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Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 11742
Disciplina	006.3
Soggetti	Artificial intelligence Computers, Special purpose Computer networks Computer vision Algorithms User interfaces (Computer systems) Human-computer interaction Artificial Intelligence Special Purpose and Application-Based Systems Computer Communication Networks Computer Vision User Interfaces and Human Computer Interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes Index.
Nota di contenuto	Parameter Optimization of eel robot based on NSGA-II algorithm -- A Novel Dual-drive Soft Pneumatic Actuator with the Improved Output Force -- Research on motion evolution of soft robot based on VoxCAD -- A gecko-inspired robot employs scaling footpads to facilitate stable attachment -- Measurement Method of Underwater Target Based on Binocular Vision -- Method on Human Activity Recognition Based on Convolutional Neural Network -- A Web Based Security Monitoring and Information Management System for Nursing homes -- Region of

Interest Growing Neural Gas for Real-time Point Cloud Processing -- Detection of Divergence Point of the Optical Flow Vectors Considering to Gaze Point while Vehicle Cornering -- Automatic fiber detection and focus system from image frames. -- Lifelog Generation Based on Informationally Structured Space -- A Soft Robotic Glove for Hand Rehabilitation using Pneumatic Actuators with Variable Stiffness -- Visual Servoing of Soft Robotic Arms by Binocular -- Design of a Teleoperated Rod-driven Continuum Robot -- Aerodynamics of soft flapping wings of Caudipteryx -- A Finite Element Model and Performance Analysis of a Hybrid Continuum Robot -- Design and experiment of a foldable pneumatic soft manipulator -- Underwater image target detection with cascade classifier and image preprocessing method -- Autopilot System of Remotely Operated Vehicle Based on Ardupilot -- Optimized SOM Algorithm to Solve Problem of Invalid Task Allocation -- Multiple underwater target search path planning based on GBNN -- Path Planning For Swarm AUV Visiting Communication Node -- A dynamic tracking control for the 4500m-Human Occupied Vehicle -- Development of A Full Ocean Depth Hydraulic Manipulator System -- Thruster fault identification for autonomous underwater vehicle based on time-domain energy and time-frequency entropy of fusion signal -- Design and Implementation of Monitoring System for Deep Sea Ore Sampling Machine -- An Automated Launch and Recovery System for USVs based onthe Pneumatic Ejection Mechanism -- The UAV path planning method based on lidar -- CSLAM and GPS based Navigation for Multi-UAV Cooperative Transportation System -- A New Concept of UAV Recovering System -- Design and Integration of a Reconfiguration Robot -- The longitudinal stability of FWMAVs considering the oscillation of body in forward flight -- Design and Control of a Small Intelligent Camera Stabilizer for a Flapping-wing Robotic Bird -- Movement-Mode-Switching Mechanism for a Hybrid Wheel/legged Mobile Robot -- Two Experimental Methods to Test the Aerodynamic Performance of HITHawk -- Tension Optimization of A Cable-DrivenCoupling Manipulator Based on RobotDynamics with Cable Elasticity -- Structure design and kinematic analysis of a partially-decoupled 3T1R parallel manipulator -- A New Four-limb Parallel Sch• oenflies Motion Generator with End-effector Full-Circle Rotation via Planetary Gear Train -- Design and Kinematic Analysis on A Novel Serial-Parallel Hybrid Leg for Quadruped Robot -- A Novel 5-DOF Hybrid Robot without Singularity Configurations -- Select and focus: action recognition with spatial-temporal attention -- Real-time Grasp Type Recognition Using Leap Motion Controller -- Speaker-Independent Speech Emotion Recognition Based on CNN-BLSTM and Multiple SVMs -- On-Line Identification of Moment of Inertia for Permanent Magnet Synchronous Motor Based On Model Reference Adaptive System -- Multi-Point Interaction Force Estimation for Robot Manipulators with Flexible Joints Using Joint Torque Sensors -- An Insulator Image Segmentation Method for Live Working Robot Platform -- Multi-robot Collaborative Assembly Research for 3C Manufacturing--Taking Server Motherboard Assembly Task as an Example -- Multiagent Reinforcement Learning for Swarm Confrontation Environments -- Distributed Adaptive Formation Control of Team of Aerial Robot Swarms in Cluttered Environments -- Resource planning for UAV swarms based on NSGA-II -- An improved OLSR protocol based on Task driven used for Military UAV Swarm Network -- A Semantic Segmentation based Lidar SLAM system towards Dynamic Environments-Rui Jian -- Fault-tolerant Control of Robotic Manipulators with/without Output Constraints -- Toward human-in-the-loop PID control based on CACLA reinforcement learning -- A

Preliminary Study on Surface Electromyography Signal Analysis for Motion Characterization during Catheterization -- Design and Control of a Novel Series Elastic Actuator for Knee Exoskeleton -- Comparison of Different Schemes for Motion Control of Pneumatic Artificial Muscle using Fast Switching Valve -- Recognition of Pes Cavus Foot using Smart Insole: A Pilot Study -- Controller Design by Using Simultaneous Perturbation Stochastic Approximation with Changeable Sliding Window -- Robust Adaptive Force Tracking Impedance Control for Robotic Capturing of Unknown Objects -- Robust Controller Design for Non-Linear System with Perturbation Compensation -- Trajectory Tracking Control of a 7-Axis Robot Arm Using SMCSPO -- Research on Control Algorithms of Underactuated Gymnastic Robot's Leaping Between Horizontal Bar -- Design and Simulation of a Push Recovery Strategy for Biped Robot -- Nonlinear Dynamic Analysis of Inclined Impact oscillator with a Harmonically External Excitation.

Sommario/riassunto

The volume set LNAI 11740 until LNAI 11745 constitutes the proceedings of the 12th International Conference on Intelligent Robotics and Applications, ICIRA 2019, held in Shenyang, China, in August 2019. The total of 378 full and 25 short papers presented in these proceedings was carefully reviewed and selected from 522 submissions. The papers are organized in topical sections as follows: Part I: collective and social robots; human biomechanics and human-centered robotics; robotics for cell manipulation and characterization; field robots; compliant mechanisms; robotic grasping and manipulation with incomplete information and strong disturbance; human-centered robotics; development of high-performance joint drive for robots; modular robots and other mechatronic systems; compliant manipulation learning and control for lightweight robot. Part II: power-assisted system and control; bio-inspired wall climbing robot; underwater acoustic and optical signal processing for environmental cognition; piezoelectric actuators and micro-nano manipulations; robot vision and scene understanding; visual and motional learning in robotics; signal processing and underwater bionic robots; soft locomotion robot; teleoperation robot; autonomous control of unmanned aircraft systems. Part III: marine bio-inspired robotics and soft robotics: materials, mechanisms, modelling, and control; robot intelligence technologies and system integration; continuum mechanisms and robots; unmanned underwater vehicles; intelligent robots for environment detection or fine manipulation; parallel robotics; human-robot collaboration; swarm intelligence and multi-robot cooperation; adaptive and learning control system; wearable and assistive devices and robots for healthcare; nonlinear systems and control. Part IV: swarm intelligence unmanned system; computational intelligence inspired robot navigation and SLAM; fuzzy modelling for automation,control, and robotics; development of ultra-thin-film, flexible sensors, and tactile sensation; robotic technology for deep space exploration; wearable sensing based limb motor function rehabilitation; pattern recognition and machine learning; navigation/localization. Part V: robot legged locomotion; advanced measurement and machine vision system; man-machine interactions; fault detection, testing and diagnosis; estimation and identification; mobile robots and intelligent autonomous systems; robotic vision, recognition and reconstruction; robot mechanism and design. Part VI: robot motion analysis and planning; robot design, development and control; medical robot; robot intelligence, learning and linguistics; motion control; computer integrated manufacturing; robot cooperation; virtual and augmented reality; education in mechatronics engineering; robotic drilling and sampling technology; automotive systems;

mechatronics in energy systems; human-robot interaction.