Index of papers published in the IEEE Robotics and Automation Letters and presented at IEEE Int. Conf. on Robotics and Automation 2017 (ICRA'17)

In order of publication

Design of a Passive Vertical Takeoff and Landing Aquatic UAV

Peloquin, Richard-Alexandre; Thibault, Dominik; Lussier Desbiens, Alexis

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 381-388, DOI: 10.1109/LRA.2016.2633623

Trajectory Generation for Unmanned Aerial Manipulators through Quadratic Programming

Rossi, Roberto; Santamaria-Navarro, Angel; Andrade-Cetto, Juan;

Rocco, Paolo

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 389-396, DOI: 10.1109/LRA.2016.2633625

Repeatable Folding Task by Humanoid Robot Worker Using Deep Learning

YANG, PIN-CHU; Sasaki, Kazuma; Suzuki, Kanata; Kase, Kei; Sug-

ano, Shigeki; Ogata, Tetsuya

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 397-403, DOI: 10.1109/LRA.2016.2633383

Estimation, Control, and Planning for Aggressive Flight With a Small Quadrotor With a Single Camera and IMU

Loianno, Giuseppe; Brunner, Chris; McGrath, Gary; Kumar, Vijay

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 404-411, DOI: 10.1109/LRA.2016.2633290

Determining the Singularities for the Observation of Three Image Lines

Briot, Sébastien; Martinet, Philippe; Chaumette, Francois

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 412-419, DOI: 10.1109/LRA.2016.2633975

Self-Supervised Visual Descriptor Learning for Dense Correspondence

Schmidt, Tanner; Newcombe, Richard; Fox, Dieter

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 420-427, DOI: 10.1109/LRA.2016.2634089

Legged Elastic Multibody Systems: Adjusting Limit Cycles to Close-To-Optimal Energy Efficiency

Stratmann, Philipp; Lakatos, Dominic; Özparpucu, Mehmet Can;

Albu-Schäffer, Alin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 436-443, DOI: 10.1109/LRA.2016.2633580

Direct Visual Odometry in Low Light Using Binary Descriptors

Alismail, Hatem; Kaess, Michael; Browning, Brett; Lucey, Simon

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 444-451, DOI: 10.1109/LRA.2016.2635686

Motion Discontinuity-Robust Controller for Steerable Mobile Robots

Sorour, Mohamed; Cherubini, Andrea; Fraisse, Philippe; Passama,

Robin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 452-459, DOI: 10.1109/LRA.2016.2638466

Incipient Slip Detection and Recovery for Controllable Gecko-Inspired Adhesion

Wu, Xin Alice; Christensen, David; Suresh, Srinivasan; Jiang, Hao;

Roderick, William Robert Thomas; Cutkosky, Mark

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 460-467, DOI: 10.1109/LRA.2016.2636881

Learning Depth-Aware Deep Representations for Robotic Perception

Porzi, Lorenzo; Rota Bulò, Samuel; Peñate-Sánchez, Adrián; Ricci,

Elisa; Moreno-Noguer, Francesc

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 468-475, DOI: 10.1109/LRA.2016.2637444

Thrust Mixing, Saturation, and Body-Rate Control for Accurate Aggressive Quadrotor Flight

Faessler, Matthias; Falanga, Davide; Scaramuzza, Davide

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 476-482, DOI: 10.1109/LRA.2016.2640362

Design and Analysis of a Soft-Fingered Hand with Contact Feedback

Ho, Van; Hirai, Shinichi

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 491-498, DOI: 10.1109/LRA.2016.2645120

Automated Robotic Measurement of 3-D Cell Morphologies

Liu, Jun; Zhang, Zhuoran; Wang, Xian; Liu, Haijiao; Zhao, Qili; Zhou,

Chao; Tan, Min; Pu, Huayan; Xie, Shaorong; Sun, Yu

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 499-505, DOI: 10.1109/LRA.2016.2645145

Computationally Efficient Belief Space Planning via Augmented Matrix Determinant Lemma and Reuse of Calculations

Kopitkov, Dmitry; Indelman, Vadim IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 506-513, DOI: 10.1109/LRA.2016.2645894

Dexterity Analysis of Three 6-DOF Continuum Robots Combining Concentric Tube Mechanisms and Cable-Driven Mechanisms

Wu, Liao: Crawford, Ross: Roberts, Jonathan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 514-521, DOI: 10.1109/LRA.2016.2645519

Passive Hierarchical Impedance Control via Energy Tanks

Dietrich, Alexander; Wu, Xuwei; Bussmann, Kristin; Ott, Christian;

Albu-Schäffer, Alin; Stramigioli, Stefano IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 522-529, DOI: 10.1109/LRA.2016.2645504

Intercepting Rogue Robots: An Algorithm for Capturing Multiple Evaders with Multiple Pursuers

Pierson, Alyssa; Wang, Zijian; Schwager, Mac

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 530-537, DOI: 10.1109/LRA.2016.2645516

Automatic Virtual Metrology and Target Value Adjustment for Mass Customization

Tieng, Hao; Chen, Chun-Fang; Cheng, Fan-Tien; Yang, Haw-Ching

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 546-553, DOI: 10.1109/LRA.2016.2645507

Robotic Pick-And-Place of Multiple Embryos for Vitrification

Zhang, Zhuoran; Liu, Jun; Wang, Xian; Zhao, Qili; Zhou, Chao; Tan,

Min; Pu, Huayan; Xie, Shaorong; Sun, Yu IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 570-576, DOI: 10.1109/LRA.2016.2640364

Probabilistic Articulated Real-Time Tracking for Robot Manipulation

Garcia Cifuentes, Cristina; Issac, Jan; Wüthrich, Manuel; Schaal,

Stefan; Bohg, Jeannette

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 577-584, DOI: 10.1109/LRA.2016.2645124

DROW: Real-Time Deep Learning-Based Wheelchair Detection in 2-D Range Data

Beyer, Lucas: Hermans, Alexander: Leibe, Bastian

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 585-592, DOI: 10.1109/LRA.2016.2645131

EVO: A Geometric Approach to Event-Based 6-DOF Parallel Tracking and Mapping in Real Time

Rebecq, Henri; Horstschäfer, Timo; Gallego, Guillermo; Scaramuzza,

Davide

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 593-600, DOI: 10.1109/LRA.2016.2645143

Image-Based Visual Servoing with Unknown Point Feature Correspondence

McFadyen, Aaron; Jabeur, Marwen; Corke, Peter

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 601-607, DOI: 10.1109/LRA.2016.2645886

Visual Servoing in an Optimization Framework for the Whole-Body Control of Humanoid Robots

Agravante, Don Joven; Claudio, Giovanni; Spindler, Fabien;

Chaumette, Francois

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 608-615, DOI: 10.1109/LRA.2016.2645512

Soft Gripper Dynamics Using a Line-Segment Model With an Optimization-Based Parameter Identification Method

Wang, Zhongkui; Hirai, Shinichi

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 624-631, DOI: 10.1109/LRA.2017.2650149

Accurate Angular Velocity Estimation with an Event Camera

Gallego, Guillermo; Scaramuzza, Davide IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 632-639, DOI: 10.1109/LRA.2016.2647639

Verification and Synthesis of Admissible Heuristics for Kinodynamic Motion Planning

Paden, Brian; Varricchio, Valerio; Frazzoli, Emilio

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 648-655, DOI: 10.1109/LRA.2017.2651157

Active Autonomous Aerial Exploration for Ground Robot Path Planning

Delmerico, Jeffrey; Mueggler, Elias; Nitsch, Julia; Scaramuzza, Da-

vide

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 664-671, DOI: 10.1109/LRA.2017.2651163

Compensation of Load Dynamics for Admittance Controlled Interactive Industrial Robots Using a Quaternion-Based Kalman Filter

Farsoni, Saverio; Talignani Landi, Chiara; Ferraguti, Federica; Sec-

chi, Cristian; Bonfe, Marcello

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 672-679, DOI: 10.1109/LRA.2017.2651393

Warped Gaussian Processes Occupancy Mapping with Uncertain Inputs

Ghaffari Jadidi, Maani; Valls Miro, Jaime; Dissanayake, Gamini

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 680-687, DOI: 10.1109/LRA.2017.2651154

Phase Correlation for Dense Visual Compass from Omnidirectional Camera-Robot Images

Morbidi, Fabio; Caron, Guillaume IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 688-695, DOI: 10.1109/LRA.2017.2650150

Fast Marching Adaptive Sampling

Lawrance, Nicholas Robert Jonathon; Chung, Jen Jen; Hollinger, Geoffrey

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 696-703, DOI: 10.1109/LRA.2017.2651148

A Framework for Optimal Grasp Contact Planning

Hang, Kaiyu; Stork, Johannes Andreas; Pollard, Nancy S; Kragic,

Danica

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 704-711, DOI: 10.1109/LRA.2017.2651381

Dynamical System Based Robotic Motion Generation with Obstacle Avoidance

Stavridis, Sotiris; Papageorgiou, Dimitrios; Doulgeri, Zoe

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 712-718, DOI: 10.1109/LRA.2017.2651172

A Method for Derivation of Robot Task-Frame Control Authority from Repeated Sensory Observations

Peternel, Luka; Rozo, Leonel; Caldwell, Darwin G.; Ajoudani, Arash

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 719-726, DOI: 10.1109/LRA.2017.2651368

Optimization of tail geometry for the propulsion of soft microrobots

Huang, Hen-Wei; Chao, Qianwen; Sakar, Mahmut Selman; Nelson, Bradley J.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 727-732, DOI: 10.1109/LRA.2017.2651167

Convergence and Consistency Analysis for a 3-D Invariant-EKF SLAM

Zhang, Teng; WU, KANZHI; Song, Jingwei; Huang, Shoudong; Dis-

sanavake. Gamini

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 733-740, DOI: 10.1109/LRA.2017.2651376

Leveraging Natural Load Dynamics with Variable Gear-Ratio Actuators

Girard, Alexandre; Asada, Harry IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 741-748, DOI: 10.1109/LRA.2017.2651946

Automatic Room Segmentation From Unstructured 3-D Data of Indoor Environments

Ambrus, Rares; Claici, Sebastian; Wendt, Axel Joerg

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 749-756, DOI: 10.1109/LRA.2017.2651939

Modeling Grasp Motor Imagery through Deep Conditional Generative Models

Veres, Matthew; Moussa, Medhat; Taylor, Graham

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 757-764, DOI: 10.1109/LRA.2017.2651945

Peduncle Detection of Sweet Pepper for Autonomous Crop Harvestingâ Combined Color and 3-D Information

Sa, Inkyu; Lehnert, Christopher; English, Andrew; McCool, Christo-

pher Steven; Dayoub, Feras; Upcroft, Ben; Perez, Tristan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 765-772, DOI: 10.1109/LRA.2017.2651952

Modeling and Inverse Compensation of Hysteresis in Supercoiled Polymer Artificial Muscles

Zhang, Jun; Iyer, Kaushik; Simeonov, Anthony; Yip, Michael C.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 773-780, DOI: 10.1109/LRA.2017.2651401

Counting Apples and Oranges With Deep Learning: A Data-Driven Approach

Chen, Steven W; Skandan, Shreyas; Dcunha, Sandeep; Das,

Jnaneshwar; Qu, Chao; Taylor, Camillo Jose; Kumar, Vijay

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 781-788, DOI: 10.1109/LRA.2017.2651944

Visual-Inertial Monocular SLAM with Map Reuse

Mur-Artal. Raul: Tardos. Juan D.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 796-803, DOI: 10.1109/LRA.2017.2653359

SLIP-Model-Based Dynamic Gait Generation in a Leg-Wheel Transformable Robot with Force Control

Lin, Yun-Meng; Lin, Hung-Sheng; Lin, Pei-Chun

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 804-810, DOI: 10.1109/LRA.2017.2653363

A Human Action Descriptor Based on Motion Coordination

Falco, Pietro; Saveriano, Matteo; Hasany, Eka Gibran; Kirk, Nicholas

Hubert; Lee, Dongheui

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 811-818, DOI: 10.1109/LRA.2017.2652494

Ergodic Exploration Using Binary Sensing for Nonparametric Shape Estimation

Abraham, Ian; Prabhakar, Ahalya; Hartmann, Mitra; Murphey, Todd

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 827-834, DOI: 10.1109/LRA.2017.2654542

Reliable Grasping of Three-Dimensional Untethered Mobile Magnetic Microgripper for Autonomous Pick-and-Place

Zhang, Jiachen; Onaizah, Onaizah; Middleton, Kevin Andrew James;

You, LiDan; Diller, Eric D.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 835-840, DOI: 10.1109/LRA.2017.2657879

Formations for Resilient Robot Teams

Guerrero-Bonilla, Luis; Prorok, Amanda; Kumar, Vijay

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 841-848, DOI: 10.1109/LRA.2017.2654550

JammJoint: A Variable Stiffness Device Based on Granular Jamming for Wearable Joint Support

Hauser, Simon; Robertson, Matthew; Ijspeert, Auke; Paik, Jamie

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 849-855, DOI: 10.1109/LRA.2017.2655109

Adaptive Task Scheduling for an Assembly Task Coworker Robot Based on Incremental Learning of Human's Motion Patterns

Kinugawa, Jun; Kanazawa, Akira; Arai, Shogo; Kosuge, Kazuhiro

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 856-863, DOI: 10.1109/LRA.2017.2655565

Autonomous Sweet Pepper Harvesting for Protected Cropping Systems

Lehnert, Christopher; English, Andrew; McCool, Christopher Steven;

Tow, Adam Michael Willem; Perez, Tristan IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 872-879, DOI: 10.1109/LRA.2017.2655622

Hybrid Tele-Manipulation System Using a Sensorized 3-D-Printed Soft Robotic Gripper and a Soft Fabric-Based Haptic Glove

Low, Jin Huat; Khin, Phone May; Lee, Wang Wei; Thakor, Nitish;

Kukreja, Sunil, L.; Ren, Hongliang; Yeow, Chen-Hua

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 880-887, DOI: 10.1109/LRA.2017.2655559

Essential Properties of Numerical Integration for Time-Optimal Path-Constrained Trajectory Planning

Shen, Peiyao; Zhang, Xuebo; Fang, Yongchun

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 888-895, DOI: 10.1109/LRA.2017.2655580

Design and Optimal Control of an Underactuated Cable-Driven Microâ Macro Robot

BARBAZZA, LUCA; Zanotto, Damiano; Rosati, Giulio; Agrawal, Sunil

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 896-903, DOI: 10.1109/LRA.2017.2651941

Decentralized Navigation for Heterogeneous Swarm Robots with Limited Field of View

Maeda, Ryuma; Endo, Takahiro; Matsuno, Fumitoshi

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 904-911, DOI: 10.1109/LRA.2017.2654549

Comparative Study of Serial-Parallel Delta Robots with Full Orientation Capabilities

Brinker, Jan; Funk, Nils; Ingenlath, Philipp; Takeda, Yukio; Corves,

Burkhard

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 920-926, DOI: 10.1109/LRA.2017.2654551

Rubbing Against Blood Clots Using Helical Robots: Modeling and In Vitro Experimental Validation

Khalil, Islam S.M.; Tabak, Ahmet Fatih; Sadek, Khaled; Mahdy, Dalia;

Hamdi, Nabila; Sitti, Metin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 927-934, DOI: 10.1109/LRA.2017.2654546

A Hybrid Method for Online Trajectory Planning of Mobile Robots in Cluttered Environments

Campos Macías, Leobardo Emmanuel; Gómez-Gutiérrez, David; Aldana-López, Rodrigo; De La Guardia, Rafael; Parra-Vilchis, Jose I.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 935-942, DOI: 10.1109/LRA.2017.2655145

Development of Giacometti Arm with Balloon Body

Takeichi, Masashi; Suzumori, Koichi; Endo, Gen; Nabae, Hiroyuki

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 951-957, DOI: 10.1109/LRA.2017.2655111

Multi-Layered Channel Patterning by Local Heating of Hydrogels

Takeuchi, Masaru; Oya, Tomoyuki; Ichikawa, Akihiko; Hasegawa, Akiyuki; Nakajima, Masahiro; Hasegawa, Yasuhisa; Fukuda, Toshio

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 958-963, DOI: 10.1109/LRA.2017.2655625

Adapting to Flexibility: Model Reference Adaptive Control of Soft Bending Actuators

Skorina, Erik; Luo, Ming; Tao, Weijia; Chen, Fuchen; Fu, Jie; Onal, Cagdas

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 964-970, DOI: 10.1109/LRA.2017.2655572

Bioinspired Ciliary Force Sensor for Robotic Platforms

Ribeiro, Pedro; Khan, Mohammed Asadullah; Alfadhel, Ahmed; Kosel, Jurgen; Franco, Fernando; Cardoso, Susana; Bernardino, Alexandre; Schmitz, Alexander; Santos-Victor, José; Jamone, Lorenzo

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 971-976, DOI: 10.1109/LRA.2017.2656249

COCoMoPL: A Novel Approach for Humanoid Walking Generation Combining Optimal Control, Movement Primitives and Learning and its Transfer to the Real Robot HRP-2

Clever, Debora; Harant, Monika; Mombaur, Katja; Naveau, Maximi-

lien; Stasse, Olivier; Endres, Dominik IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 977-984, DOI: 10.1109/LRA.2017.2657000

Force Measurement Toward the Instability Theory of Soft Pneumatic Actuators

Sun, Yi; Liang, Xinquan; Yap, Hong Kai; Cao, Jiawei; Ang Jr, Marcelo

H; Yeow, Chen-Hua

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 985-992, DOI: 10.1109/LRA.2017.2656943

A Sample-Efficient Black-Box Optimizer to Train Policies for Human-In-The-Loop Systems with User Preferences

Thatte, Nitish; Duan, Helei; Geyer, Hartmut IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 993-1000, DOI: 10.1109/LRA.2017.2656948

Printed Paper Robot Driven by Electrostatic Actuator

Shigemune, Hiroki; Maeda, Shingo; Cacucciolo, Vito; Iwata, Yoshi-

taka; Iwase, Eiji; Hashimoto, Shuji; Sugano, Shigeki

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1001-1007, DOI: 10.1109/LRA.2017.2658942

Computing Minimum-Power Dipole Solutions for Interdipole Forces Using Nonlinear Constrained Optimization with Application to Electromagnetic Formation Flight

Abbott, Jake; Brink, Joseph; Osting, Braxton IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1008-1014, DOI: 10.1109/LRA.2017.2658727

Probabilistic Contact Estimation and Impact Detection for State Estimation of Quadruped Robots

Camurri, Marco; Fallon, Maurice; BAZEILLE, Stephane; Radulescu, Andreea; Barasuol, Victor; Caldwell, Darwin G.; Semini, Claudio

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1023-1030, DOI: 10.1109/LRA.2017.2652491

3-D Map Merging on Pose Graphs

Bonanni, Taigo Maria: Della Corte, Bartolomeo: Grisetti, Giorgio

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1031-1038, DOI: 10.1109/LRA.2017.2655139

Resilient Flocking for Mobile Robot Teams

Saulnier, Kelsey; Saldana, David Julian; Prorok, Amanda; Pappas,

George J.; Kumar, Vijay

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1039-1046, DOI: 10.1109/LRA.2017.2655142

Fast, On-line Collision Avoidance for Dynamic Vehicles using Buffered Voronoi Cells

Zhou, Dingjiang; Wang, Zijian; Schwager, Mac; Bandyopadhyay,

Saptarshi

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1047-1054, DOI: 10.1109/LRA.2017.2656241

VAM: Hypocycloid Mechanism for Efficient Bioinspired Robotic Gaits

Knoop, Espen; Conn, Andrew; Rossiter, Jonathan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1055-1061, DOI: 10.1109/LRA.2017.2657004

Eigenmodes of Nonlinear Dynamics: Definition, Existence, and Embodiment into Legged Robots with Elastic Elements

Lakatos, Dominic; Friedl, Werner; Albu-Schäffer, Alin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1062-1069, DOI: 10.1109/LRA.2017.2658018

Experimental Evaluation of Deadbeat Running on the ATRIAS Biped

Martin, William; Wu, Albert; Geyer, Hartmut IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1085-1092, DOI: 10.1109/LRA.2017.2658020

Enabling Flow Awareness for Mobile Robots in Partially Observable Environments

Kucner, Tomasz Piotr; Magnusson, Martin; Schaffernicht, Erik; Hernandez Bennetts, Victor Manuel; Lilienthal, Achim J.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1093-1100, DOI: 10.1109/LRA.2017.2660060

A Comparison of Autoregressive Hidden Markov Models for Multimodal Manipulations With Variable Masses

Kroemer, Oliver; Peters, Jan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1101-1108, DOI: 10.1109/LRA.2017.2660541

Lane-Change Detection Based on Vehicle-Trajectory Prediction

Woo, Hanwool; JI, Yonghoon; Kono, Hitoshi; Tamura, Yusuke; Kuroda, Yasuhide; Sugano, Takashi; Yamamoto, Yasunori; Ya-

mashita, Atsushi; Asama, Hajime IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1109-1116, DOI: 10.1109/LRA.2017.2660543

Probabilistic Air Flow Modelling Using Turbulent and Laminar Characteristics for Ground and Aerial Robots

Hernandez Bennetts, Victor Manuel; Kucner, Tomasz Piotr; Schaffernicht, Erik; Neumann, Patrick Paul; Fan, Han; Lilienthal, Achim J.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1117-1123, DOI: 10.1109/LRA.2017.2661803

The Energetic Benefit of Robotic Gait Selectionâ A Case Study on the Robot RAMitalica onei/italica

Smit-Anseeuw, Nils; Gleason, Rodney; Vasudevan, Ram; Remy, C.

David

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1124-1131, DOI: 10.1109/LRA.2017.2661801

Singularity-Tolerant Inverse Kinematics for Bipedal Robots: An Efficient Use of Computational Power to Reduce Energy Consumption

Faraji, Salman; Ijspeert, Auke

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1132-1139, DOI: 10.1109/LRA.2017.2661810

Serially Actuated Locomotion for Soft Robots in Tube-Like Environments

Gilbertson, Mark; McDonald, Gillian; Korinek, Gabriel; Van de Ven,

James: Kowalewski, Timothy

IEEE Robotics and Automation Letters

Year: 2017. Volume: 2. Issue: 2

Pages: 1140-1147, DOI: 10.1109/LRA.2017.2662060

An Exact Solver for Geometric Constraints with Inequalities

Somani, Nikhil; Rickert, Markus; Knoll, Alois IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1148-1155, DOI: 10.1109/LRA.2017.2655113

Exploratory tactile servoing with active touch

Lepora, Nathan; Aquilina, Kirsty; Cramphorn, Luke

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1156-1163, DOI: 10.1109/LRA.2017.2662071

Variable-Grasping-Mode Underactuated Soft Gripper With Environmental Contact-Based Operation

Nishimura, Toshihiro; Mizushima, Kaori; Suzuki, Yosuke; Tsuji,

Tokuo; Watanabe, Tetsuyou

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1164-1171, DOI: 10.1109/LRA.2017.2662086

Predicting Task Intent from Surface Electromyography Using Layered Hidden Markov Models

Razin, Yosef; Pluckter, Kevin; Ueda, Jun; Feigh, Karen

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1180-1185, DOI: 10.1109/LRA.2017.2662741

On the Sensor Design of Torque Controlled Actuators: A Comparison Study of Strain Gauge and Encoder-Based Principles

Kashiri, Navvab; Malzahn, Jörn; Tsagarakis, Nikos

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1186-1194, DOI: 10.1109/LRA.2017.2662744

Spine Controller for a Sprawling Posture Robot

Horvat, Tomislav; Melo, Kamilo; Ijspeert, Auke

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1195-1202, DOI: 10.1109/LRA.2017.2664898

Dubins Orienteering Problem

Pěnička, Robert; Faigl, Jan; Váňa, Petr; Saska, Martin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1210-1217, DOI: 10.1109/LRA.2017.2666261

Exploiting Sensor Symmetry for Generalized Tactile Perception in Biomimetic Touch

Ward-Cherrier, Benjamin; Cramphorn, Luke; Lepora, Nathan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 2

Pages: 1218-1225, DOI: 10.1109/LRA.2017.2665692

Numerical Approach to Reachability-Guided Sampling-Based Motion Planning Under Differential Constraints

Pendleton, Scott Drew; Liu, Wei; Andersen, Hans; Eng, You Hong;

Frazzoli, Emilio; Rus, Daniela; Ang Jr, Marcelo H

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1232-1239, DOI: 10.1109/LRA.2017.2651940

An Approach for Imitation Learning on Riemannian Manifolds

Zeestraten, Martijn J.A.; Havoutis, Ioannis; Silvério, João; Calinon,

Sylvain; Caldwell, Darwin G.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1240-1247, DOI: 10.1109/LRA.2017.2657001

Insect-Inspired Mechanical Resilience for Multicopters

Mintchev, Stefano; de Rivaz, Sébastien; Floreano, Dario

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1248-1255, DOI: 10.1109/LRA.2017.2658946

Model-Based Global Localization for Aerial Robots Using Edge Alignment

Qiu, Kejie; Liu, Tianbo; Shen, Shaojie IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1256-1263, DOI: 10.1109/LRA.2017.2660063

Implicit Robot Force Control Based on Set Invariance

Parigi-Polverini, Matteo; Nicolis, Davide; Zanchettin, Andrea Maria;

Rocco, Paolo

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1288-1295, DOI: 10.1109/LRA.2017.2665681

Parallel Dynamics Computation Using Prefix Sum Operations

Yang, Yajue; Wu, Yuanqing; Pan, Jia IEEE Robotics and Automation Letters

Year: 2017. Volume: 2. Issue: 3

Pages: 1296-1303, DOI: 10.1109/LRA.2017.2666544

Efficient Aerialâ Aquatic Locomotion With a Single Propulsion System

Tan, Yu Herng; Siddall, Robert; Kovac, Mirko IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1304-1311, DOI: 10.1109/LRA.2017.2665689

Distributed Voronoi Neighbor Identification from Inter-Robot Distances

Elwin, Matthew: Freeman, Randy: Lynch, Kevin

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1320-1327, DOI: 10.1109/LRA.2017.2665696

Mixtures of Lightweight Deep Convolutional Neural Networks: Applied to Agricultural Robotics

McCool, Christopher Steven; Perez, Tristan; Upcroft, Ben

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1344-1351, DOI: 10.1109/LRA.2017.2667039

Autonomous Retroflexion of a Magnetic Flexible Endoscope

Slawinski, Piotr; Taddese, Addisu; Musto, Kyle; Obstein, Keith; Val-

dastri, Pietro

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1352-1359, DOI: 10.1109/LRA.2017.2668459

Highly Articulated Robotic Needle Achieves Distributed Ablation of Liver Tissue

Gerboni, Giada; Greer, Joseph; Laeseke, Paul F.; Hwang, Gloria L.;

Okamura, Allison M.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1367-1374, DOI: 10.1109/LRA.2017.2668467

Learning by Demonstration for Planning Activities of Daily Living in Rehabilitation and Assistive Robotics

Lauretti, Clemente; Cordella, Francesca; Guglielmelli, Eugenio; Zollo, Loredana

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1375-1382, DOI: 10.1109/LRA.2017.2669369

Automated Particle Collection for Protein Crystal Harvesting

Zeydan, Burak; Petruska, Andrew J.; Somm, Luca; Pieters, Roel S.;

Fang, Yang; Sargent, David Fisher; Nelson, Bradley J.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1391-1396, DOI: 10.1109/LRA.2017.2669364

Unsupervised Linking of Visual Features to Textual Descriptions in Long Manipulation Activities

Aksoy, Eren Erdal; Ovchinnikova, Ekaterina; Orhan, Adil; Yang,

Yezhou: Asfour. Tamim

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1397-1404, DOI: 10.1109/LRA.2017.2669363

An Analytical Lidar Sensor Model Based on Ray Path Information

Schaefer, Alexander; Luft, Lukas; Burgard, Wolfram

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1405-1412, DOI: 10.1109/LRA.2017.2669376

Optimization-Based Inverse Model of Soft Robots with Contact Handling

Coevoet, Eulalie; Escande, Adrien; Duriez, Christian

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1413-1419, DOI: 10.1109/LRA.2017.2669367

Design and Analysis of 6-DOF Triple Scissor Extender Robots with Applications in Aircraft Assembly

Gonzalez, Daniel; Asada, Harry

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1420-1427, DOI: 10.1109/LRA.2017.2671366

Kinematic Design of a Dynamic Brace for Measurement of Head/Neck Motion

Zhang, Haohan; Agrawal, Sunil

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1428-1435, DOI: 10.1109/LRA.2017.2671409

Dance Teaching by a Robot: Combining Cognitive and Physical Humanâ Robot Interaction for Supporting the Skill Learning Process

Paez Granados, Diego Felipe; Yamamoto, Breno Akihiro; Kinugawa,

Jun; Kosuge, Kazuhiro

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1452-1459, DOI: 10.1109/LRA.2017.2671428

A New Framework for Optimal Path Planning of Rectangular Robots Using a Weighted L_v Norm

Hyun, Nak-seung Patrick; Vela, Patricio; Verriest, Erik

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1460-1465, DOI: 10.1109/LRA.2017.2673858

A Curved-Drilling Approach in Core Decompression of the Femoral Head Osteonecrosis Using a Continuum Manipulator

Alambeigi, Farshid; Wang, Yu; Sefati, Shahriar; Gao, Cong; Murphy, Ryan Joseph; Iordachita, Ioan Iulian; Taylor, Russell H.; Khanuja,

Harpal; Armand, Mehran

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1480-1487, DOI: 10.1109/LRA.2017.2668469

Through the Eustachian Tube and Beyond: A New Miniature Robotic Endoscope to See into the Middle Ear

Fichera, Loris; Dillon, Neal P; Zhang, Dongqing; Godage, Isuru S.; Siebold, Michael A; Hartley, Bryan; Noble, Jack; Russell, Paul T.;

LABADIE, ROBERT F; Webster III, Robert James

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1488-1494, DOI: 10.1109/LRA.2017.2668468

Variable Damping Force Tunnel for Gait Training Using ALEX III

Stegall, Paul; Zanotto, Damiano; Agrawal, Sunil

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1495-1501, DOI: 10.1109/LRA.2017.2671374

Trajectory Optimization through Contacts and Automatic Gait Discovery for Quadrupeds

Neunert, Michael; Farshidian, Farbod; Winkler, Alexander, Wayne;

Buchli, Jonas

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1502-1509, DOI: 10.1109/LRA.2017.2665685

A Single-Port Robotic System for Transanal Microsurgeryâ Design and Validation

Shang, Jianzhong; Leibrandt, Konrad; Giataganas, Petros; Vitiello, Valentina; Seneci, Carlo Alberto; Wisanuvej, Piyamate; Liu, Jindong; Gras, Gauthier; Clark, James; Darzi, Ara; Yang, Guang-Zhong

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1510-1517, DOI: 10.1109/LRA.2017.2668461

A Contact-Aided Asymmetric Steerable Catheter for Atrial Fibrillation Ablation

Gao, Anzhu; Iiu, Hao; Zou, Yun; Wang, Zhidong; Liang, Ming; Wang,

Zulu

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1525-1531, DOI: 10.1109/LRA.2017.2676351

Word Ordering and Document Adjacency for Large Loop Closure Detection in 2-D Laser Maps

deray, jeremie; Solà, Joan; Andrade-Cetto, Juan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1532-1539, DOI: 10.1109/LRA.2017.2657796

An Adaptable, Probabilistic, Next-Best View Algorithm for Reconstruction of Unknown 3-D Objects

Jonathan Daudelin, Jonathan; Campbell, Mark

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1540-1547, DOI: 10.1109/LRA.2017.2660769

Efficient Proximity Queries for Continuum Robots on Parallel Computing Hardware

Leibrandt, Konrad; Yang, Guang-Zhong IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1548-1555, DOI: 10.1109/LRA.2017.2668466

Uncertainty in Monotone Codesign Problems

Censi. Andrea

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1556-1563, DOI: 10.1109/LRA.2017.2674970

Designing Anthropomorphic Robot Hand with Active Dual-Mode Twisted String Actuation Mechanism and Tiny Tension Sensors

Jeong, Seok-Hwan; Kim, Kyung-Soo; Kim, Soohyun

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1571-1578, DOI: 10.1109/LRA.2017.2647800

Design of a Compact Actuation and Control System for Flexible Medical Robots

Morimoto, Tania K.; Hawkes, Elliot Wright; Okamura, Allison M.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1579-1585, DOI: 10.1109/LRA.2017.2676240

Utilizing Elasticity of Cable-Driven Surgical Robot to Estimate Cable Tension and External Force

Haghighipanah, Mohammad; Miyasaka, Muneaki; Hannaford, Blake

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1593-1600, DOI: 10.1109/LRA.2017.2676347

Computationally Efficient Rigid-Body Gaussian Process for Motion Dynamics

Lang, Muriel; Hirche, Sandra

IEEE Robotics and Automation Letters

Year: 2017. Volume: 2. Issue: 3

Pages: 1601-1608, DOI: 10.1109/LRA.2017.2677469

Enhancing Seated Stability Using Trunk Support Trainer (TruST)

Khan, Moiz; Santamaria, Victor; Kang, Jiyeon; Bradley, Brian;

Dutkowsky, Joseph; Gordon, Andrew M.; Agrawal, Sunil

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1609-1616, DOI: 10.1109/LRA.2017.2678600

Continuum Reconfigurable Parallel Robots for Surgery: Shape Sensing and State Estimation with Uncertainty

Anderson, Patrick; Mahoney, Art; Webster III, Robert James

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1617-1624, DOI: 10.1109/LRA.2017.2678606

Development and Experimental Evaluation of Concurrent Control of a Robotic Arm and Continuum Manipulator for Osteolytic Lesion Treatment

Wilkening, Paul; Alambeigi, Farshid; Murphy, Ryan Joseph; Taylor,

Russell H.; Armand, Mehran

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1625-1631, DOI: 10.1109/LRA.2017.2678543

A Practically Linear Relation between Time Delay and the Optimal Settling Time of a Haptic Device

Hulin, Thomas

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1632-1639, DOI: 10.1109/LRA.2017.2678538

Developing a Compact Robotic Needle Driver for MRI-Guided Breast Biopsy in Tight Environments

Navarro-Alarcon, David; Singh, Satwinder; zhang, tianxue; Chung, Hayley Louise; NG, KWUN WANG; CHOW, Man Kiu; Liu, Yunhui

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1648-1655, DOI: 10.1109/LRA.2017.2678542

A Continuum Robot and Control Interface for Surgical Assist in Fetoscopic Interventions

Dwyer, George; Chadebecq, François; Tella Amo, Marcel; Bergeles, Christos; Maneas, Efthymios; Pawar, Vijay; Vander Poorten, Emmanuel B; Deprest, Jan; Ourselin, Sebastien; De Coppi, Paolo; Vercauteren, Tom; Stoyanov, Danail

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1656-1663, DOI: 10.1109/LRA.2017.2679902

Caging Polygonal Objects Using Equilateral Three-Finger Hands

Bunis, Hallel A.; Rimon, Elon; Shapiro, Amir; Golan, Yoav

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1672-1679, DOI: 10.1109/LRA.2017.2651158

Planning Dynamically Feasible Trajectories for Quadrotors Using Safe Flight Corridors in 3-D Complex Environments

Liu, Sikang; Watterson, Michael; Mohta, Kartik; Sun, Ke; Bhattacharya, Subhrajit; Taylor, Camillo Jose; Kumar, Vijay

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1688-1695, DOI: 10.1109/LRA.2017.2663526

Real-Time Motion Planning for Aerial Videography With Real-Time With Dynamic Obstacle Avoidance and Viewpoint Optimization

Naegeli, Tobias; Alonso-Mora, Javier; Domahidi, Alexander; Rus,

Daniela; Hilliges, Otmar

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1696-1703, DOI: 10.1109/LRA.2017.2665693

Effective Manipulation in Confined Spaces of Highly Articulated Robotic Instruments for Single Access Surgery

Leibrandt, Konrad; Wisanuvej, Piyamate; Gras, Gauthier; Shang, Jianzhong; Seneci, Carlo Alberto; Giataganas, Petros; Vitiello,

Valentina; Darzi, Ara; Yang, Guang-Zhong

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1704-1711, DOI: 10.1109/LRA.2017.2668465

Coordination Dynamics in Multihuman Multirobot Teams

Igbal, Tarig; Riek, Laurel D.

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1712-1717, DOI: 10.1109/LRA.2017.2673864

Analysis of Joint and Hand Impedance During Teleoperation and Free-Hand Task Execution

Buzzi, Jacopo; Gatti, Cecilia; Ferrigno, Giancarlo; De Momi, Elena

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1733-1739, DOI: 10.1109/LRA.2017.2678546

Observability-Aware Trajectory Optimization for Self-Calibration with Application to UAVs

Hausman, Karol; Preiss, James; Sukhatme, Gaurav; Weiss, Stephan

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1770-1777, DOI: 10.1109/LRA.2017.2647799

Toward Domain Independence for Learning-Based Monocular Depth Estimation

Mancini, Michele; Costante, Gabriele; Valigi, Paolo; Ciarfuglia, Thomas Alessandro; Delmerico, Jeffrey; Scaramuzza, Davide

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1778-1785, DOI: 10.1109/LRA.2017.2657002

Hierarchical Cascade Controller for Assistance Modulation in a Soft Wearable Arm Exoskeleton

Dinh, Binh Khanh; Xiloyannis, Michele; Antuvan, Chris Wilson; Cap-

pello, Leonardo; Masia, Lorenzo

IEEE Robotics and Automation Letters

Year: 2017, Volume: 2, Issue: 3

Pages: 1786-1793, DOI: 10.1109/LRA.2017.2668473