

1. Record Nr.	UNINA9910488716503321
Titolo	Communication and intelligent systems : proceedings of ICCIS 2020 // Harish Sharma [and three others] editors
Pubbl/distr/stampa	Singapore : , : Springer, , [2021] ©2021
ISBN	981-16-1089-4
Descrizione fisica	1 online resource (1036 pages)
Collana	Lecture Notes in Networks and Systems ; ; Volume 204
Disciplina	006.3
Soggetti	Artificial intelligence Machine learning Telecommunication systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Editors and Contributors -- Neural Network Imitation Model of Realization of the Business Analysis Process -- 1 Introduction -- 2 Analysis of Recent Research and Publications -- 3 Setting the Objective -- 4 The Case Study -- 5 Research Method -- 6 Conclusions -- References -- Thermal Modeling of the GaN HEMT Device Using Decision Tree Machine Learning Technique -- 1 Introduction -- 2 Experimental Setup -- 3 Device Modeling Using Machine Learning -- 4 Results -- 5 Conclusion -- References -- Low-Cost FPGA-Based On-board Computer -- 1 Introduction -- 2 Related Work -- 3 Proposed Work -- 4 Results and Simulations -- 5 Conclusion -- References -- A Survey on Solution of Imbalanced Data Classification Problem Using SMOTE and Extreme Learning Machine -- 1 Introduction -- 2 Imbalanced Data -- 2.1 Approaches to Overcome Class Imbalance -- 2.2 Advantages and Disadvantages of the Approaches -- 3 Synthetic Minority Over-sampling Technique -- 4 Extreme Learning Machine (ELM) -- 4.1 Variants of ELM -- 5 Machine Learning -- 5.1 ML Techniques -- 6 Convolutional Neural Network (CNN) -- 7 Related Work -- 8 Conclusion -- References -- Thermal Imaging-Assisted Infection Classification (BoF) for Brinjal Crop -- 1 Introduction -- 2 Motivation -- 3 Material and Methods -- 3.1 Experimental Setup -- 3.2 Proposed Methodology -- 3.3 Classification:

BoF -- 4 Result and Discussion -- 5 Conclusion -- References --
Preterm Delivery Prediction Using Gradient Boosting Algorithms -- 1
Introduction -- 2 Related Work -- 3 Backgrounds -- 4 Result
and Discussion -- 5 Conclusions -- References -- Analysis Urban
Traffic Vehicle Routing Based on Dijkstra Algorithm Optimization -- 1
Introduction -- 2 Related Work -- 2.1 Dijkstra Algorithm -- 2.2
Algorithm Optimization -- 3 Model Construction -- 4 Results
and Discussion -- 5 Conclusion -- References.
A Comprehensive Overview of Quality Enhancement Approach-Based
Biometric Fusion System Using Artificial Intelligence Techniques -- 1
Introduction -- 2 Background Survey -- 3 Biometric Quality
Enhancement -- 4 Analysis of Existing Work -- 5 Conclusion
and Future Work -- References -- Rainfall Prediction Using Deep Neural
Network -- 1 Introduction -- 2 Methodology -- 3 Data and Data Pre-
processing -- 3.1 Data Set -- 3.2 Data Pre-processing -- 3.3 Data
Insight -- 3.4 Train-Test Split -- 3.5 Feature Scaling -- 4 Deep Neural
Network Model -- 5 Result and Conclusion -- 5.1 Weights and Bias --
5.2 Training and Validation: Loss and Accuracy -- 5.3 Test Loss
and Test Accuracy -- 5.4 Comparative Analysis -- 6 Conclusion --
References -- A Comparative Analysis of Supervised Word Sense
Disambiguation in Information Retrieval -- 1 Introduction -- 2 WSD
Approaches -- 3 Supervised WSD for IR -- 3.1 Naive Bayes Algorithm
-- 3.2 Support Vector Machine (SVM) Algorithm -- 3.3 Decision Tree
Algorithm -- 3.4 K-Nearest Neighbor (KNN) Algorithm -- 4
Comparison of Algorithms -- 5 Discussion -- 6 Conclusion --
References -- Real-Time Deep Learning Face Mask Detection Model
During COVID-19 -- 1 Introduction -- 2 Literature Survey -- 3
Methodology -- 3.1 Algorithm -- 3.2 Dataset -- 4 Implementation --
5 Conclusion -- References -- Prediction of California Bearing Ratio
of Subgrade Soils Using Artificial Neural Network Principles -- 1
Introduction -- 2 Materials -- 2.1 Particle Sizes -- 2.2 Plasticity
Characteristics -- 2.3 Compaction Characteristics -- 2.4 California
Bearing Ratio (CBR) -- 3 Artificial Neuron Network -- 4 Results
and Discussion -- 5 Conclusions -- References -- Real-Time
Bangladeshi Currency Recognition Using Faster R-CNN Approach
for Visually Impaired People -- 1 Introduction -- 2 Related Works -- 3
System Design -- 4 Dataset Developing and Training.
5 Currency Recognition via Faster R-CNN -- 6 Results and Discussions
-- 7 Conclusions -- References -- Bearing Fault Detection Using
Comparative Analysis of Random Forest, ANN, and Autoencoder
Methods -- 1 Introduction -- 2 Related Work -- 3 Algorithms -- 3.1
Random Forest Classification -- 3.2 Artificial Neural Network -- 3.3
Autoencoder -- 4 Proposed Methodology -- 4.1 Dataset Description --
4.2 Methodology -- 5 Results and Discussion -- 5.1 Random Forest
Classification -- 5.2 Artificial Neural Network -- 5.3 Autoencoder --
5.4 Comparing the Various Models -- 6 Conclusion -- References --
Selection of a Mesh Network Routing Protocol for Underground Mines
-- 1 Introduction -- 2 Literature Review -- 2.1 Current Networking
Methods Used in Mines -- 2.2 Similar Work on Selecting WMN Routing
Protocols for Underground Mines -- 2.3 Wireless Mesh Network
Routing Protocols -- 3 Setup and Procedure -- 3.1 Setup -- 3.2
Procedure -- 3.3 Equipment and Software -- 3.4 Requirements -- 4
Results -- 5 Discussion -- 6 Conclusion -- References -- An Energy-
Efficient Communication Scheme for Multi-robot Coordination
Deployed for Search and Rescue Operations -- 1 Introduction -- 2
Related Works -- 3 Proposed System -- 3.1 Publisher Robots -- 3.2
Subscriber Robots -- 3.3 Coordinator Robot -- 4 Implementation -- 5
Results and Discussion -- 6 Conclusion -- References -- Butterfly

Optimization Algorithm-Based Optimal Sizing and Integration of Photovoltaic System in Multi-lateral Distribution Network for Interoperability -- 1 Introduction -- 2 Literature Review -- 3 Problem Formulation -- 4 Overview of Butterfly Optimization Algorithm -- 4.1 Modelling of Food Foraging Behaviour of Butterflies -- 4.2 Proposed Methodology for Optimal I-PV Configuration -- 5 Results and Discussion -- 6 Conclusion -- References.

Document Classification in Robotic Process Automation Using Artificial Intelligence-A Preliminary Literature Review -- 1 Introduction -- 2 Robotic Process Automation -- 3 Document Classification Process -- 3.1 Conversion of Files with Various Formats to Text and Conversion of PDF Files to a Structured Format -- 3.2 Alternative Approach to Converting PDFs to a Structured Format -- 3.3 Preprocessing of the Inference Process for Classifying Documents -- 3.4 Execution of the Inference Process in the Classification of Documents -- 3.5 Artificial Intelligence Application -- 4 Discussion -- 5 Conclusions -- References -- Artificial Intelligence Optimization Strategies for Invoice Management: A Preliminary Study -- 1 Introduction -- 2 AI Techniques -- 2.1 Computer Vision -- 2.2 Optical Character Recognition -- 2.3 Natural Language Processing -- 2.4 Machine Learning -- 3 Invoice Improvement Strategies -- 3.1 Robotic Process Automation Tools -- 3.2 Recently Researched Optimization Strategies -- 4 Analysis -- 5 Conclusion -- References -- A Comparative Study Between Data-Based Approaches Under Earlier Failure Detection -- 1 Introduction -- 2 Data Set and System Description -- 3 Experimental Results and Discussion -- 4 Conclusion -- References -- Survey Analysis for Medical Image Compression Techniques -- 1 Introduction -- 1.1 Motivation -- 1.2 Existing Solutions -- 1.3 Evaluation and Analysis -- 1.4 Paper Organization -- 2 Lossy Compression for Medical Images -- 2.1 Fractal-Based Compression Technique -- 2.2 Wavelet Transform-Based Compression Technique -- 2.3 Lossy Approaches Based on ROI and Non-ROI -- 2.4 Other Lossy Approaches -- 3 Lossless Compression for Medical Images -- 3.1 Adaptive Block Size-Based Compression Technique -- 3.2 Least Square-Based Compression Technique -- 3.3 Other Lossless Approaches -- 4 Analysis and Evaluation -- 5 Conclusion.

References -- Performance Evaluation of SEIG Under Unbalanced Load Operations Using Genetic Algorithm -- 1 Introduction -- 2 Machine Modeling -- 3 Genetic Algorithm as an Optimization Tool -- 4 Performance Equations -- 5 Results and Discussion -- 5.1 Effect on SEIG Under Variation in Load Power Factor of One Phase -- 5.2 Effect on SEIG Under Variation in Load Power Factor of Two Phases -- 6 Conclusion -- References -- Suppliers Selection Using Fuzzy AHP and Fuzzy TOPSIS Method-A Case Study of a Bearing Manufacturing Company -- 1 Introduction -- 2 Methodology: Fuzzy Logic Approach -- 2.1 Fuzzy Set-Theory -- 2.2 Definitions of Fuzzy Sets -- 3 Case Study -- 3.1 Introduction of the Company -- 3.2 Current Supplier Selection Method -- 3.3 Supplier Selection Criteria Description -- 3.4 Solution of Supplier Selection Problem Using FUZZY AHP and FUZZY TOPSIS Method -- 4 Conclusion -- References -- A New Approach to Classify the Boolean Functions Based on Heuristic Technique -- 1 Introduction -- 2 Related Definitions -- 2.1 Boolean Function -- 2.2 Hamming Distance -- 2.3 Walsh-Hadamard Transform -- 2.4 Nonlinearity of Boolean Function (f) -- 3 Our Approach for Classification -- 4 Results and Discussion -- 5 Conclusion -- References -- Influence of Object-Oriented Software Design Measures on Reliability: Fuzzy Inference System Perspective -- 1 Introduction -- 2 Related Work -- 3 Object-Oriented Design Measures -- 3.1

Inheritance Metrics (IMc) -- 3.2 Encapsulation Metric (EM) -- 3.3
Cohesion Metric (CoMc) -- 4 Analysis Phase -- 4.1 Sensitivity Analysis
-- 4.2 Design Metrics Analysis -- 5 Conclusion -- References -- Test
Case Prioritization Based on Requirement -- 1 Introduction -- 2 Test
Case Prioritization -- 3 Proposed Methodology -- 4 Results
and Validation -- 5 Conclusion -- References.
Mining and Predicting No-Show Medical Appointments: Using Hybrid
Sampling Technique.
