

SUNDAY DECEMBER 8, 2024	MONDAY DECEMBER 9, 2024	TUESDAY DECEMBER 10, 2024	WEDNESDAY DECEMBER 11, 2024	THURSDAY DECEMBER 12, 2024
start end	start end	start end	start end	start end
9:00 9:15	Scaling Long-Horizon Online POMDP Planning via Rapid State Space Sampling Liang, Yaochu; Kim, Edward; Thomason, Wit; Kingston, Zachary; Kurniawati, Hamza; Kawrak, Lydia	DRAMA: An Efficient End-to-end Motion Planner for Autonomous Driving with Mamba Yuei, Chengran; Zhang, Zhanq; Sun, Jiawei; Sun, Shuo; Huang, Zefan; Leo, Christina Dao Wen; Li, Dongen; Han, Yuhang; Wong, Anthony; Tes, Kang Peng;	Grasping by Hinging: A Learning-Free Grasping Detection Method for Previously Unseen Objects Li, Weiran; Su, Wen; Choijani, Gregory	Ego-to-Exo: Interfacing Third Person Visuals from Egocentric Views in Real-time for Improved ROV Teleoperation Aboulsh, Adnan; Chen, Rui; Revalte, Ismael; Islam, Md Jahidul
9:15 9:30	Faster Algorithms for Growing Collision-Free Convex Polytopes in Robot Configuration Space Werner, Peter; Cohn, Thomas; Jiang, Rebecca H.; Seyde, Tim Niklas; Simrowitz, Max; Tedrake, Russ; Rus, Daniela	Learning a Stable, Safe, Distributed Feedback Controller for a Heterogeneous Platoon of Autonomous Vehicles Shaham, Michael; Padir, Tassilo	GRASPING KaADemo: Data-Efficient Demonstration Expansion for Generalist Robotic Agent Ma, Tongzhou; Guo, Yijie; Xu, Jie; Goyal, Ankil; Su, Hao; Fox, Dieter; Garg, Akhilish	A Haptic-Based Proximal Sensing System for Buried Object in Granular Material Zhang, Zeyang; Jia, Ruqing; YAN, Youcan; Han, Ruihua; Lin, Shijie; JIANG, Qian; Zhang, Liangjun; Pan, Jia
9:30 9:45	Task and Motion Planning in Hierarchical 3D Scene Graphs Ray, Anoop; Bradley, Christopher; Carlone, Lucia Rey; Nikolaidis	Bird's Eye View Based Pretrained World model for Visual Navigation Lakkala, Kiran; Liu, Chen; Li, Laurent	9:30 9:45 TOPIC: Real-time Transparent Obstacle Detection using Lidar Point Cloud Intensity for Autonomous Robot Navigation Kulsturn Mudiyanselage, Kasun Weerakoon; Sathyanoorthy, Adarsh Jagan; Elweir, Mohamed; Zorn, Anil; Manocha, Dinesh	MECHANISMS, DESIGN, TELEOPERATION AND HAPTICS Testing the Waters: Power-Efficient Actuation for Insect-Scale Autonomous Underwater Vehicles Trygstad, Connor; Longwell, Cody; Peres-Arancibia, Nestor O
9:45 10:00	Q-TAGS: Quality-Optimized Spatio-Temporal Heterogeneous Task Allocation with a Time Budget Neville, Glenn; Liu, Jiachen; Chernova, Sonja; Ravichandrar, Harish	NAVIGATION Chair: Jiachen LI An Energy-Aware Routing Algorithm for Mobile Ground-to-Air Charging Cai, Sweil; Lu, Fei; Zhou, Lifeng	9:45 10:00 NeRFuser: Scalable Scene Representation by NeRF Registration and Blending Fang, Jiading; Lin, Shengjie; Vasiljevic, Igor; Guizilini, Vitor; Ambrus, Rares; Gaidon, Adrien; Shakhnarovich, Gregory; Walter, Matthew	9:45 10:00 Chair: Marcelo Ang NASU Novel Actuating Screw Unit: Origami-Inspired Screw-based Population on Mobile Ground Robots Joyce, Caleb; Lin, Jason; Nguyen, Roger; Owens, Michael; Wickenhiser, Sara; Perros, Lizzie; Richter, Florian; Yp, Michael C.
10:00 10:15	RuleUser: An Evidential Bayes Approach for Rule Injection in Imitation Learned Planners for Robustness under Distribution Shifts Patelkar, Jay; Veer, Sushant; Sharma, Apoorva; Pavone, Marco; Scherer, Sebastian	10:00 10:15 Gaussian Process Distance Fields Obstacle and Ground Constraints for Safe Navigation Uthsa, Monisha Mushiary; Le Gentil, Cedric; Wu, Lan; Vidal-Calleja, Teresa A.	10:00 10:15 PERCEPTION Embodyed Active Learning of Generic Sensor-Object Models Procyk, Allison; Murphy, Todd	10:00 10:15 Self-Deployable, Adaptive Soft Robots Based on Contracting-Cord Particle Jamming Yan, Wenzhong; Ye, Brian; Li, Mingxi; Hopkins, Jonathan; Mehta, Ankur
10:15 10:30	Chair: Wolfram Burgard Can Large Language Models Solve Robot Routing? Huang, Zhenxi; Shi, Guangyao; Sukhtme, Gaurav	10:15 10:30 NAVMAC: Combining Navigation and Imitation Learning for Bootstrapping Reinforcement Learning Bhatkar, Arvindr; Mahammedi, Zahreddin; Jadhav, Sachin; Tokkar, Pratap	10:15 10:30 Chair: Pratap Tokkar Vectorable Thrust Control for Multimodal Locomotion by Quadruped Zhao, Moji	10:15 10:45 Coffee
10:30 11:00	Coffee	10:30 11:00	10:30 11:00	10:45 12:00
11:00 11:15	The State of Robot Motion Generation Bekris, Kostas E.; Doer, Joe; Meng, Patrick; Tangirala, Sumanth	11:00 11:15	11:00 11:15	DEBATE AND PANEL Hard Robot Challenges for Learning and Control: Perspectives from Industry and Academia Chair: Gaurav Sukhtme
11:15 11:30	Risk Density RRT*: Planning in the space of Probability Pascia, Lorenzo; Ghis, Giorgio; Biondi, Antonio	11:15 11:30	11:15 11:30	Chair: Gaurav Sukhtme Stefan Schaal Matt Mason Antonio Biondi
11:30 11:45	Simplified POMDP Planning with an Alternative Observation Space and Formal Performance Guarantees Kong, Du; Indelman, Vadim	11:30 11:45	11:30 11:45	12:00 12:15
11:45 12:00	Use Experience in Preference-Based Optimization of Reward Functions for Assistive Robots Denzler, Nathaniel; Shi, Zhonghao; Nikolaidis, Stefanos; Mataric, Maja	11:45 12:00	GRASPING AND MANIPULATION Jiang, Hao; Wang, Yuhai; Zhou, Hanyang; Seita, Daniel	12:00 12:15
12:00 12:15	HUMAN ROBOT INTERACTION Chair: Harish Ravichandrar Breathless: An 8-hour Performance Contrasting Human and Robot Expressiveness Guan, Cate; Gu, Tianshang; Ganji, Shreyo; Goldberg, Ken	12:00 12:15	12:00 12:15	DEBATE AND PANEL Challenges in Perception Wolfram Burgard Nick Roy Gaurav Sukhtme
12:15 12:30	A Framework for Understanding Human Perception of Vibrotactile Feedback in Sports Performance and Rehabilitation Demirov, Emel; Reijnen, Eelke	12:15 12:30	12:15 12:30	12:15 12:30
12:30 14:30	Lunch (not included with registration)	12:30 14:30	12:30 14:00	12:30 12:45
14:30 17:00		12:30 14:30	14:00 14:15	LOCOMOTION Autonomous Exploration and Mapping Payload Integrated on a Quadruped Robot Rahemnia, Julian; Hess, Michael; Provost, Raymond C; Blenski, Mark; Christensen, Henrik Inkerov Modeling and In-Flight Torso Attitude Stabilization of a Jumping Quadruped Papadakis, Michail; Olsen, Jergen Anker; Pouliakos, Ioannis; Alexis, Kostas
DEBATE AND PANEL Chair: Henrik Christensen Panelists: Ruzana Bajray John Hollerbach Daniela Rus Oussama Khatib		14:15 14:30	14:15 14:30	
	ISRR 40th Anniversary: From Science to Systems (coffee/snacks available from 15:30 to 16:00)	14:30 14:45	PERCEPTION Learning Affordances from Interactive Exploration using an Object-level Map Wullop, Paula; Ozdemir, Halli Umut; Hülner, Antonia; Chung, Jen Jen; Siegwart, Roland; Ot, Lionel	
		14:45 15:00	14:45 15:00	
		15:00 15:30	15:00 15:30	
		15:30 17:00	15:30 17:00	
		EXCURSION Los Angeles Excursion (lunch, dinner and transportation provided) Downtown Los Angeles including Crypto Com, Walt Disney Concert Hall, Olvera Street, Grand Central Market, including Movie Locations, Griffith Observatory, View of the Hollywood Sign, Hollywood Walk of Fame, Dolby Theater, Home of the Oscars, TCL Chinese Theater, Roosevelt Hotel, Sunset Strip, Beverly Hills Walk down Rodeo Drive Santa Monica to Wilshire Blvd, LACMA, La Brea Tar Pits, Academy Museum, Stop at Urban Lights. Farmers Market Dinner	15:00 15:30	
		17:00 18:30	17:00 18:30	
	Break			
18:30 20:30 Reception	18:30 20:30 Dinner (Hotel)			
	21:00 23:00 Reception at Queen Mary			
				Free evening