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Nota di contenuto	Intro -- Contents -- Preface -- Semantic Modeling of Places using Objects -- Design of a Bio-inspired Dynamical Vertical Climbing Robot -- Online Learning for Offroad Robots: Using Spatial Label Propagation to Learn Long-Range Traversability -- Composition of Vector Fields for Multi-Robot Manipulation via Caging -- Closed Loop Control of a Gravity-assisted Underactuated Snake Robot with Application to Aircraft Wing-Box Assembly -- Predicting Partial Paths from Planning Problem Parameters -- Emergent Task Allocation for Mobile Robots -- Passivity-Based Switching Control for Stabilization of Wheeled Mobile Robots -- A Tree Parameterization for Efficiently Computing Maximum Likelihood Maps using Gradient Descent -- Spatially-Adaptive Learning Rates for Online Incremental SLAM -- Adaptive Non-Stationary Kernel Regression for Terrain Modeling -- Fishbone Model for Belt Object Deformation -- Context and Feature Sensitive Re-sampling from Discrete Surface Measurements -- Simultaneous Localisation and Mappingin Dynamic Environments (SLAMIDE) with Reversible Data Association -- Sliding Mode Formation Tracking Control of a Tractor

and Trailer - Car System -- Map-Based Precision Vehicle Localization in Urban Environments -- Dense Mapping for Range Sensors: Efficient Algorithms and Sparse Representations -- Gaussian Beam Processes: A Nonparametric Bayesian Measurement Model for Range Finders -- Vision-Aided Inertial Navigation for Precise Planetary Landing: Analysis and Experiments -- Optimal Kinodynamic Motion Planning for 2D Reconfiguration of Self-Reconfigurable Robots -- A Discrete Geometric Optimal Control Framework for Systems with Symmetries -- BS-SLAM: Shaping the World -- An Implicit Time-Stepping Method for Multibody Systems with Intermittent Contact -- Synthesis of Constrained nR Planar Robots to Reach Five Task Positions.
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Sommario/riassunto

Proceedings from the third annual Robotics: Science and Systems conference, presenting state-of-the-art research on the foundations of robotics, robotics applications, and robotics systems.