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Autore	Gini Giuseppina
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Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 1436
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Control engineering Robotics Automation Computational Intelligence Artificial Intelligence Control, Robotics, Automation Control and Systems Theory
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Intelligent Control Systems and Optimization -- Modeling Nonlinear Head Sway Response Induced by Support Surface -- Tilt in Healthy Subjects PSO-Based Adaptive NMPC for Uranium Extraction-Scrubbing Operation in Spent Nuclear Fuel Treatment Process -- Positively Invariant Sets for ODEs and Predictor-Corrector Multi-Step Numerical Solvers -- RAM: Resource Allocation for Multi-Agent Maritime Environment -- Enhanced Optimal Beacon Placement for Indoor Positioning: Refining the Search Process -- Graph Decomposition via Spectral Clustering in Rule-Based Algorithms for Multi-Agent Path Finding -- Robotics and Automation -- Advanced Trajectory Planning Technique for Unmanned Underwater Vehicle Navigation with Enhanced

Fuzzy Logic Control and Obstacle Avoidance Strategy -- UAV Deployment for Wildfire Monitoring: Introducing the Hanging Drone Landing Technique -- Sparse Convolutional 3D Neural Networks for the Assessment of Environment Traversability -- Enhancing Robot Navigation: Integrating Safety Zones into Path Planning -- Control of the End-Effector Orientation in the Path Following Task for a Manipulator -- Kalman Filtering for Position/Velocity Aided Leveling Loop with Sampled Measurements -- Integrative Deep Driving Analysis: Environmental Factors for Enhanced Navigation in Pedestrian Zones -- Towards Safe and Efficient Walk-Through Programming in Actual Industrial Environments -- Signal Processing, Sensors, Systems Modelling and Control -- A PSO Tuned Robust Novel NLPID Controller with Application to Nonlinear Systems -- Wireless Remote Control of Low-Cost Smart Devices Using Block-Programming Tools -- Walking Ability Assessment in Paroxysmal Positional Vertigo: -Bonacci Gait Number and Harmonic Gait Variability as Rehabilitation Measures -- Adaptive Direct Compensation of External Disturbances for MIMO Linear Systems with State Delay and Control Delay.

Sommario/riassunto

This book focuses on the latest endeavors relating researches and developments conducted in fields of control, robotics, and automation. Through 18 revised and extended articles, the present book aims to provide the most up-to-date state of the art of the aforementioned fields allowing researcher, Ph.D. students, and engineers not only updating their knowledge but also benefiting from the source of inspiration that represents the set of selected articles of the book. The book presents revised selected papers from the 20th International Conference, ICINCO 2023 Rome, Italy, held on November 13-15, 2023. The deliberate intention of editors to cover as well theoretical facets of those fields as their practical accomplishments and implementations offers the benefit of gathering in a same book a factual and well-balanced prospect of nowadays research in those topics.
