Record Nr. UNINA9911015639303321 Autore Sharma Rohit Titolo Data Analytics for Smart Robotics and Its Applications / / edited by Rohit Sharma, Gwanggil Jeon Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-87697-0 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (419 pages) Collana Intelligent Systems Reference Library, , 1868-4408;; 272 Altri autori (Persone) JeonGwanggil 620.00285 Disciplina Soggetti Engineering - Data processing Automatic control Robotics Automation Computational intelligence Big data **Data Engineering** Control, Robotics, Automation Computational Intelligence Big Data Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Scalable Blockchain and Robotics Technology for a Patient-Centric Next Nota di contenuto Generation Medical System -- Face Mask Detection using Multimedia Data and Deep Learning Techniques -- Digital Twin Robots for Securing IoT Based Healthcare 4.0 Application: Key Technologies, Integration Trends and Recent Advancement -- Evolution of FinFET SRAM Cells for Smart Robotics: A Comprehensive Review -- Robot Path Planning Using Triangular Inequality -- Smart Factory Architecture, Infrastructure and Design of Manufacturing Systems using Robotics. By offering a deep dive into the integration of robotics and IoT, this Sommario/riassunto

book provides actionable insights for developing autonomous systems

healthcare, agriculture, education, manufacturing, and smart cities. It explores practical applications of the Internet of Robotic Things (IoRT),

that address complex real-world challenges in sectors such as

enabling readers to leverage its transformative potential to create smarter, more efficient environments. The book introduces a fresh perspective by combining the fields of robotics and IoT into a cohesive framework, underpinned by innovations in edge computing, cloud robotics, and Industry 4.0. Unlike traditional approaches, it emphasizes the convergence of these technologies to foster novel solutions for remote automation and data-driven intelligence. Covering topics like data management, machine learning, Hadoop, and IoRT applications, this book provides a comprehensive scope that balances theoretical foundations with real-world implementations. It is tailored for academic researchers, practitioners, and educators aiming to stay at the forefront of IoRT innovation and its practical deployment. With its unique approach and broad applicability, this book is an essential guide for exploring cutting-edge IoRT technologies, overcoming integration challenges, and inspiring the development of advanced systems that redefine how technology interacts with the physical world.