

1. Record Nr.	UNISA996466002203316
Titolo	Towards Autonomous Robotic Systems [[electronic resource]] : 17th Annual Conference, TAROS 2016, Sheffield, UK, June 26--July 1, 2016, Proceedings // edited by Lyuba Alboul, Dana Damian, Jonathan M. Aitken
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-40379-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XII, 384 p. 190 illus.)
Collana	Lecture Notes in Artificial Intelligence ; ; 9716
Disciplina	629.892
Soggetti	Artificial intelligence Optical data processing User interfaces (Computer systems) Computers Application software Data mining Artificial Intelligence Image Processing and Computer Vision User Interfaces and Human Computer Interaction Computation by Abstract Devices Information Systems Applications (incl. Internet) Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Active Compliance Control of the RED Hand: A PID Control Approach -- A Wearable Automated System to Quantify Parkinsonian Symptoms Enabling Closed Loop Deep Brain Stimulation -- Systematic and Realistic Testing in Simulation of Control Code for Robots in Collaborative Human-Robot Interactions -- Congratulations, it's a boy! Bench-marking children's perceptions of the Robokind Zeno-R25 -- A Bioinspired Approach to Vision -- An Overview of the Ongoing Humanoid Robot Project LARMbot -- Force and Topography

Reconstruction using GP and MOR for the TACTIP Soft Sensor System -- Agent-based Autonomous Systems and Abstraction Engines: Theory meets Practice -- Experimental evaluation of a multi-modal user interface for a robotic Service -- Enhancing Autonomy in VTOL Aircraft Based on Symbolic Computation Algorithms -- Development of an Intelligent Robotic Rein for Haptic Control and Interaction with Mobile Machines -- Infrastructure Mapping in Well-Structured Environments Using MAV -- Probabilistic Model Checking of Ant-Based Positionless Swarming -- Testing, Verification and Improvements of Timeliness in ROS Processes -- The Psi Swarm: A low-cost robotics platform and its use in an education setting -- Multi Robot Cooperative Area Coverage, Case Study: Spraying -- A Step Toward Mobile Robots Autonomy: Energy Estimation Models -- Toward Performance Guarantee for Autonomous Mobile Robotic Mission: An Approach for Hardware and Software Resources Management -- Using Google Glass in Human-Robot Swarm Interaction -- A virtual viscoelastic based aggregation model for self-organization of swarm robots system -- A Portable Active Binocular Robot Vision Architecture for Scene Exploration -- Kinematic Analysis of the Human Thumb with Foldable Palm -- Private Cloud Deployment Model in Open-Source Mobile Robots Ecosystem -- Efficient People-Searching Robot -- Accurate and Versatile Automation of Industrial Kitting Operations with SkiROS -- Introducing a 3D Physics Simulator Plugin for the ARGoS Robot Simulator -- Co-operative use of Marine Autonomous Systems to enhance navigational accuracy of Autonomous Underwater Vehicles -- Human Management of a Robotic Swarm -- Texture Recognition Using Force Sensitive Resistors -- First Experiences towards Potential Impact of an Outdoor Shopping Assistant -- Evaluating Multi-Robot Teamwork in Parameterised Environments -- How to build and customize a high-resolution 3D laserscanner using off-the-shelf components -- Effects of residual charge on the performance of Electro-adhesive grippers -- A Data Set for Fault Detection Research on Component-Based Robotic Systems.

Sommario/riassunto

This book constitutes the refereed proceedings of the 17th Annual Conference on Towards Autonomous Robotics, TAROS 2016, held in Sheffield UK, in June/July 2016. The 23 revised full papers presented together with 15 short papers were carefully reviewed and selected from 56 submissions. The overall program covers various aspects of robotics, including navigation, planning, sensing and perception, flying and swarm robots, ethics, humanoid robotics, human-robot interaction, and social robotics.
