1.	Record Nr.	UNINA9910349306803321
	Titolo	RoboCup 2018: Robot World Cup XXII / / edited by Dirk Holz, Katie Genter, Maarouf Saad, Oskar von Stryk
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
	ISBN	3-030-27544-2
	Edizione	[1st ed. 2019.]
	Descrizione fisica	1 online resource (XV, 539 p. 411 illus., 215 illus. in color.)
	Collana	Lecture Notes in Artificial Intelligence ; ; 11374
	Disciplina	006.3
	Soggetti	Artificial intelligence
		Special purpose computers
		Computer communication systems
		Optical data processing
		Application software
		Artificial Intelligence
		Special Purpose and Application-Based Systems
		Computer Communication Networks
		Image Processing and Computer Vision
		Computer Applications
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Communication in Soccer Simulation: On the Use of Wiretapping Opponent Teams -- Multi-Robot Fast-Paced Coordination With Leader Election -- Visual SLAM-Based Localization and Navigation for Service Robots: The Pepper Case -- Visual Mesh: Real-time Object Detection Using Constant Sample Density -- Fast Multi-Scale fHOG Feature Extraction Using Histogram Downsampling -- Combining Simulations and Real-Robot Experiments for Bayesian Optimization of Bipedal Gait Stabilization -- Learning Skills for Small Size League RoboCup -- Real-time Scene Understanding Using Deep Neural Networks for RoboCup SPL -- Training a RoboCup Striker Agent via Transferred Reinforcement Learning -- Playing Soccer Without Colors in the SPL: A Convolutional Neural Network -- End-to-End Deep Imitation Learning: Robot Soccer Case Study -- Designing Convolutional Neural Networks Using a

Genetic Approach for Ball Detection -- ImageTagger: An Open Source Online Platform for Collaborative Image Labeling -- Mimicking an Expert Team Through the Learning of Evaluation Functions from Action Sequences -- Jetson, Where Is the Ball? Using Neural Networks for Ball Detection at RoboCup 2017 -- Bridging the Gap - On a Humanoid Robotics Rookie League -- Context Aware Robot Architecture, Application to the Robocup@Home Challenge -- From Commands to Goal-based Dialogs: A Roadmap to Achieve Natural Language Interaction in RoboCup@Home.-RoboCupSimData: Software and Data for Machine Learning from RoboCup Simulation League -- Generation of Laser-Quality 2D Navigation Maps from RGB-D Sensors -- Towards Long-Term Memory for Social Robots: Proposing a New Challenge for the RoboCup@Home -- eEVA: Real-Time Web-Based Affective Agents for Human-Robot Interface -- Evaluation of Situations in RoboCup 2D Simulations Using Soccer Field Images -- Near Real-Time Object Recognition for Pepper Based on Deep Neural Networks Running on a Backpack -- Multimodal Movement Activity Recognition Using a Robot's Proprioceptive Sensors -- Survey of Rescue Competitions and Proposal of New Standard Task from Ordinary Tasks -- Adjusted Bounded Weighted Policy Learner -- Towards Real-Time Ball Localization Using CNNs -- Deep Learning for Semantic Segmentation on Minimal Hardware -- RoboCup Junior in the Hunter Region: Driving the Future of Robotic STEM Education Distributed Circumnavigation Control with Dynamic Spacings for a Heterogeneous Multi-Robot System -- Prediction of a Ball Trajectory for the Humanoid Robots: A Friction-Based Study -- RoboCup SSL 2018 Champion Team Paper -- Tech United Eindhoven Middle Size League Winner 2018 -- Ichiro Robots Winning RoboCup 2018 Humanoid TeenSize Soccer Competitions -- NimbRo Robots Winning RoboCup 2018 Humanoid AdultSize Soccer Competitions -- HELIOS2018: RoboCup 2018 Soccer Simulation 2D League Champion -- UT Austin Villa: RoboCup 2018 3D Simulation League Champions -- Integrating the Latest Artificial Intelligence Algorithms in the RoboCup Rescue Simulation framework -- Robust and Flexible System Architecture for Facing the RoboCup Logistics League Challenge -- RoboCup@Work 2018 Team AutonOHM -- homer@UniKoblenz: Winning Team of the RoboCup@Home Open Platform League 2018 -- ToBI - Team of Bielefeld: Enhancing the Robot Capabilities of the Social Standard Platform Pepper. .

| Sommario/riassunto | This book includes the post-conference proceedings of the 22nd RoboCup International Symposium, held in Montreal, QC, Canada, in June 2018. The 32 full revised papers and 11 papers from the winning teams presented were carefully reviewed and selected from 51 submissions. This book highlights the approaches of champion teams from the competitions and documents the proceedings of the 22nd annual RoboCup International Symposium. Due to the complex research challenges set by the RoboCup initiative, the RoboCup International Symposium offers a unique perspective for exploring scientific and engineering principles underlying advanced robotic and AI systems. |