Control and Planning	Oct. 13
913	De Stefano, Marco	An optimized passivity based method for simulating satellite dynamics on a position controlled robot in presence c	Interactive	Robot Control and Planning	Oct. 13
1045	Quintero, David	Preliminary Experiments with a Unified Controller for a Powered Knee-Ankle Prosthetic Leg Across Walking Spee	Interactive	Robot Control and Planning	Oct. 13
1108	DEVIGNE, LOUISE	Low complex sensor-based shared control for power wheelchair navigation	Interactive	Robot Control and Planning	Oct. 13
1114	Shahbazi Aghbelagh, I	Coordination of Monopodal SLIP Models Towards Quadrupedal Running	Interactive	Robot Control and Planning	Oct. 13
1150	Traversaro, Silvio	Identification of Fully Physical Consistent Inertial Parameters using Optimization on Manifolds	Interactive	Robot Control and Planning	Oct. 13
1186	Yi, Seung-Joon	Heel and Toe Lifting Walk Controller for Resource Constrained Humanoid Robots	Interactive	Robot Control and Planning	Oct. 13
1208	Watterson, Michael	Smooth Trajectory Generation on SE(3) for a Free Flying Space Robot	Interactive	Robot Control and Planning	Oct. 13
1274	Grey, Michael	Humanoid Manipulation Planning using Backward-Forward Search	Interactive	Robot Control and Planning	Oct. 13
1329	Gu, Tianyu	Automated Motion-based Tactical Maneuver Discovery, Reasoning and Trajectory Planning for Autonomous Driv	Interactive	Robot Control and Planning	Oct. 13
1406	Zhou, You	Coordinate Change Dynamic Movement Primitives - A Leader-Follower Approach	Interactive	Robot Control and Planning	Oct. 13
1442	Desai, Arjav	Dynamically Feasible and Safe Shape Transitions for Teams of Aerial Robots	Interactive	Robot Control and Planning	Oct. 13
36	Borges, Paulo Vinicius	Low-Obstacle Detection Using Stereo Vision	Interactive	Robot Vision	Oct. 13
133	Del Bue, Alessio	Fast 6D Pose from a Single RGB Image using Cascaded Forests Templates	Interactive	Robot Vision	Oct. 13
265	Lee, Jaeyeon	A Multiple Kernel Convolution Score Method for Bin Picking of Plastic Packed Object	Interactive	Robot Vision	Oct. 13
315	Heng, Lionel	Semi-Direct Visual Odometry for a Fish-eye-Stereo Camera	Interactive	Robot Vision	Oct. 13
335	DUAN, RAN	Recoverable Recommended Keypoint-aware Visual Tracking Using Coupled-layer Appearance Modelling	Interactive	Robot Vision	Oct. 13
383	Fontana, Simone	Point Clouds Registration with Probabilistic Data Association	Interactive	Robot Vision	Oct. 13

388	DUFLOT, Lesley-Ann	Shearlet-based vs. Photometric-based Visual Servoings for Robot-assisted Medical Applications	Interactive	Robot Vision	Oct. 13
417	Serafin, Jacopo	Fast and Robust 3D Feature Extraction from Sparse Point Clouds	Interactive	Robot Vision	Oct. 13
443	Sahin, Caner	Iterative Hough Forest with Histogram of Control Points for 6 DoF Object Registration from Depth Images	Interactive	Robot Vision	Oct. 13
469	Buck, Sebastian	Generic 3D Obstacle Detection for AGVs using Time-of-Flight Cameras	Interactive	Robot Vision	Oct. 13
525	Georgakis, Georgios	RGB-D Multi-View Object Detection with Object Proposals and Shape Context	Interactive	Robot Vision	Oct. 13
630	Mosberger, Rafael	Infering Human Body Posture Information from Reflective Patterns of Protective Work Garments	Interactive	Robot Vision	Oct. 13
776	Vasco, Valentina	Fast Event-based Harris Corner Detection Exploiting the Advantages of Event-driven Cameras	Interactive	Robot Vision	Oct. 13
895	Cadena Lerma, Cesar	Measuring the Performance of Single Image Depth Estimation Methods	Interactive	Robot Vision	Oct. 13
1043	Mohades Kasaei, Seye	GOOD: A Global Orthographic Object Descriptor for 3D Object Recognition and Manipulation	Interactive	Robot Vision	Oct. 13
1061	Ataer-Cansizoglu, Esra	Object Detection and Tracking in an RGB-D SLAM via Hierarchical Feature Grouping	Interactive	Robot Vision	Oct. 13
1102	Vasic, Milos	A System Implementation and Evaluation of a Cooperative Fusion and Tracking Algorithm based on a Gaussian M	Interactive	Robot Vision	Oct. 13
1131	Bateau, Quentin	Particle Filter-based Visual Servoing	Interactive	Robot Vision	Oct. 13
1371	Koide, Kenji	Person Identification Based on the Matching of Foot Strike Timings Obtained by LRFs and a Smartphone	Interactive	Robot Vision	Oct. 13
1377	Wang, John	AprilTag 2: Efficient and robust fiducial detection	Interactive	Robot Vision	Oct. 13
1557	Pham, Trung	Unsupervised Segmentation of Dense Indoor 3D Maps via Constrained Plane Fitting	Interactive	Robot Vision	Oct. 13
1587	Pereira, Tiago	Visibility Maps for Any-Shape Robots	Interactive	Robot Vision	Oct. 13
1619	Gomez-Ojeda, Ruben	PL-SVO: Semi-Direct Monocular Visual Odometry by Combining Points and Line Segments	Interactive	Robot Vision	Oct. 13
1722	Alexandrov, Sergey	Color Correction for 3D Mapping with RGB-D Cameras	Interactive	Robot Vision	Oct. 13
701	Bürki, Mathias	Appearance-Based Landmark Selection for Efficient Long-Term Visual Localization	Interactive	Robot Vision	Oct. 13
20	Seo, TaeWon	Steering control of a water-running robot by using an active tail	Oral	Biologically-Inspired Robots	Oct. 13
200	Cui, Lei	An Underwater Electro-sensory Membrane Bio-inspired by Weakly Electric Fish	Oral	Biologically-Inspired Robots	Oct. 13
456	Shintake, Jun	Biomimetic Underwater Robots Based on Dielectric Elastomer Actuators	Oral	Biologically-Inspired Robots	Oct. 13
1048	Karasek, Matěj	Free flight force estimation of a 23.5 g flapping wing MAV using an on-board IMU	Oral	Biologically-Inspired Robots	Oct. 13
1435	Bae, Joonbum	Design of a Robot with Biologically-inspired Swimming Hairs for Fast and Efficient Mobility in Aquatic Environmen	Oral	Biologically-Inspired Robots	Oct. 13
229	Park, Sangsin	Bipedal Walking Pattern Generation Based on an Extrapolated Center of Mass	Oral	Bipedal Control	Oct. 13
822	Divan, Stefano	Passive Robotic Walker Path Following with Bang-Bang Hybrid Control Paradigm	Oral	Bipedal Control	Oct. 13
855	Li, Qingdu	A Simple 2D Straight-Leg Passive Dynamic Walking Model without Foot-Scuffing Problem	Oral	Bipedal Control	Oct. 13
1205	Hutchinson, Seth	Optimal Double Support Zero Moment Point Trajectories for Bipedal Locomotion	Oral	Bipedal Control	Oct. 13
1378	Oh, Yonghwan	A Planar Stable Walking Model based on Ankle Actuation and the Virtual Pendulum Concept	Oral	Bipedal Control	Oct. 13
59	Zhou, Qiang	New type of climbing robot using square vortex adsorption unit	Oral	Climbing Robots	Oct. 13
570	Matsuno, Takahiro	Design of spring-suspended suction cup based on the air inflow change with inside negative pressure	Oral	Climbing Robots	Oct. 13
608	Quin, Phillip	Exploring in 3D with a Climbing Robot: Selecting the Next Best Base Position on Arbitrarily-Oriented Surfaces	Oral	Climbing Robots	Oct. 13
678	Ren, Chao	Guide Rail Design for a Passive Suction Cup based Wall-Climbing Robot	Oral	Climbing Robots	Oct. 13
1330	Sun, Xiao	Stabilized Ladder Climbing Motion Generation with Separated Path and Time Planning	Oral	Climbing Robots	Oct. 13
223	Chathuranga, Damith	A Soft Three Axis Force Sensors that is Useful for Robot Grippers	Oral	Force and Tactile Sensing	Oct. 13
1134	Faraji, Salman	Designing a virtual whole body tactile sensor suit for a simulated humanoid robot using inverse dynamics	Oral	Force and Tactile Sensing	Oct. 13
1384	Bergbreiter, Sarah	Soft Microfabricated Capacitive Sensor for High Dynamic Range Strain Sensing	Oral	Force and Tactile Sensing	Oct. 13
1554	Meier, Martin	Distinguishing Sliding from Slipping during Object Pushing	Oral	Force and Tactile Sensing	Oct. 13
1561	Murozaki, Yuichi	Detection of Multi-biosignal Using a Quartz Crystal　Resonator based Wide Range Load Sensor with Cor	Oral	Force and Tactile Sensing	Oct. 13
306	Hildebrandt, Arne-Chri	Real-Time Predictive Kinematic Evaluation and Optimization for Biped Robots	Oral	Humanoid Locomotion	Oct. 13
351	Kimura, Kohei	Tricycle Manipulation Strategy for Humanoid Robot Based on Active and Passive Manipulators Control	Oral	Humanoid Locomotion	Oct. 13
792	Oh, Yonghwan	A Novel Performance Measure for Biped Robots against Bounded Persistent Disturbances	Oral	Humanoid Locomotion	Oct. 13
1242	Tsuji, Toshiaki	Force control of a jumping musculoskeletal robot with pneumatic artificial muscles	Oral	Humanoid Locomotion	Oct. 13
1583	Ma, Wenlong	Efficient HZD Gait Generation for Three-Dimensional Underactuated Humanoid Running	Oral	Humanoid Locomotion	Oct. 13
292	Kojo, Yuta	Walking Control in Water Considering Reaction Forces from Water for Humanoid Robots with a Waterproof Suit	Oral	Humanoid Robots 1	Oct. 13
574	Kumagai, Iori	Achievement of Localization System for Humanoid Robots with Virtual Horizontal Scan Relative to Improved Odor	Oral	Humanoid Robots 1	Oct. 13
805	Tagne, Gilles	Measurement and Analysis of Physical Parameters of the Handshake Between two Persons According to Simple	Oral	Humanoid Robots 1	Oct. 13
1171	Romano, Francesco	Stability Analysis and Design of Momentum-based Controllers for Humanoid Robots	Oral	Humanoid Robots 1	Oct. 13
129	Oh, Jun Ho	Walking-Wheeling Dual mode Strategy for Humanoid Robot, DRC-HUBO+	Oral	Humanoid Robots 2	Oct. 13
236	Spyrakos-Papastavridi	Balance and Impedance Optimization Control for Compliant Humanoid Stepping	Oral	Humanoid Robots 2	Oct. 13
284	Takasugi, Noriaki	Real-Time Skating Motion Control of Humanoid for Acceleration and Balancing	Oral	Humanoid Robots 2	Oct. 13
668	Yamamoto, Ko	Resolved COG Viscoelasticity Control of Humanoid Robot	Oral	Humanoid Robots 2	Oct. 13
961	Farnioli, Edoardo	Toward Whole-Body Loco-Manipulation: Experimental Results on Multi-Contact Interaction with the Walk-Man Rc	Oral	Humanoid Robots 2	Oct. 13
220	Gateau, Thibault	Considering Human's Non-Deterministic Behavior and his Availability State When Designing a Collaborative Hum	Oral	Human-Robot Interaction 1	Oct. 13
1091	Gao, Yixing	Iterative Path Optimisation for Personalised Dressing Assistance using Vision and Force Information	Oral	Human-Robot Interaction 1	Oct. 13
1522	Zhu, Guangming	Human Activity Recognition Based on Weighted Limb Features	Oral	Human-Robot Interaction 1	Oct. 13
1667	Monajemi, Valiollah (N	UAV, Come To Me: End-to-End, Multi-Scale Situated HRI with an Uninstrumented Human and a Distant UAV	Oral	Human-Robot Interaction 1	Oct. 13
462	Palinko, Oskar	A Robot Reading Human Gaze: Why Eye Tracking Is Better Than Head Tracking for Human-Robot Collaboration	Oral	Human-Robot Interaction 2	Oct. 13
682	Coppola, Claudio	Social Activity Recognition based on Probabilistic Merging of Skeleton Features with Proximity Priors from RGB-D	Oral	Human-Robot Interaction 2	Oct. 13
1167	Manuelli, Lucas	Localizing External Contact Using Proprioceptive Sensors: The Contact Particle Filter	Oral	Human-Robot Interaction 2	Oct. 13
1551	Cha, Elizabeth	Using Nonverbal Signals To Request Help During Human-Robot Collaboration	Oral	Human-Robot Interaction 2	Oct. 13
1641	Zhang, Lingqiang	Optimal Robot Selection by Gaze Direction in Multi-Human Multi-Robot Interaction	Oral	Human-Robot Interaction 2	Oct. 13
361	Merlet, Jean-Pierre	A generic numerical continuation scheme for solving the direct kinematics of cable-driven parallel robot with defor	Oral	Mechanisms and Parallel Robots	Oct. 13
518	Song, Jae-Bok	Reduction in Gravitational Torques of an Industrial Robot Equipped with 2 DOF Passive Counterbalance Mechani	Oral	Mechanisms and Parallel Robots	Oct. 13
879	Fortin-Côté, Alexis	Improving cable Driven Parallel Robot Accuracy Through Angular Position Sensors	Oral	Mechanisms and Parallel Robots	Oct. 13
1651	Jalaly Bidgoly, Hamed	Design and Modeling of a Compact Rotational Nonlinear Spring	Oral	Mechanisms and Parallel Robots	Oct. 13
178	Khalil, Islam S.M.	Influence of the Magnetic Field on the Two-Dimensional Control of Magnetospirillum gryphiswaldense Strain MSR	Oral	Micro/Nano Robots	Oct. 13
953	Avci, Ebu Bekir	Development of A Microhand using Direct Laser Writing for Indirect Optical Manipulation	Oral	Micro/Nano Robots	Oct. 13
1011	Diller, Eric D.	Magnetically-Guided in-Situ Micro-robot Fabrication	Oral	Micro/Nano Robots	Oct. 13
1168	Vela, Emir Augusto	Closed-loop Selective Manipulation of Multiple Microparticles by Controlling the Transient Regime of Marangoni F	Oral	Micro/Nano Robots	Oct. 13
1265	Tsai, Chia-Hung Dylan	Unexpected Beads Alignment in a Microfluidic Channel	Oral	Micro/Nano Robots	Oct. 13
392	Indelman, Vadim	Multi-Robot Decentralized Belief Space Planning in Unknown Environments via Efficient Re-Evaluation of Impact	Oral	Mobile Robots	Oct. 13
414	Abad Guaman, Sara A	The role of morphological computation of the goat hoof in slip reduction	Oral	Mobile Robots	Oct. 13
549	alaskhendra, veer	A Robust Adaptive Control of Mecanum Wheel Mobile Robot: Simulation and Experimental Validation	Oral	Mobile Robots	Oct. 13
708	Kobayashi, Taisuke	Quasi-Passive Dynamic Autonomous Control to Enhance 3-D Gait Speed Control including Turn	Oral	Mobile Robots	Oct. 13
1095	Isoy, Werner Alexandre	Micro Aerial Projector - Stabilizing Projected Images Of An Airborne Robotics Projection Platform	Oral	Mobile Robots	Oct. 13
105	Pan, Zherong	Motion Planning for Fluid Manipulation using Simplified Dynamics	Oral	Motion Planning for Manipulators	Oct. 13
154	Campeau-Lecours, Ale	An Anticipative Kinematic Limitation Avoidance Algorithm For Collaborative Robots: Two-Dimensional Case	Oral	Motion Planning for Manipulators	Oct. 13
427	Rodriguez Pacheco, C	Combining Motion Planning and Task Planning for a Dual-arm System	Oral	Motion Planning for Manipulators	Oct. 13
472	Blin, Nassime Michel	Interactive Motion Planning with Contact	Oral	Motion Planning for Manipulators	Oct. 13
706	Sabatini, Lorenzo	Hierarchical Coordination Strategy for Multi-AGV Systems Based on Dynamic Geodesic Environment Partitioning	Oral	Multi-Robot Systems 1	Oct. 13
1489	Rahmattalabi, Aida	D++: Structural Credit Assignment in Tightly Coupled Multiagent Domains	Oral	Multi-Robot Systems 1	Oct. 13
1549	Fricke, George Matthe	A Distributed Deterministic Spiral Search Algorithm for Swarms	Oral	Multi-Robot Systems 1	Oct. 13
1638	Morales, Marco	Multi-Agent Push Behaviors for Large Sets of Passive Objects	Oral	Multi-Robot Systems 1	Oct. 13
412	Spica, Riccardo	Active Decentralized Scale Estimation for Bearing Based Localization	Oral	Multi-Robot Systems 2	Oct. 13
470	mohammadi, mostafa	Cooperative Aerial Tele-Manipulation with Haptic Feedback	Oral	Multi-Robot Systems 2	Oct. 13
651	Schiano, Fabrizio	A Rigidity-Based Decentralized Bearing Formation Controller for Groups of Quadrotor UAVs	Oral	Multi-Robot Systems 2	Oct. 13
769	Karaoguz, Hakan	Merging Appearance-Based Spatial Knowledge in Multirobot Systems	Oral	Multi-Robot Systems 2	Oct. 13
1026	Čap, Michal	Provably Safe and Deadlock-Free Execution of Multi-Robot Plans under Delaying Disturbances	Oral	Multi-Robot Systems 2	Oct. 13
92	Koch, Pierrick	Managing environment models in multi-robot teams	Oral	Multi-Robot Systems 3	Oct. 13
246	Gadd, Matthew	Checkout My Map: Version Control for Fleetwide Visual Localisation	Oral	Multi-Robot Systems 3	Oct. 13
789	O'Kane, Jason	Forming Repeating Patterns of Mobile Robots: A Provably Correct Decentralized Algorithm	Oral	Multi-Robot Systems 3	Oct. 13
1027	Hamann, Heiko	Robot Self-Assembly as Adaptive Growth Process: Collective Selection of Seed Position and Self-Organizing Tree	Oral	Multi-Robot Systems 3	Oct. 13
1710	Luo, Wenhao	Distributed Knowledge Leader Selection for Multi-Robot Environmental Sampling Under Bandwidth Constraints	Oral	Multi-Robot Systems 3	Oct. 13
555	Zienkiewicz, Jacek	Real-Time Height Map Fusion using Differentiable Rendering	Oral	Novel Range Sensing	Oct. 13
1157	Ciaruglia, Thomas Ale	Fast Robust Monocular Depth Estimation for Obstacle Detection with Fully Convolutional Networks	Oral	Novel Range Sensing	Oct. 13
1654	Reynolds, Matthew	2D and 3D Millimeter-wave Synthetic Aperture Radar Imaging on a PR2 Platform	Oral	Novel Range Sensing	Oct. 13
1094	Vaz Teixeira, Pedro A	Underwater Inspection using Sonar-based Volumetric Submaps	Oral	Novel Range Sensing	Oct. 13
41	Pall, Elod	Analysis and a home assistance application of online AEMS2 planning	Oral	Planning and Scheduling	Oct. 13
147	Althe, Florent	Time-optimal Coordination of Mobile Robots along Specified Paths	Oral	Planning and Scheduling	Oct. 13
261	Bezzo, Nicola	Online Planning for Energy-efficient and Disturbance-aware UAV Operations	Oral	Planning and Scheduling	Oct. 13
861	Grippa, Pasquale	Decision Making in a UAV-Based Delivery System with Impatient Customers	Oral	Planning and Scheduling	Oct. 13
1714	Lin, Christopher	Sequential Quadratic Programming for Task Plan Optimization	Oral	Planning and Scheduling	Oct. 13
316	Wang, Yuquan	Reactive Task-oriented Redundancy Resolution using Constraint-Based Programming	Oral	Robot Control and Planning	Oct. 13
406	Najafi, Esmaeil	Contact-Based Language for Robotic Planning and Manipulation	Oral	Robot Control and Planning	Oct. 13
489	Li, Jue Kun	Act to See and See to Act: POMDP Planning for Objects Search in Clutter	Oral	Robot Control and Planning	Oct. 13
1019	Werner, Alexander	Multi-Contact Planning and Control for a Torque-Controlled Humanoid Robot	Oral	Robot Control and Planning	Oct. 13
1514	Ghosh, Mukulika	Motion Planning using Hierarchical Aggregation of Workspace Obstacles	Oral	Robot Control and Planning	Oct. 13
735	Saputra, Azhar Aulia	Passive Joint Control for Bio-Inspired Locomotion of Low Cost Four Legged Robot	Oral	Robotic Manipulation	Oct. 13
925	Suarez, Alejandro	Lightweight Compliant Arm with Compliant Finger for Aerial Manipulation and Inspection	Oral	Robotic Manipulation	Oct. 13
1298	Wada, Masayoshi	Kinematic Modeling and Simulation of Active-caster Robotic Drive with a Ball Transmission (ACROBAT-S)	Oral	Robotic Manipulation	Oct. 13

1737	Johns, Edward	Deep Learning a Grasp Function for Object Manipulation under Gripper Pose Uncertainty	Oral	Robotic Manipulation	Oct. 13
344	Renda, Federico	Discrete Cosserat Approach for Soft Robot Dynamics: a New Piece-wise Constant Strain Model with Torsion and	Oral	Soft Robots	Oct. 13
551	Doi, Toshiyuki	Proposal of Flexible robotic arm with thin McKibben actuators mimicking octopus arm structure	Oral	Soft Robots	Oct. 13
629	ZHANG, ZHONGKAI	Kinematic Modeling and Observer Based Control of Soft Robot using Real-Time Finite Element Method	Oral	Soft Robots	Oct. 13
1301	Lessard, Steven	A Bio-Inspired Tensegrity Manipulator with Multi-DOF, Structurally Compliant Joints	Oral	Soft Robots	Oct. 13
97	Krishnan, Rakesh	Invariant Spatial Parametrization of Human Thoracohumeral Kinematics: A Feasibility Study	Oral	Software and Framework	Oct. 13
670	Dieber, Bernhard	Application-level Security for ROS-based Applications	Oral	Software and Framework	Oct. 13
870	Trenkwalder, Stefan M	OpenSwarm: An Event-Driven Embedded Operating System for Miniature Robots	Oral	Software and Framework	Oct. 13
1016	Santos, André	A Framework for Quality Assessment of ROS Repositories	Oral	Software and Framework	Oct. 13
434	Bhargava, Rachit	Image Space based Path Planning for Reactionless Manipulation of Redundant Space Robot	Oral	Space Robotics and Automation	Oct. 13
876	Kim, Kyunam	Hopping and Rolling Locomotion with Spherical Tensegrity Robots	Oral	Space Robotics and Automation	Oct. 13
1147	Coltin, Brian	Localization from Visual Landmarks on a Free-flying Robot	Oral	Space Robotics and Automation	Oct. 13
1264	Ventura, Rodrigo	Space CoBot: modular design of an holonomic aerial robot for indoor microgravity environments	Oral	Space Robotics and Automation	Oct. 13
423	Enayati, Nima	A Dynamic Non-Energy-Storing Guidance Constraint with Motion Redirection for Robot-Assisted Surgery	Oral	Surgical Robotics 2	Oct. 13
928	Grammatikopoulou, M	Motor Channelling for Safe and Effective Dynamic Constraints in Minimally Invasive Surgery	Oral	Surgical Robotics 2	Oct. 13
1046	Fagogenis, Georgios	Adaptive Nonparametric Kinematic Modeling of Concentric Tube Robots	Oral	Surgical Robotics 2	Oct. 13
1603	Mahoney, Art	Reconfigurable Parallel Continuum Robots for Incisionless Surgery	Oral	Surgical Robotics 2	Oct. 13
142	Gómez Eguíluz, August A	Multi-modal Approach to Continuous Material Identification through Tactile Sensing	Oral	Tactile Sensing	Oct. 13
438	Bergner, Florian	Event-based signaling for large-scale artificial robotic skin - Realization and performance evaluation	Oral	Tactile Sensing	Oct. 13
797	Yi, Zhengkun	Active Tactile Object Exploration with Gaussian Processes	Oral	Tactile Sensing	Oct. 13
1316	Zhang, Mabel Mengzi	A Triangle Histogram for Object Classification by Tactile Sensing	Oral	Tactile Sensing	Oct. 13
1379	Choi, Youngjin	Novel Apparatus for Light Touch Threshold Measurement towards Haptic Applications	Oral	Tactile Sensing	Oct. 13
231	Smeur, Ewoud	Gust Disturbance Alleviation with Incremental Nonlinear Dynamic Inversion	Oral	UAV-Control	Oct. 13
1084	Carloni, Raffaella	Robust Control of an Unmanned Aerial Vehicle Using the Parameter Space Approach	Oral	UAV-Control	Oct. 13
1184	Rodríguez Salazar, Le	Wind Field Estimation and Identification having Shear Wind and Discrete Gusts Features with a Small UAS	Oral	UAV-Control	Oct. 13
1207	Kim, H. Jin	Autonomous Flight and Vision-Based Target Tracking for a Flapping-Wing MAV	Oral	UAV-Control	Oct. 13
1372	McKinnon, Christopher	Unscented External Force Estimation for Quadrotors and Experiments	Oral	UAV-Control	Oct. 13
237	Grabe, Volker	Long Distance Visual Ground-Based Signaling for Unmanned Aerial Vehicles	Oral	UAV-Vision	Oct. 13
374	YANG, Zhenfei	Self-Calibrating Multi-Camera Visual-Inertial Fusion for Autonomous MAVs	Oral	UAV-Vision	Oct. 13
752	Ye, Dong Hye	Multi-Target Detection and Tracking from a Single Camera in Unmanned Aerial Vehicles (UAVs)	Oral	UAV-Vision	Oct. 13
1715	Ozaslan, Tolga	Towards Fully Autonomous Visual Inspection of Dark Featureless Dam Penstocks using MAVs	Oral	UAV-Vision	Oct. 13
1726	Okada, Yoshito	Realtime Restoration of Aerial Inspection Images by Recognition and Removal of Passive Rotating Shell of UAV	Oral	UAV-Vision	Oct. 13
337	Craye, Céline	RL-IAC: An Exploration Policy for Online Saliency Learning on an Autonomous Mobile Robot	Oral	Visual Learning	Oct. 13
439	Oliveira, Gabriel	Efficient Deep Models for Monocular Road Segmentation	Oral	Visual Learning	Oct. 13
468	Sankaran, Bharath	Parameter Learning for Improving Binary Descriptor Matching	Oral	Visual Learning	Oct. 13
1002	Kazmi, S. M. Ali Musa	Simultaneous Learning and Place Recognition for Real-time Appearance-based Mapping	Oral	Visual Learning	Oct. 13
1211	Ciliberto, Carlo	Learning Objects from Few Examples by Improving the Invariance of a Deep Convolutional Learning Network	Oral	Visual Learning	Oct. 13
205	Konomura, Ryo	FPGA-based 6-DoF Pose Estimation with a Monocular Camera Using Non Co-planer Marker and Application on M	Oral	Visual Servoing 1	Oct. 13
587	Leang, Kam K.	Adaptive Repetitive Visual-Servo Control of a Low-Flying Unmanned Aerial Vehicle with an Uncalibrated High-Flyi	Oral	Visual Servoing 1	Oct. 13
695	Abi Farraj, Firas	A Visual-Based Shared Control Architecture for Remote Telemanipulation	Oral	Visual Servoing 1	Oct. 13
859	Guelpa, Valérian	Single Frequency-based Visual Servoing for Microrobotics Applications	Oral	Visual Servoing 1	Oct. 13
1452	Zhong, Fangxun	Adaptive 3D Pose Computation of Suturing Needle Using Constraints From Static Monocular Image Feedback	Oral	Visual Servoing 2	Oct. 13
1484	Yang, Lianjing	Towards Intelligent Robot Assisted Microscopy: An Uncalibrated Approach for Robotic Vision Guided Micromanip	Oral	Visual Servoing 2	Oct. 13
1639	Sheckells, Matthew	Optimal Visual Servoing for Differentially Flat Underactuated Systems	Oral	Visual Servoing 2	Oct. 13
1642	Kingkan, Cherdasak	Model-Based Virtual Visual Servoing With Point Cloud Data	Oral	Visual Servoing 2	Oct. 13
114	Jang, Junwon	Assistance strategy for stair ascent with a robotic hip exoskeleton	Oral	Wearable Robots	Oct. 13
138	Lim, Bokman	Simulating Gait Assistance of a Hip Exoskeleton: Feasibility Studies for Ankle Muscle Weaknesses	Oral	Wearable Robots	Oct. 13
669	Masia, Lorenzo	Adaptive Backlash Compensation for Bowden Cable Transmission in Soft Wearable Exoskeleton	Oral	Wearable Robots	Oct. 13
838	Merad, Manelle	Intuitive prosthetic control using upper limb inter-joint coordinations and IMU-based shoulder angles measuremen	Oral	Wearable Robots	Oct. 13
1023	Boaventura, Thiago	Acceleration-based Transparency Control Framework for Wearable Robots	Oral	Wearable Robots	Oct. 13
670	Fumagalli, Matteo	Mechatronic Design of a Robotic Manipulator for Unmanned Aerial Vehicles	Special S	(Special Session) Towards the realization of the A€	Oct. 13
860	Otão Pereira, Pedro M	Decoupled Design of Controllers for Aerial Manipulation with Quadrotors	Special S	(Special Session) Towards the realization of the A€	Oct. 13
1025	Steich, Kelly	Tree Cavity Inspection Using Aerial Robots	Special S	(Special Session) Towards the realization of the A€	Oct. 13
1166	Teixeira, Lucas	Real-time Monocular-Inertial Scene Estimation for Aerial Inspection	Special S	(Special Session) Towards the realization of the A€	Oct. 13
1528	Kamel, Mina	Design and Modeling of Dexterous Aerial Manipulator	Special S	(Special Session) Towards the realization of the A€	Oct. 13