

| | | |
|----|-------------------------|--|
| 1. | Record Nr. | UNICAMPANIASUN0132023 |
| | Titolo | The economy of Pompeii / edited by Miko Flohr and Andrew Wilson |
| | Pubbl/distr/stampa | Oxford, : Oxford University Press, 2017 |
| | ISBN | 978-01-987865-7-3 |
| | Descrizione fisica | XVII, 433 p. : ill. ; 25 cm. |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |
| | Livello bibliografico | Monografia |
| 2. | Record Nr. | UNINA9910799211203321 |
| | Autore | Abonyi János |
| | Titolo | Ontology-Based Development of Industry 4.0 and 5.0 Solutions for Smart Manufacturing and Production : Knowledge Graph and Semantic Based Modeling and Optimization of Complex Systems // by János Abonyi, László Nagy, Tamás Ruppert |
| | Pubbl/distr/stampa | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024 |
| | ISBN | 9783031474446 3031474449 |
| | Edizione | [1st ed. 2024.] |
| | Descrizione fisica | 1 online resource (277 pages) |
| | Collana | Springer Series in Advanced Manufacturing, , 2196-1735 |
| | Altri autori (Persone) | NagyLaszlo RuppertTamás |
| | Disciplina | 670 |
| | Soggetti | Industrial engineering Production engineering Production management Mathematical optimization System theory Industrial and Production Engineering Production Optimization Complex Systems |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |

Nota di contenuto

Part I Introduction and motivation of the book -- Introduction to the industrial application of semantic technologies -- Ontology-based modeling of a wire harness manufacturing processes -- Knowledge graph-based framework to support human-centered collaborative and ergonomic manufacturing in Industry 5.0 -- Part II Problem statement of network science-based process optimization -- Analytic hierarchy process and multilayer network-based method for assembly line balancing -- Efficient network community detection algorithm based on crossing minimization and bottom-up segmentation -- Hypergraph-based analysis of collaborative manufacturing -- Cookbook for semantic-based modeling and optimization of manufacturing systems -- Conclusion.

Sommario/riassunto

This book presents a comprehensive framework for developing Industry 4.0 and 5.0 solutions through the use of ontology modeling and graph-based optimization techniques. With effective information management being critical to successful manufacturing processes, this book emphasizes the importance of adequate modeling and systematic analysis of interacting elements in the era of smart manufacturing. The book provides an extensive overview of semantic technologies and their potential to integrate with existing industrial standards, planning, and execution systems to provide efficient data processing and analysis. It also investigates the design of Industry 5.0 solutions and the need for problem-specific descriptions of production processes, operator skills and states, and sensor monitoring in intelligent spaces. The book proposes that ontology-based data can efficiently represent enterprise and manufacturing datasets. The book is divided into two parts: modeling and optimization. The semantic modeling part provides an overview of ontologies and knowledge graphs that can be used to create Industry 4.0 and 5.0 applications, with two detailed applications presented on a reproducible industrial case study. The optimization part of the book focuses on network science-based process optimization and presents various detailed applications, such as graph-based analytics, assembly line balancing, and community detection. The book is based on six key points: the need for horizontal and vertical integration in modern industry; the potential benefits of integrating semantic technologies into ERP and MES systems; the importance of optimization methods in Industry 4.0 and 5.0 concepts; the need to process large amounts of data while ensuring interoperability and re-usability factors; the potential for digital twin models to model smart factories, including big data access; and the need to integrate human factors in CPSs and provide adequate methods to facilitate collaboration and support shop floor workers.

| | |
|-------------------------|--|
| 3. Record Nr. | UNINA9910375886403321 |
| Autore | Conti Mauro |
| Titolo | SACMAT'13 : proceedings of the 18th ACM Symposium on Access Control Models and Technologies : June 12-14, 2013, Amsterdam, The Netherlands |
| Pubbl/distr/stampa | [Place of publication not identified], : ACM, 2013 |
| ISBN | 1-4503-1950-5 |
| Descrizione fisica | 1 online resource (266 pages) |
| Collana | ACM Conferences |
| Soggetti | Engineering & Applied Sciences Computer Science |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Bibliographic Level Mode of Issuance: Monograph |