1. Record Nr. UNINA9910957464803321

| | |
|---|---|
| Titolo | Robotics : science and systems VI / / edited by Yoky Matsuoka, Hugh Durrant-Whyte, and Jose Neira |
| Pubbl/distr/stampa | Cambridge, MA, : MIT Press, ©2011 |
| ISBN | 1-283-25881-1<br>9786613258816<br>0-262-29893-7 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (341 p.) |
| Altri autori (Persone) | MatsuokaYoky<br>Durrant-WhyteHugh F. <1961-><br>NeiraJose |
| Disciplina | 629.8/92 |
| Soggetti | Robotics |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "This volume contains the 40 papers presented at Robotics: Science and Systems (RSS) 2010, held at the University of Zaragoza in Spain, from June 27 to June 30, 2010"--Preface. |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Cover ; Contents; Preface; Organizing Committee; Program Committee; Sponsors; Biophysically Inspired Development of a Sand-Swimming Robot; Passive Torque Regulation in an Underactuated Flapping Wing Robotic Insect ; Color-Accurate Underwater Imaging Using Perceptual Adaptive Illumination; Probabilistic Lane Estimation Using Basis Curves; Reinforcement Learning to Adjust Robot Movements to New Situations; Analysis and Control of a Dissipative Spring-Mass Hopper with Torque Actuation; On Motion and Force Control of Grasping Hands with Postural Synergies<br>Back-drivable and Inherently Safe Mechanism for Artificial Finger Segmentation and Unsupervised Part-based Discovery of Repetitive Objects; Scale Drift-Aware Large Scale Monocular SLAM; Preliminary Results in Decentralized Estimation for Single-Beacon Acoustic Underwater Navigation; A Non-invasive, Real-Time Method for Measuring Variable Stiffness ; Consistent Data Association in Multi-robot Systems with Limited Communications; Singularity-invariant Leg Rearrangements in Doubly-planar Stewart-Gough Platforms ; On the Kinematic Design of Exoskeletons and Their Fixations with a Human |

Member

Assessing Optimal Assignment under Uncertainty LQG-MP ; The Smooth Curvature Flexure Model; Multi-priority Cartesian Impedance Control ; Variable Impedance Control; A Fast Traversal Heuristic and Optimal Algorithm for Effective Environmental Coverage ; Stochastic Complementarity for Local Control of Discontinuous Dynamics; Distributed Optimization with Pairwise Constraints and Its Application to Multi-robot Path Planning; PLISS; A Constant-Time Algorithm for Vector Field SLAM Using an Exactly Sparse Extended Information Filter Efficient Probabilistic Planar Robot Motion Estimation Given Pairs of Images Efficient Non-parametric Surface Representations Using Active Sampling for Push Broom Laser Data; Sensor Placement for Improved Robotic Navigation; Task-driven Tactile Exploration; On the Role of Hand Synergies in the Optimal Choice of Grasping Forces; Dynamic Constraint-based Optimal Shape Trajectory Planner for Shape-Accelerated Under-actuated Balancing Systems ; Design and Optimization Strategies for Muscle-like Direct Drive Linear Permanent Magnet Motors

Study of Group Food Retrieval by Ants as a Model for Multi-robot Collective Transport Strategies Incremental Sampling-based Algorithms for Optimal Motion Planning; Stochastic Modeling of the Expected Time to Search for an Intermittent Signal Source Under a Limited Sensing Range ; Closing the Learning-Planning Loop with Predictive State Representations; Belief Space Planning Assuming Maximum Likelihood Observations ; Motion Planning under Bounded Uncertainty Using Ensemble Control; Remotely Powered Propulsion of Helical Nanobelts ; A Molecular Algorithm for Path Self-Assembly in 3 Dimensions

Sommario/riassunto

Papers from a flagship robotics conference that cover topics ranging from kinematics to human-robot interaction and robot perception.