1. Record Nr. UNINA9910728933403321

Autore	Abraham Ajith <1968->
Titolo	Intelligent Systems Design and Applications : 22nd International Conference on Intelligent Systems Design and Applications (ISDA 2022) Held December 12-14, 2022 - Volume 1 / / edited by Ajith Abraham, Sabri Pllana, Gabriella Casalino, Kun Ma, Anu Bajaj
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	3-031-27440-7
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (592 pages)
Collana	Lecture Notes in Networks and Systems, , 2367-3389 ; ; 646
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 -- KMetaTagger: A Knowledge Centric Metadata Driven Hybrid Tag Recommendation Model Encompassing Machine Intelligence -- 1 Introduction -- 2 Related Work -- 3 Proposed Work -- 4 Results and Performance Evaluation -- 5 Conclusion -- References -- KCReqRec: A Knowledge Centric Approach for Semantically Inclined Requirement Recommendation with Micro Requirement Mapping Using Hybrid Learning Models -- 1 Introduction -- 2 Related Works -- 3 Proposed System Architecture -- 4 Implementation and Performance Evaluation and Results -- 5 Conclusion -- References -- Object Classification Using ECOC Multi-class SVM and HOG Characteristics -- 1 Introduction -- 1.1 Background -- 1.2 Research Objectives -- 1.3 Paper Organization -- 2 Proposed Scheme for Object Classification -- 3 System Description -- 3.1 Image Datasets -- 3.2 ECOC Based Multi-class SVM -- 3.3 Appropriate Cell Size Selection for HOG Feature -- 4

Results and Discussions -- 5 Conclusion -- References -- GA Evolved Configuration Data for Embryonic Architecture with Built-in Self-test -- 1 Introduction -- 2 Embryonic Digital Circuit Architecture Using CGP Data -- 3 Novel Parallel GA Design for CGP Configuration Data Generation -- 3.1 Optimum Individual Monogenetic GA-OIMGA -- 3.2 Parallel HsClone GA -- 4 Embryonic Cells with Built-in Self-Test Design -- 5 Embryonic Adder and Comparator Cell Fault Detection -- 6 Conclusion and Scope for Future Work -- References -- A Multi-layer Deep Learning Model for ECG-Based Arrhythmia Classification -- 1 Introduction -- 2 Related Work -- 3 Material and Method -- 3.1 Dataset -- 3.2 Methodology -- 4 Results and Discussion -- 5 Conclusion -- References -- Analyzing Electoral Data Using Partitional and Hierarchical Clustering Algorithms -- 1 Introduction -- 2 The Municipal Human Development Index (MHDI).
3 Data Used in the Experiments -- 4 Methodology and Experiments -- 5 Conclusions -- References -- Medical Decision Making Based 5D Cardiac MRI Segmentation Tools -- 1 Introduction -- 2 Methods and Materials -- 3 Theory -- 3.1 Concept of the 5D Segmentation and Medical Issue -- 3.2 Goals and Contributions -- 4 Results -- 5 Discussion -- 6 Conclusion -- References -- India Post Service Facility Layout Design Selection and Evaluation Using MCDM Approach -- 1 Introduction -- 2 Literature Support -- 3 Research Methodology -- 4 Application - NSH Mangalore -- 5 Results -- 5.1 Finding the Weightage Criteria -- 5.2 Calculation Method -- 6 Conclusions -- References -- Weighted Pathfinding in the Paparazzi Problem with Dynamic Obstacles -- 1 Introduction -- 2 Problem Statement -- 3 Background Information -- 3.1 A* Algorithm -- 3.2 Extended A* Algorithm -- 3.3 Heuristics -- 3.4 Dynamic Obstacles -- 4 Implementation and Testing -- 4.1 Code Structure -- 4.2 Pathfinding -- 5 Results and Discussion -- 5.1 Data Distribution -- 5.2 Pathfinding -- 5.3 Diagonal Movement -- 5.4 Overall Heuristic Performance -- 6 Conclusions -- References -- A Rapid Review on Ensemble Algorithms for COVID-19 Classification Using Image-Based Exams -- 1 Introduction -- 2 Ensemble Algorithms -- 3 Methodology -- 3.1 Inclusion Criteria -- 3.2 Exclusion Criteria -- 4 Results and Discussion -- 4.1 Q1 - Ensemble Technique -- 4.2 Q2 - Number of Classes -- 4.3 Q3 - Machine Learning Algorithms and Models -- 4.4 Q4 - Datasets -- 5 Conclusions -- References -- Indian Postal Service Quality Assessment Using Graph Theoretic Approach - A Quantitative Decision-Making Tool -- 1 Introduction -- 1.1 Importance of the Study -- 2 Literature Review -- 2.1 Graph Theoretical (GT) Model -- 3 Research Methodology -- 3.1 Graph-Theoretic Model Approach -- 4 Analysis and Results -- 4.1 Graph Theory Calculation.
5 Conclusions -- References -- Analyzing the Critical Success Factors of Lean System Implementation in India Post Using DEMATEL Method -- 1 Introduction -- 1.1 Rationale of the Study -- 2 Literature Support -- 3 Research Methodology -- 3.1 Steps for DEMATEL Method -- 4 Case Application: Indian Postal NSH Mangalore, India -- 5 Conclusions -- References -- Application of Artificial Intelligence in Mental Health -- 1 Introduction to Artificial Intelligence in Healthcare -- 2 Mental Health -- 2.1 AI in Healthcare -- 2.2 Ethics and AI Mental Health Research -- 2.3 AI Research on the Involvement of Patient and Public Mental Health -- 2.4 Well-Being and Educational Performance -- 2.5 Internet-Based Mental Health Care -- 2.6 Mental Healthcare Chatbots -- 3 Literature Survey -- 4 Constraints of AI and Mental Health Care Research -- 5 Statistics Scenario in the Area of AI in Mental Health Care Research -- 6 Conclusion -- References -- Cold Rolling Mill Energy Consumption Prediction Using Machine Learning -- 1 Introduction -- 2 Cold Rolling

Mill and Energy Consumption -- 3 Proposed Approach -- 4 Results and Analysis: Model Training and Energy Prediction -- 5 Conclusions and Future Work -- References -- Virtual Reconstruction of Adaptive Spectral and Spatial Features Based on CNN for HSI Classification -- 1 Introduction -- 2 Proposed Approach -- 2.1 Extraction of Spectral Data Vectors and Fusions of Pixels to Obtain a Single Spatial-Spectral Band -- 2.2 Apply Five Algorithms to Create Five Virtual Layers -- 2.3 3D Image Reconstruction -- 2.4 Edge-Adaptive Spatial Data Extraction -- 2.5 Convolution and Processing of Each Block Until Recognition of the pixel -- 2.6 Placing Pixels in Their Positions, Merging the Five Spectral Bands and Labeling -- 3 Experiences and Results -- 3.1 Tests -- 3.2 Results and Discussions -- 4 Conclusion -- References.
Enhancing Rental Bike Count and Availability Prediction Using Regression Modelling -- 1 Introduction -- 2 Literature Review -- 3 Methodology -- 3.1 Multiple Linear Regression -- 3.2 Polynomial Regression -- 4 Results -- 5 Conclusion and Fututre Enhancement -- References -- Application of WASPAS Method for the Evaluation of Tamil Nadu Private Travels -- 1 Introduction -- 2 Literature Support -- 3 Research Methods -- 4 Case Study - Chennai, Tamilnadu, Southern India -- 4.1 Application of WASPAS Method -- 5 Comparative Study -- 6 Conclusion -- References -- Time Series Forecast Applied to Electricity Consumption -- 1 Introduction -- 2 Related Work -- 3 BackGround of Study -- 3.1 Definitions -- 3.2 Machine Learnings Models -- 4 Material and Methods -- 4.1 Dataset Description -- 4.2 Performance Indices -- 5 Simulation Results -- 5.1 Regression Models - Data with Daily Periodicity -- 5.2 Regression Models - Data with Daily Periodicity (Outlier Removal) -- 5.3 Regression Models - Data with Monthly Periodicity -- 5.4 Regression Models - Data with Daily Periodicity (Outlier Removal) - Moving Average -- 5.5 Multi Layer Perceptron (MLP) - Data with Monthly Periodicity -- 5.6 Recurrent Neural Network (RNR) - Data with Monthly Periodicity -- 6 Conclusions -- References -- A Survey on Text Processing Using Deep Learning Techniques -- 1 Introduction -- 2 Sentiment Analysis is Divided into Numerous Categories -- 2.1 Sentiment with a Finer Granularity -- 2.2 Sentiment Analysis for Emotion Identification -- 2.3 Analyses Based on Aspects -- 2.4 Sentiment Analysis Based on Intent -- 3 Approaches to Sentiment Analysis -- 3.1 Rule-Based Approach -- 3.2 Machine Learning Approach -- 3.3 Lexicon Based Approach -- 4 All Approaches Advantages and Limitations -- 5 Text-Based Emotion Detection (TBED) -- 5.1 Datasets for Text-Based ED (Emotion Detection) Research -- 6 Feature Set.
6.1 Extraction of Feature -- 6.2 Feature Selection -- 7 Comparison Analysis -- 7.1 Lexicon Based Approach -- 7.2 Dictionary-Based Classification -- 7.3 Corpus-Based Classification -- 7.4 Machine Learning Based Classification -- 7.5 Support Vector Machine -- 7.6 Comparative Table for Different Classification Algorithm -- 7.7 Naïve Bayes -- 7.8 K-Nearest Neighbor -- 7.9 Maximum Entropy -- 7.10 Decision Tree Learning -- 7.11 Semantic Orientation Approach -- 7.12 Keyword-Based Classification -- 7.13 Emotions Based Classifications -- 8 Issues in Text Sentiment Analysis -- 9 Conclusion -- References -- RePI: Research Paper Impact Analysis -- 1 Introduction -- 2 Literature Survey -- 2.1 Previous Works -- 2.2 Impact Metrics -- 2.3 Keyword Extraction -- 3 Dataset Creation -- 4 Methodology and Architecture -- 5 Design and API Integration -- 5.1 RAKE -- 5.2 Implementation -- 6 Impact Metric Calculation -- 7 Results -- 7.1 Visualizations -- 7.2 Impact Metric Ratio -- 8 Conclusion -- References -- Human-Centred Artificial Intelligence in Sound Perception and Music Composition -- 1 Introduction -- 2 Melody

and Musical Grammar -- 3 Formalization of Musical Grammar Rules -- 4 Obtained Results -- 5 Discussion and Conclusions -- References -- Multi-objective Optimization for Sensor Networks Based Smart Parking Systems -- 1 Introduction -- 2 Related Works -- 3 Real Time Smart Parking System Description -- 4 Mathematical Formulation -- 4.1 Poisson Process -- 4.2 Linear Programming Formulation -- 5 Performance Evaluation -- 6 Open Research Issue: Sensor Networks and Artificial Neural Networks (ANN) -- 7 Conclusion -- References -- Process Automation with Digital Robots Under Smart University Concept -- 1 Introduction -- 2 Literature Review -- 3 Digital Transformation of Processes -- 3.1 Digital Transformation -- 3.2 Process Automation -- 3.3 Human Path and Robot Path.
4 Case Study.

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. .