1. Record Nr. UNINA9910349304303321 Industrial Applications of Holonic and Multi-Agent Systems: 9th **Titolo** International Conference, HoloMAS 2019, Linz, Austria, August 26–29, 2019, Proceedings / / edited by Vladimír Maík, Petr Kadera, George Rzevski, Alois Zoitl, Gabriele Anderst-Kotsis, A Min Tjoa, Ismail Khalil Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-27878-6 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (X, 219 p. 112 illus., 71 illus. in color.) Collana Lecture Notes in Artificial Intelligence;; 11710 Disciplina 670.285 670.4275 Soggetti Artificial intelligence Computer organization Microprogramming Application software Software engineering Artificial Intelligence Computer Systems Organization and Communication Networks Control Structures and Microprogramming Information Systems Applications (incl. Internet) Software Engineering/Programming and Operating Systems Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto IEC 61499 and the Promise of Holonic Systems -- Engineering and Validating Cyber-Physical Energy Systems: Needs, Status Quo, and Research Trends -- A Intelligent Multi-Agent Platform for Designing Digital Ecosystems -- Contribution to the theory of uncertain systems alliances -- The Framework for Designing Autonomous Cyber-Physical Multi-Agent Systems for Adaptive Resource Management -- Plan Executor MES: Manufacturing Execution System Combined with a Planner for Industry 4.0 Production Systems -- Multi-agent supply

> planning methods allowing the real-time performance of the supply network management systems -- Operationalization of a Machine

Learning and Fuzzy Inference-Based Defect Prediction Case Study in a Holonic Manufacturing System -- Cloud-based Digital Twin for Industrial Robotics -- Semi-automatic Tool for Ontology Learning Tasks -- Agent-based Approach for Decentralized Data Analysis in Industrial Cyber-Physical Systems -- Data Exchange Ontology for Interoperability Facilitation within Industrial Automation Domain -- Information Exchange and Integration within Industrial Automation Domain -- Plant Layout Optimization Using Evolutionary Algorithms -- Experimentation of Negotiation Protocols for Consensus Problems in Smart Parking Systems -- Development of resource-demand networks for Smart Cities 5.0.

Sommario/riassunto

This book constitutes the refereed proceedings of the 9th International Conference on Industrial Applications of Holonic and Multi-Agent Systems, HoloMAS 2019, held in Linz, Austria, in August 2019. The 14 full papers presented were carefully reviewed and selected from 15 submissions, and 2 invited papers were also included. The papers are organized in the following topical sections: invited talks; methodologies and framework; agent-based production scheduling and control; data and knowledge; and MAS in various areas.