

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910728932903321 |
| Autore | Abraham Ajith |
| Titolo | Intelligent Systems Design and Applications [[electronic resource]] : 22nd International Conference on Intelligent Systems Design and Applications (ISDA 2022) Held December 12-14, 2022 - Volume 4 // edited by Ajith Abraham, Sabri Pllana, Gabriella Casalino, Kun Ma, Anu Bajaj |
| Pubbl/distr/stampa | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023 |
| ISBN | 3-031-35510-5 |
| Edizione | [1st ed. 2023.] |
| Descrizione fisica | 1 online resource (631 pages) |
| Collana | Lecture Notes in Networks and Systems, , 2367-3389 ; ; 717 |
| Altri autori (Persone) | PllanaSabri CasalinoGabriella MaKun BajajAnu |
| Disciplina | 006.3 |
| Soggetti | Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Intro -- Preface -- ISDA 2022-Organization -- Contents -- Machine Learning Approach for Detection of Mental Health -- 1 Introduction -- 2 Literature Review -- 3 Dataset Description -- 4 Proposed Model -- 5 Results and Discussion -- 6 Conclusion and Future Scope -- References -- U-Net as a Tool for Adjusting the Velocity Distributions of Rheomagnetic Fluids -- 1 Introduction -- 2 Theoretical Basics -- 2.1 Physics-Based Loss -- 2.2 Rheomagnetic Fluids -- 3 Simulation Modeling -- 4 Results and Discussion -- 5 Conclusions -- References -- Detection of Similarity Between Business Process Models with the Integration of Semantics in Similarity Measures -- 1 Introduction -- 2 Similarity Measures -- 2.1 Syntactic Measures -- 2.2 Semantic Measures -- 2.3 Structural Measures -- 2.4 Behavioral Measures -- 3 Problem Illustration -- 3.1 Similarity Measures -- 3.2 Dimensions of Semantic Similarity -- 3.3 Cardinality Problem -- 3.4 |

Genetic Algorithm -- 4 Related Work -- 5 Our Approach -- 5.1 Steps of Genetic Algorithm -- 6 Conclusion -- References -- Efficient Twitter Sentiment Analysis System Using Deep Learning Algorithm -- 1 Introduction -- 2 Literature Review -- 3 Proposed Method -- 3.1 Pre-processing -- 3.2 User-Mention -- 3.3 EMOJ Positive and Negative -- 3.4 Feature Selection -- 3.5 Classification -- 4 Experimental Results and Discussion -- 5 Conclusion -- References -- An Efficient Deep Learning-Based Breast Cancer Detection Scheme with Small Datasets -- 1 Introduction -- 1.1 Contributions -- 2 Proposed Method -- 2.1 Preprocessing -- 2.2 CNN Architecture -- 3 Datasets -- 4 Results and Discussion -- 5 Conclusion -- References -- Comparative Analysis of Machine Learning Models for Customer Segmentation -- 1 Introduction -- 2 Problem Statement -- 3 Literature Review -- 4 Algorithms for Customer Segmentation -- 4.1 Customer Segmentation Using K-Means.

4.2 Customer Segmentation Using DBSCAN -- 4.3 Agglomerative Clustering (Using PCA) -- 4.4 K-Means Using PCA -- 5 Results and Discussion -- 5.1 K-Means Model -- 5.2 DBSCAN -- 5.3 Agglomerative Clustering with PCA -- 5.4 Kmeans with PCA -- 6 Conclusion -- References -- An Intelligent Approach to Identify the Eggs of the Insect Bemisia Tabaci -- 1 Introduction -- 2 Overview of Proposed Approach -- 2.1 Deep Learning Algorithm -- 2.2 Auto-encoder -- 2.3 Stacked Auto-encoder for Egg Classification -- 3 Results and Discussion -- 3.1 Databases Used -- 3.2 Result -- 3.3 Test Phase -- 4 Conclusion -- References -- Overview of Blockchain-Based Seafood Supply Chain Management -- 1 Introduction -- 2 Blockchain Technology: Overview and Adoption in Supply Chains Management -- 3 An Overview of Blockchain Based Seafood Supply Chain Management Systems -- 4 Discussion and Research Challenges -- 5 Conclusion -- References -- Synthesis of a DQN-Based Controller for Improving Performance of Rotor System with Tribotronic Magnetorheological Bearing -- 1 Introduction -- 2 System Description and Modeling -- 2.1 Rotor Model -- 2.2 Bearing Model -- 3 Model Verification -- 4 Designing a DQN Controller -- 5 Results and Discussion -- 6 Conclusion -- References -- Card-Not-Present Fraud Detection: Merchant Category Code Prediction of the Next Purchase -- 1 Introduction -- 2 State of the Art -- 2.1 What is a Card-Not-Present Transaction? -- 2.2 Card not Present Fraud Scenario -- 2.3 What is the Merchant Category Code? -- 2.4 Prediction of Merchant Category Code for the Next Buy -- 3 Related Works -- 3.1 Online Payment Fraud Detection AI Proposals -- 4 Conclusion -- References -- Fast Stroke Lesions Segmentation Based on Parzen Estimation and Non-uniform Bit Allocation in Skull CT Images -- 1 Introduction -- 2 Related Works: classical and Deep Learning Approaches.

3 Materials and Methods -- 3.1 Level Set -- 3.2 Parzen Window -- 3.3 Non-uniform Bit Allocation: -law and A-law Algorithms -- 3.4 Datasets and Evaluation Metrics -- 4 LSBRD: An Approach Based on Parzen Estimation and Non-uniform Bit Allocation via -law and A-law -- 5 Results and Discussions -- 5.1 Algorithm Performance Analysis -- 6 Conclusion and Future Works -- References -- Methods for Improving the Fault Diagnosis Accuracy of Rotating Machines -- 1 Introduction -- 2 Intellectual Diagnostic Methods -- 2.1 Fully Connected Neural Networks -- 2.2 Generative Adversarial Network -- 3 Results and Discussion -- 3.1 Data Collection -- 3.2 Fully Connected Neural Networks to Rotor Diagnostic Defects -- 3.3 Generative Adversarial Network to Increasing the Volume and Variety of Training Data -- 4 Conclusion -- References -- Heuristics Assisted by Machine Learning for the Integrated Production Planning and Distribution Problem -- 1

Introduction -- 2 Problem Definition -- 3 Proposed Algorithms -- 3.1 Decoding Algorithms -- 3.2 Initial Solution -- 3.3 Neighborhood Search Heuristics -- 3.4 Framework -- 4 Computational Experiments -- 4.1 Computational Results -- 5 Conclusions -- References -- LSTM-Based Congestion Detection in Named Data Networks -- 1 Introduction -- 2 Background and Related Works -- 2.1 Long Short Term Memory Background -- 2.2 Related Works -- 3 LSTM-Based Congestion Detection -- 4 Performance Evaluation -- 5 Conclusion -- References -- Detection of COVID-19 in Computed Tomography Images Using Deep Learning -- 1 Introduction -- 2 Related Work -- 3 Materials and Methods -- 3.1 Image Acquisition -- 3.2 Pre-processing -- 3.3 Data Augmentation -- 3.4 Evaluated Architectures -- 3.5 Proposed Method -- 4 Experimental Results -- 4.1 Transfer Learning Results -- 4.2 Fine-Tuning Results -- 5 Discussion -- 6 Conclusion -- References.

Abnormal Event Detection Method Based on Spatiotemporal CNN Hashing Model -- 1 Introduction -- 2 Related Work -- 3 Proposed Approach -- 3.1 Spatiotemporal Stream -- 3.2 Network Architecture -- 4 Experiments Results -- 4.1 Network Architecture -- 4.2 Datasets -- 4.3 Evaluation -- 5 Conclusion -- References -- A Multi-objective Iterated Local Search Heuristic for Energy-Efficient No-Wait Permutation Flowshop Scheduling Problem -- 1 Introduction -- 2 Problem Description -- 3 Multi-objective Iterated Local Search Heuristic -- 3.1 Multi-objective Local Search and Perturbation -- 4 Computational Experiments -- 4.1 Obtained Results -- 5 Conclusions -- References -- An Elastic Model for Virtual Computing Labs Using Timed Petri Nets -- 1 Introduction -- 2 Cloud Computing -- 2.1 Cloud Service Models -- 2.2 Cloud Deployment Models -- 2.3 Benefits and Challenges of Cloud Computing -- 3 Related Works -- 4 Background -- 4.1 Timed and Colored Petri Nets -- 4.2 Cloud Elasticity -- 5 Proposed Approach -- 5.1 The Challenge for Moving to VCL -- 5.2 Model Description -- 5.3 Vertical Elasticity Algorithm -- 5.4 Proposed Solution -- 5.5 Support Tools -- 6 Conclusion -- References -- A Decision Support System Based Vehicle Ontology for Solving VRPs -- 1 Introduction -- 2 Literature Review -- 2.1 Classification of Vehicle Routing Problems -- 2.2 Ontologies for Vehicle Domain -- 3 Decision Support System -- 4 Proposed VRP-Vehicle Ontology -- 5 Conclusion -- References -- Web API Service to RDF Mapping Method for Querying Distributed Data Sources -- 1 Introduction -- 2 Related Work -- 2.1 Smart City Platforms -- 2.2 Relational Databases -- 3 Accident Card Analysis System -- 3.1 R2RML Mapping -- 3.2 Data Quality -- 4 Web API Service to RDF Mapping Method Description -- 4.1 Weather Data Sources Specific -- 4.2 W2RML Scheme -- 5 Conclusion -- References.

Risk Management in the Clinical Pathology Laboratory: A Bayesian Network Approach -- 1 Introduction -- 2 Research Design -- 3 Results -- 3.1 Literature Review -- 3.2 Risk Model -- 4 Conclusions -- References -- Leveraging Sequence Mining for Robot Process Automation -- 1 Introduction -- 2 Related Works -- 3 The Proposed Approach -- 3.1 FEM-M: Frequent Episode Miner -- 3.2 TEF-M: Target Episode Finder -- 4 Experimental Results -- 5 A Case Study -- 6 Conclusions -- References -- Intelligent Agents System for Intention Mining Using HMM-LSTM Model -- 1 Introduction and Motivation -- 2 Related Works -- 3 Architecture of Multi Intelligent Agents System Approach -- 3.1 Description of Agents -- 3.2 Hybrid Model -- 4 Experimentation and Validation -- 4.1 Dataset -- 4.2 Evaluation Metrics -- 4.3 Result -- 5 Conclusion -- References -- Unsupervised Manipulation Detection Scheme for Insider Trading -- 1 Introduction -- 2 Literature Review -- 3 Proposed Methodology -- 3.1 Feature Characterisation -- 3.2 Kernel Principal Component Analysis (KPCA) --

4 Results and Discussion -- 5 Conclusion -- References --
A Comparative Study for Modeling IoT Security Systems -- 1
Introduction -- 1.1 Originality and Objectives -- 1.2 Outline -- 2 IoT
and Modeling Languages -- 2.1 IoT Background -- 2.2 Overview
of UML -- 2.3 Overview of SysML -- 3 Related Works -- 4 Proposed
New IoT Security Modeling -- 4.1 IoT Architecture and Security
Requirements -- 4.2 Modeling the Security of the Physical Layer
and the Network Layer of IoT Systems with UML Language: Use Case
Diagram -- 4.3 Modeling IoT Security Systems Using SysML Language:
Requirement Diagram -- 5 Analysis and Discussion -- 6 Conclusion --
References -- Improving the Routing Process in SDN Using a
Combination of the Evidence Theory and ML -- 1 Introduction -- 2
Related Work -- 3 Overview of the Trust-Based Routing Scheme.
4 Global Trust (GT) Vector Computation.

Sommario/riassunto

This book highlights recent research on intelligent systems and nature-inspired computing. It presents 223 selected papers from the 22nd International Conference on Intelligent Systems Design and Applications (ISDA 2022), which was held online. The ISDA is a premier conference in the field of computational intelligence, and the latest installment brought together researchers, engineers, and practitioners whose work involves intelligent systems and their applications in industry. Including contributions by authors from 65 countries, the book offers a valuable reference guide for all researchers, students, and practitioners in the fields of computer science and engineering. .
