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	Nota di contenuto	Robot kinematics and dynamics -- Comparative Analysis of Quasi-differential Approaches in Inverse Kinematics, by Bertalan Csanádi, János F. Bitó, Imre J. Rudas, József Tar -- A Novel Single-Loop Decoupled Schoenflies-Motion Generator: Concept and Kinematics Analysis, by Raffaele Di Gregorio -- A comparative study of three

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Huang -- Legged robot strategies for climbing stairs, by Mircea Nitulescu, Mircea Ivanescu, Sorin Manoiu-Olaru, Dong Hai Nguyen Van -- Kinematic Path Control of a Redundant Robot Arm in Sliding Mode, by Evgeniy Krastev -- Precise Positioning of a Robotic Arm Manipulator Using Stereo Computer Vision and Iterative Learning, by Kaloyan Yovchev, Denis Chikurtev, Nayden Chivarov, Nedko Shivarov -- A Receding Horizon Push Recovery Strategy for Balancing the iCub Humanoid Robot, by Stefano Dafarra, Francesco Romano, Francesco Nori -- Neural Networks for Real-Time, Probabilistic Obstacle Detection, by Tobias Werner, Josua Bloeß, Dominik Henrich -- Vision systems -- Cloud Robot Vision Services Extend High-performance Computing Capabilities of Robot Systems, by Florin Daniel Anton, Theodor Borangiu, Silvia Anton, Silviu Raileanu -- A robotic 3D vision system for automatic cranial prostheses inspection, by Maria Cristina Valigi, Silvia Logozzo, Gabriele Canella -- Automated, Depth Sensor Based Object Detection and Path Planning for Robot-Aided 3D Scanning, by Jakob Ziegler, Hubert Gattringer, Dominik Kaserer, Andreas Mueller -- Collision Avoidance System for Collaborative Robotics, by Stefano Mauro, Leonardo Sabatino Scimmi, Stefano Pastorelli -- Mobile robots and path planning design and construction of a demonstrative Heritagebot Platform, by Marco Ceccarelli, Daniele Cafolla, Matteo Russo, Giuseppe Carbone -- Estimation of the Traversal Time for a Fleet of Industrial Transport Robots, by Clemens Mühlbacher, Gerald Steinbauer, Stephan Gspandl, Micheal Reip -- Adapting Edge Weights for Optimal Paths in a Navigation Graph, by Clemens Mühlbacher, Gerald Steinbauer, Stephan Gspandl, Micheal Reip -- Advanced Modelling Techniques for Flexible Robotic Systems, by Mariapaola D'Imperio, Cristiano Pizzamiglio, Daniele Ludovico, Giancarlo Genta, Darwin Caldwell, Ferdinando Cannella -- Autonomous Mobile Manipulation using ROS, by Heiko Engemann, Patrick Wiesen, Stephan Kallweit, Harshavardhan Deshpande -- Automation and robotics for vehicles -- Team of Pneumatic ASi-controlled Climber Robots for Ships Inspection, by Enrico Ravina -- Elasto-kinematic characteristics of Car Sus-pensions with magnetorheological bushings, by Renato Brancati, Giandomenico Di Massa, Ernesto Rocca, Cesare Rossi, Sergio Savino, Francesco Timpone -- Delay-dependent criteria for robust lateral stability control of articulated vehicles, by Mojtaba Sharifzadeh, arash farnam, Adolfo Senatore, Francesco Timpone, Ahmad Akbari -- Comparison of modelling tools for the assessment of the parameters of driving assistance solutions, by Flavio Farroni, Guido Fusco, Luigi Pariota, Sebastian Rosario Pastore, Aleksandr Sakhnevych, Francesco Timpone -- Modeling, Simulation and Control of a 4WD Electric Vehicle with In-Wheel Motors, by Raffaele Iervolino, Aleksandr Sakhnevych -- Path Tracking Control for Autonomous Driving Applications, by Antonio Tota, mauro velardocchia, Levent Guvenc -- UAV: Innovation and new application fields in the future -- Electromagnetic characterization of installed antennas through UAVs, by Irene Aicardi, Pietro Bolli, Andrea Lingua, Fabio Paonessa, Marco Piras,Giuseppe Virone -- Remote Sensing from RPAS in Agriculture: an Overview of Expectations and Unanswered Questions, by Enrico Borgogno Mondino -- A Self-adapting Method for 3D Environment Exploration Inspired by Swarm Behaviour, by Jan Zelenka, tomas kasanicky, Ivana Budinska -- Analysis & Modelling of Powertrain Components for an Efficient UAV Design, by Mario Silvagni, Marcello Chiaberge, Federico Tessari -- Camera Selection and Flight Planning for Post Processing 3D Reconstruction Automatization, by Mario Silvagni, Marcello Chiaberge, Osman Abdalla Sidahmed Osman -- A modular Cloud Robotics architecture for data management and mission handling

of UnmannedRobotic Services, by Marcello Chiaberge, Mario Silvagni, Claudio Sanguedolce, Gianluca Dara -- Application of an inspection robot composed by collaborative terrestrial and aerial modules for an operation in agriculture, by Roberto Grassi, Rea Pierluigi, Erika Ottaviano, Paolo Maggiore -- Industrial applications -- Airbrush robotic painting system: experimental validation of a colour spray model, by Lorenzo Scalera, Enrico Mazzon, Paolo Gallina, Alessandro Gasparetto -- Spring design for motor torque reduction in articulated mechanisms, by Paolo Boscariol, Giovanni Boschetti, Paolo Gallina, Chiara Passarini -- A robotic design for a MIM based technology, by Hermes Giberti, Luca Sbaglia -- Robust One-Shot Robot Programming by Demonstration using Entity-based Resources, by Eric Mathias Orendt, Michael Riedl, Dominik Henrich -- The "Robot Mechanics" course experience at Politecnico di Milano, by Hermes Giberti, Enrico Fiore -- Mechatronic Design and Prototype of a 4-DOFs Hot Wire CNC FoamCutting Machine, by Giorgio Figliolini, Rea Pierluigi, Carlo Cocomello -- Robotic grippers -- Development of a NEMS-Technology based Nano Gripper, by Andrea Veroli, Alessio Buzzin, Rocco Crescenzi, Fabrizio Frezza, Giampiero de Cesare, Vito D'Andrea, Francesco Mura, Matteo Verotti, Alden Dochshanov, Nicola Pio Belfiore -- A 3-Finger Robotic Gripper for Grasping Fabrics Based on Cams-Followers Mechanism, by Panagiotis Koustoumpardis, Sotiris Smyrnis, Nikos Aspragathos -- Experimental results for QuBu Gripper: a 3-Jaw electric gripper, by Luca Girolamo Butera, Giuseppe Quaglia -- Experimental evaluation and comparison of low-cost adaptive mechatronic grippers, by Giovanni Carabin, Ilaria Palomba, Dominik Matt, Renato Vidoni -- The experience at University of L'Aquila on shape memory alloys actuators, by Francesco Durante, Pierluigi Beomonte Zobel, Terenziano Raparelli -- Humanoids & cognitive systems.

Sommario/riassunto	This volume contains the proceedings of the 26th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2017, held at the Polytechnic University of Turin, Italy, from June 21-23, 2017. The conference brought together academic and industrial researchers in robotics from 30 countries, the majority of them affiliated to the Alpe-Adria-Danube Region, and their worldwide partners. RAAD 2017 covered all major areas of R&D and innovation in robotics, including the latest research trends. The book provides an overview on the advances in service and industrial robotics. The topics are presented in a sequence starting from the classical robotic subjects, such as kinematics, dynamics, structures, control, and ending with the newest topics, like human-robot interaction and biomedical applications. Researchers involved in the robotic field will find this an extraordinary and up-to-date perspective on the state of the art in this area.