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| 1. Record Nr. | UNINA990003092460403321 |
| Autore | Robertson, Ross M. |
| Titolo | History of the American Economy / Gary M.Walton, Ross M.Robertson. |
| Pubbl/distr/stampa | New York : Harcourt Brace Jovanovich, 1983 |
| ISBN | 0-15-536505-3 |
| Descrizione fisica | XII, 692 p. : ill. ; 23 cm |
| Altri autori (Persone) | Walton, Gary M. |
| Disciplina | F/1.221 |
| Locazione | SE |
| Collocazione | S
F/1.221 WAL |
| Lingua di pubblicazione | Italiano |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| 2. Record Nr. | UNINA9910460844703321 |
| Autore | Humar J. L |
| Titolo | Dynamics of structure // by J. Humar |
| Pubbl/distr/stampa | Boca Raton, FL : , : CRC Press, , 2012 |
| ISBN | 0-429-09607-0
0-203-11256-3 |
| Edizione | [Third edition.] |
| Descrizione fisica | 1 online resource (1048 p.) |
| Disciplina | 624.1/7 |
| Soggetti | Structural dynamics
Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | "A Balkema Book." |
| Nota di contenuto | Front Cover; Dedication; Contents; Preface; Preface to Second Edition;
List of symbols; 1. Introduction; PART 1; 2. Formulation of the |

equations of motion: Single-degree-of-freedom systems; 3. Formulation of the equations of motion: Multi-degree-of-freedom systems; 4. Principles of analytical mechanics; PART 2; 5. Free vibration response: Single-degree-of-freedom system; 6. Forced harmonic vibrations: Single-degree-of-freedom system; 7. Response to general dynamic loading and transient response; 8. Analysis of single-degree-of-freedom systems: Approximate and numerical methods
9. Analysis of response in the frequency domainPART 3; 10. Free vibration response: Multi-degree-of-freedom system; 11. Numerical solution of the eigenproblem; 12. Forced dynamic response: Multi-degree-of-freedom systems; 13. Analysis of multi-degree-of-freedom systems: Approximate and numerical methods; PART 4; 14. Formulation of the equations of motion: Continuous systems; 15. Continuous systems: Free vibration response; 16. Continuous systems: Forced-vibration response; 17. Wave propagation analysis; PART 5; 18. Finite element method; 19. Component mode synthesis
20. Analysis of nonlinear responseAnswers to selected problems

Sommario/riassunto

This major textbook provides comprehensive coverage of the analytical tools required to determine the dynamic response of structures. The topics covered include: formulation of the equations of motion for single- as well as multi-degree-of-freedom discrete systems using the principles of both vector mechanics and analytical mechanics; free vibration response; determination of frequencies and mode shapes; forced vibration response to harmonic and general forcing functions; dynamic analysis of continuous systems;and wave propagation analysis.

3. Record Nr.	UNINA9910878988603321
Autore	Hassanien Aboul Ella
Titolo	Artificial Intelligence for Environmental Sustainability and Green Initiatives // edited by Aboul Ella Hassanien, Ashraf Darwish, Sally M. Elghamrawy
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-63451-9
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (361 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 542
Altri autori (Persone)	DarwishAshraf ElghamrawySally M
Disciplina	620
Soggetti	Engineering mathematics Engineering - Data processing Chemical engineering Environmental engineering Artificial intelligence Mathematical and Computational Engineering Applications Environmental Process Engineering Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- Artificial Intelligence for Environmental Sustainability -- Recognizing Aluminum Beverage Cans from Waste Mixtures Based on Densenet121-CNN Model: Deep Learning Methodology -- 1 Introduction -- 2 Related Work -- 3 Aluminum Beverage Cans Recognition Model -- 4 Model Evaluation and Experimental Results -- 5 Discussion -- 6 Conclusion -- References -- Machine Learning-Based Forecasting of Electricity Demand for Sustainable Electricity Planning -- 1 Introduction -- 2 Methods and Background -- 2.1 Support Vector Regression -- 2.2 Random Forest -- 2.3 EXtreme Gradient Boosting -- 2.4 Autoregressive Integrated Moving Average -- 3 Dataset Description -- 4 The Proposed Electricity Demand Forecasting Model -- 4.1 Data Pre-processing Phase -- 4.2 Time Series Forecasting Phase -- 5 Experimental Results and Discussion -- 6 Conclusions and Future Work -- References --

Using Artificial Intelligence Techniques in Water Quality Analysis and Prediction: Towards Sustainability -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Phase 1: Data Collection and Characteristics -- 3.2 Phase 2: Data Preprocessing -- 3.3 Phase 3: Predicting the Potability of Water Using Machine Learning Classification Methods -- 4 Experimental Study -- 4.1 Experimental Results -- 5 Conclusion and Future Work -- References -- Flowers Classification with Low Carbon Footprint Using Deep Learning Pretrained Models -- 1 Introduction -- 2 Related Work -- 3 The Proposed Model -- 3.1 Training Phase -- 3.2 Testing Phase -- 4 Dataset Characteristics and Pre-processing -- 5 Experiments and Results -- 6 Conclusion and Future Work -- References -- Measuring Global Warming Effect by the Prediction of Climate Change on the Different Countries Using Machine Learning Approaches -- 1 Introduction -- 2 Background -- 2.1 Support Vector Machine. 2.2 Artificial Neural Network -- 2.3 Decision Trees -- 2.4 Ensemble Methods -- 3 Climate Change Prediction System Description -- 3.1 Preprocessing -- 3.2 Model Selection -- 3.3 Step Wise Linear Regression -- 3.4 Optimization -- 4 Experimental Results -- 4.1 Evaluation Metrics -- 5 Conclusion and Future work -- References -- Towards Sustainable and Green Agriculture: Integrating Machine Learning and Fuzzy Rough Set Analysis to Enhance Fruit Classification and Ripeness Detection -- 1 Introduction -- 2 Related Work -- 3 The Proposed Model for Discriminating Fruit Types Using Mineral Composition Data -- 4 Experimental Results and Analysis -- 4.1 Dataset Description -- 4.2 Statistical Analysis: Mineral Composition Analysis -- 4.3 Feature Selection Based on FRS -- 4.4 Fruit Discrimination Using Support Vector Machines (SVMs) -- 5 Conclusion and Future Works -- References -- Classifying Bird Songs Based on Chroma and Spectrogram Feature Extraction -- 1 Introduction -- 2 Related Work -- 3 Materials and Methods -- 3.1 Bird Song Dataset Description -- 3.2 Feature Extraction -- 3.3 Mel Spectrogram -- 3.4 Chroma -- 3.5 Support Vector Machine -- 3.6 CNN -- 3.7 Spectral Features and Feature Learning -- 4 Experimental Results -- 5 Conclusions -- References -- Fish Recognition Using MobileNet-V2 and MAR-Based Metaverse for an Educative Marine Life System -- 1 Introduction -- 2 Related Work -- 3 Background -- 3.1 Extended Reality (XR) -- 3.2 Mobile Augmented Reality (MAR) -- 3.3 The Role of AI in the Metaverse -- 3.4 The Importance of Deep Learning and Image Processing for the Speed of Object Detection in the Metaverse -- 3.5 Machine Learning Technique Transfer Learning -- 4 The Proposed Model -- 4.1 Virtual World -- 4.2 Metaverse Engine -- 4.3 The Physical Worlds -- 5 Experiments Results and Discussion -- 5.1 Experiment I: Training Based Adam Optimization Algorithm. 5.2 Experiment II: Training Based SGD Optimization Algorithm -- 5.3 Experiment III: Training Based RMSprop Optimization Algorithm -- 5.4 The Testing Results -- 6 Conclusion -- References -- Biodiesel Yield Prediction from Sunflower Oil Using Artificial Intelligence: Towards Sustainable, and Renewable Energy Sources -- 1 Introduction -- 2 Literature Review -- 3 Preliminaries -- 3.1 Artificial Intelligence -- 3.2 Biodiesel as a Renewable Energy Source -- 4 Proposed Framework and Methodology -- 4.1 Phase 1: Classification of Sunflower Diseases Using VGG16 Model -- 4.2 Phase 2: Prediction of Biodiesel Yield from Sunflower Oil Using GBR Model -- 5 Results and Discussion -- 5.1 Performance Metrics -- 5.2 Results of VGG16 in Phase 1 -- 5.3 Results of GBR in Phase 2 -- 6 Comparison with Other Related Work Models -- 6.1 Validation of the VGG16 Model Performance -- 6.2 Validation of the GBR Model Performance -- 7 Conclusion and Future Work --

References -- Applications and Innovations in Green Initiatives -- Snake Optimization of Multiclass SVM for Efficient Diagnosis of Heart Disease Risk Prediction -- 1 Introduction -- 2 Related Work -- 3 Proposed Work -- 4 Dataset Details -- 5 Support Vector Machine -- 6 Snake Optimization (SO) Algorithm and Its Mathematical Model -- 6.1 The Proposed OFA for SVM Parameter Optimization Algorithm -- 7 Results and Discussions -- 8 Conclusion -- References -- Efficient Prediction Adverse Drug-Drug Interactions with Deep Neural Networks -- 1 Introduction -- 2 Related Work -- 3 Material and Methods -- 4 Experimental Design -- 4.1 Benchmark Dataset -- 4.2 Pre-processing Data -- 4.3 Technical Processing and Chemical Characteristics -- 4.4 Proposed Model -- 5 Results and Discussions -- 5.1 Statistical Analysis -- 5.2 Comparison and Result Validation for State-of-the-Art Study -- 5.3 Experimental Discussions -- 6 Conclusion.

References -- Drones and Birds Detection Based on InceptionV3-CNN Model: Deep Learning Methodology -- 1 Introduction -- 2 Related Work -- 3 "Drone Versus Bird" Detection Recognition Model: Inception V3-CNN -- 4 Model Evaluation and Experimental Results -- 5 Discussion -- 6 Conclusion -- References -- Deep Artificial Neural Network Regression Model for Synergistic Drug Combination Prediction -- 1 Introduction -- 2 Background -- 2.1 Drugs Combination -- 2.2 Deep Learning -- 3 Related Work -- 4 The Proposed Model -- 4.1 Dataset -- 4.2 Phase 1: Features Extraction -- 4.3 Phase 2: Feature Selection and Data Pre-processing -- 4.4 Phase 3: Implementation and Model Evaluation -- 5 Experimental Results -- 6 Conclusion -- References -- Classification of Benign and Malignant Breast Tumor Based on Machine Learning and Feature Selection Algorithms -- 1 Introduction -- 2 Related Work -- 3 Data Description -- 4 Proposed Model -- 4.1 Data Preprocessing -- 4.2 Feature Selection -- 4.3 Classification -- 5 Experimental Results -- 5.1 Evaluation Metrics -- 5.2 Evaluation -- 6 Conclusion and Future Work -- References -- Enhancing Synergistic Drug Combination Model Through Dimension Reduction in Cancer Cell Lines -- 1 Introduction -- 2 Implementation Approach -- 2.1 Feature Selection Techniques -- 2.2 Implementation Models -- 3 Experimental Results -- 3.1 Dataset Characteristics -- 3.2 Evaluation Metrics -- 3.3 Global Settings -- 3.4 Results and Discussion -- 4 Conclusion -- References -- A Novel Dynamic Chaotic Golden Jackal Optimization Algorithm for Sensor-Based Human Activity Recognition Using Smartphones for Sustainable Smart Cities -- 1 Introduction -- 2 Related Work -- 3 Golden Jackal Algorithm -- 3.1 Initialization -- 3.2 Exploration Phase -- 3.3 Exploitation Phase -- 3.4 Exploration-Exploitation Transition -- 4 Proposed Approach -- 4.1 Dynamic Opposite Learning. 4.2 Chaotic Maps Learning -- 4.3 The Proposed IGJO -- 5 Experimental Results -- 5.1 Parameter Settings and Evaluation Metrics -- 5.2 Experiment 1: Global Optimization Test -- 5.3 Experiment 2: IGJO as Feature Selection for HAR -- 6 Conclusion and Future Work -- References -- Artificial Intelligence in Finance Sector for Risk Prediction -- 1 Introduction -- 2 Artificial Intelligent Techniques for Risk Prediction in Finance -- 3 Related Work -- 4 Methodology and Data -- 4.1 Data Set Description -- 4.2 Data Set Analysis -- 4.3 Modelling Method and Results -- 5 Conclusion -- References -- Ensemble Regression Tree with Bayesian Optimization for Prediction of Biochemical Oxygen Demand and Climate Impact Assessment in Full Scale Waste Water Treatment Plant -- 1 Introduction -- 2 Related Work -- 3 Basics and Background -- 3.1 Feature Selection -- 3.2 Ensemble Regression Tree -- 3.3 Bayesian Optimization -- 3.4 Performance Metric -- 4 The Proposed Optimized Predictive Model -- 5 Results,

Discussion and Analysis -- 5.1 Dataset-Statistical Description -- 5.2 Results and Analysis -- 6 Conclusion and Future Work -- References -- Enhancing Dynamic Wind Power Forecasting Using Cluster-Based Intelligence Swarm Optimization Technique -- 1 Introduction -- 2 Related Work -- 3 The Proposed Wind Power Forecasting Technique -- 4 Experimental Results -- 4.1 SDWPF Dataset -- 4.2 Experiment Setup -- 4.3 Evaluation Measures and Comparative Analysis of the CISWP Technique -- 5 Conclusions -- References -- Sustainable Green Cognitive Radio Networks: Optimized Deep Transfer Learning Model for Energy Consumption -- 1 Introduction -- 2 Cognitive Radio Network's System Model -- 3 Related Works -- 4 The Proposed Optimized Deep Transfer Learning Model (ODTL) in GNRNs -- 4.1 The African Vultures Optimization Algorithm (AVOA) -- 5 Experiment Results and Discussion.
5.1 Testing the Energy Consumption After Applying the Proposed ODTL-GCRN.

Sommario/riassunto

This book discusses AI's applications in sustainability, exploring its potential in sectors such as energy, healthcare, agriculture, transportation, and waste management. Discusses applications and innovations in Green Initiatives such as energy, finance, and drug discovery. Highlights the ethical challenges and benefits of integrating AI into sustainability initiatives.
