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Titolo	Cognitive Systems and Information Processing : 7th International Conference, ICCSIP 2022, Fuzhou, China, December 17-18, 2022, Revised Selected Papers / / edited by Fuchun Sun, Angelo Cangelosi, Jianwei Zhang, Yuanlong Yu, Huaping Liu, Bin Fang
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Descrizione fisica	1 online resource (661 pages)
Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 1787
Disciplina	006.3
Soggetti	Artificial intelligence Image processing - Digital techniques Computer vision Computer engineering Computer networks Application software Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics Computer Engineering and Networks Computer and Information Systems Applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Award -- Multi-Modal Ankle Muscle Strength Training Based on Torque and Angle Sensors -- T3SFNet: A Tuned Topological Temporal-Spatial Fusion Network for Motor Imagery with Rehabilitation Exoskeleton -- Joint Trajectory Generation of Obstacle Avoidance in Tight Space for Robot Manipulator -- Manipulating adaptive analysis and performance test of a negative-pressure actuated adhesive gripper -- Depth Control of a Biomimetic Manta Robot via Reinforcement Learning -- Inchworm-Gecko Inspired Robot with Adhesion State Detection and CPG Control -- Coherence Matrix based Early Infantile Epileptic Encephalopathy Analysis with ResNet -- Constrained Canonical Correlation Analysis for fMRI Analysis Utilizing Experimental Paradigm Information -- Algorithm

-- BFAct: Out-of-distribution Detection with Butterworth Filter Rectified Activations -- NKB-S: Network Intrusion Detection Based on SMOTE Sample Generation -- Mastering “Gongzhu” with Self-play Deep Reinforcement Learning -- Improved Vanishing Gradient Problem for Deep Multi-layer Neural Networks -- Incremental Quaternion Random Neural Networks -- Application -- Question Answering on Agricultural Knowledge Graph Based on Multi-label Text Classification -- Dairy Cow Individual Identification System Based on Deep Learning -- Automatic Packaging System Based on Machine Vision -- Meteorological and Hydrological Monitoring Technology Based on Wireless Sensor Network Model and its Application -- A Review of Deep Reinforcement Learning Exploration Methods: Prospects and Challenges for Application to Robot Attitude Control Tasks -- AeroBotSim: A High-photo-fidelity Simulator for Heterogeneous Aerial Systems under Physical Interaction -- Trailer Tag Hitch: an Automatic Reverse Hanging System Using Fiducial Markers -- Anatomical and Vision-guided Path Generation Method for Nasopharyngeal Swabs Sampling -- A Hierarchical Model for Dynamic Simulation of the Fault in Satellite Operations -- Manipulation & Control -- Design and Implementation of Autonomous Navigation System Based on Tracked Mobile Robot -- Towards Flying Carpet: Dynamics Modeling, and Differential-flatness-based Control and Planning -- Towards Flying Carpet: Dynamics Modeling, and Differential-flatness-based Control and Planning -- Region Clustering for Mobile Robot Autonomous Exploration in Unknown Environment -- Human Intention Understanding and Trajectory Planning Based on Multi-modal Data -- Robotic Arm Movement Primitives Assembly Planning Method based on BT and DMP -- Center-of-Mass-based Regrasping of Unknown Objects Using Reinforcement Learning and Tactile Sensing -- Alongshore Circumnavigating Control of a Manta Robot Based on Fuzzy Control and an Obstacle Avoidance Strategy -- Robot Calligraphy Based on Footprint Model and Brush Trajectory Extraction -- Hierarchical Knowledge Representation of Complex Tasks Based on Dynamic Motion Primitives -- Saturation Function and Rule Library-Based Control Strategy for Obstacle Avoidance of Robot Manta -- Perception-aware Motion Control of Multiple Aerial Vehicle Transportation Systems -- NSGA-II Optimization-based CPG Phase Transition Control Method of Manta Ray Robot -- Hardware -- High Resolution Multi-indicator MIM Nano-Sensor Based on Aperture-Coupled Asymmetric Square Resonator -- Rigid-flexible Coupled Soft Gripper with Treble Modular Fingers -- Ecofriendly Soft Material-based Sensors Capable of Monitoring Health -- Teleoperation of a Dexterous Hand using a Wearable Hand -- Vision -- A Cuboid Volume Measuring Method Based on a Single RGB Image -- Surface Defect Detection of Electronic Components Based on FaSB R-CNN -- A LED Module Number Detection for LED Screen Calibration -- Estimating the Pose of Irregular Surface Contact Based on Multi-collider Collision Information and Nonlinear Neural Network in Virtual Environment -- Vision-Tactile Fusion Based Detection of Deformation and Slippage of Deformable Objects During Grasping -- A MobileNet Based Model for Tongue Shape Classification -- A 3D Point Cloud Object detection Algorithm Based on MSCS-Pointpillars -- Polar Grid Based Point Cloud Ground Segmentation -- High-precision Localization of Mobile Robot Based on Particle Filters Combined with Triangle Matching.

Sommario/riassunto

This book constitutes the refereed proceedings of the 7th International Conference on Cognitive Systems and Information Processing, ICCSIP 2022, held in Fuzhou, China, during November 18–20, 2022. The 47 papers included in this book were carefully reviewed and selected from 121 submissions. They were organized in the following topical sections

as follows: Award; Algorithm; Application; Manipulation & Control;
Hardware and Vision.
