

1. Record Nr.	UNINA9910617307103321
Titolo	Applied informatics : Fifth International Conference, ICAI 2022, Arequipa, Peru, October 27-29, 2022, proceedings // edited by Hector Florez and Henry Gomez
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-19647-3
Descrizione fisica	1 online resource (472 pages)
Collana	Communications in Computer and Information Science ; ; v.1643
Disciplina	215
Soggetti	Computer science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Artificial Intelligence -- A Genetic Algorithm for Scheduling Laboratory Rooms: A Case Study -- 1 Introduction -- 2 Related Works -- 3 Materials and Methods -- 4 Experimental Setup -- 5 Experimental Results -- 6 Conclusion -- References -- COVID-19 Article Classification Using Word-Embedding and Different Variants of Deep-Learning Approach -- 1 Introduction -- 2 Related Work -- 2.1 Text Classification -- 2.2 Deep Learning Methods -- 3 Study Design -- 3.1 Experimental Dataset -- 3.2 Word Embedding -- 3.3 Feature Selection and Dimensionality Reduction -- 3.4 Deep Learning Models -- 3.5 Research Methodology -- 4 Findings and Discussion -- 4.1 RQ1: Which Word Embedding Technique Results in the Best Performance? -- 4.2 RQ2: What Is the Impact of Feature Selection and Dimensionality Reduction on the Performance? -- 4.3 RQ3: Which of the Eight Structures for the DL Neural Network Is the Most Suitable for Text Classification? -- 4.4 How Do the Performances of the Models Trained on the Title Dataset Compare with Those Trained on the Content Dataset? -- 5 Conclusion -- References -- Crop Classification Using Deep Learning: A Quick Comparative Study of Modern Approaches -- 1 Introduction -- 2 Related Works -- 3 Methodology -- 3.1 Data Understanding and Preparation -- 3.2 Modeling -- 3.3 Evaluation -- 4 Results and Discussion -- 5 Conclusions and Future Works -- References -- Internet of Things (IoT)

for Secure and Sustainable Healthcare Intelligence: Analysis and Challenges -- 1 Introduction -- 2 Basic Elements of IoT Environment -- 3 IoT Applications for Healthcare Intelligence -- 3.1 Types of IoT Applications in Healthcare -- 4 Sustainable IoT Techniques for Error Reduction, and Challenges (Security) in Healthcare Delivery -- 4.1 Healthcare Error Reduction Using Secured IoT Solutions. 4.2 Healthcare Optimization Using IoT -- 4.3 Security Challenges in Healthcare Intelligence Delivery -- 5 Conclusion and Future Direction -- References -- Multiple Colour Detection of RGB Images Using Machine Learning Algorithm -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Overall Framework -- 3.2 K-Nearest Neighbour (KNN) -- 3.3 RGB Colour Histogram -- 3.4 Colour Classification Using KNN -- 4 Implementation and Results -- 4.1 Feature Extraction -- 4.2 Comparison -- 5 Conclusion -- References -- Neural Model-Based Similarity Prediction for Compounds with Unknown Structures -- 1 Introduction -- 2 Materials and Methods -- 2.1 Embeddings Construction -- 2.2 Neural Model -- 2.3 Dataset Construction -- 3 Results -- 3.1 Embeddings Selection -- 3.2 Optimization of the Neural Architecture -- 3.3 Similarity Prediction in Compounds of Unknown Structure -- 4 Conclusions -- References -- Data Analysis -- Classifying Incoming Customer Messages for an e-Commerce Site Using Supervised Learning -- 1 Introduction -- 2 Related Work -- 3 Integration of Data Sources -- 4 Data Preparation -- 5 Modeling -- 6 Evaluation -- 7 Deployment -- 8 Conclusions and Future Work -- References -- Comparison of Machine Learning Models for Predicting Rainfall in Tropical Regions: The Colombian Case -- 1 Introduction -- 2 Literature Review -- 3 Data Understanding -- 3.1 Descriptive Statistics -- 4 Methodology -- 4.1 The Model -- 5 Model Evaluation -- 6 Discussion -- 7 Conclusions -- References -- Deep Mining Covid-19 Literature -- 1 Introduction -- 2 Dataset -- 3 Related Work -- 3.1 Search Engines -- 3.2 Mining of Cord19 -- 4 Text Mining -- 4.1 Classical Topic Modelling with Bag of Words: From LSA to LDA -- 4.2 Beyond Bag of Words: Text Classification and Clustering with Word Embeddings -- 4.3 Topic Analysis with Deep Architectures -- 5 Experiments -- 5.1 Preparing the Data. 5.2 Finding the Most Prominent Topics -- 6 Conclusion -- References -- Keyword-Based Processing for Assessing Short Answers in the Educational Field -- 1 Introduction -- 2 State of the Art -- 3 Methodology -- 3.1 Automated Scoring -- 3.2 Effective Feedback -- 4 Results -- 4.1 Program Functioning -- 4.2 Relationship Between Calculated and Real Mark -- 4.3 Influence of Each Keyterm on the Mark -- 5 Discussion -- 6 Conclusions -- References -- Statistical Characterization of Image Intensities in Regions Inside Arteries to Facilitate the Extraction of Center Lines in Atherosclerosis Frameworks -- 1 Introduction -- 2 Materials and Methods -- 2.1 Statistically Estimating Level of Intensities for Pathogenic Arteries -- 3 Results -- 3.1 Institution 1. Statistical Values for Lumen, Calcifications and Background -- 3.2 Institution 2. Statistical Values for Lumen, Calcifications and Background -- 3.3 Institution 3. Statistical Values for Lumen, Calcifications and Background -- 3.4 Institution 4. Statistical Values for Lumen, Calcifications and Background -- 4 Discussion -- 5 Conclusions -- References -- Text Encryption with Advanced Encryption Standard (AES) for Near Field Communication (NFC) Using Huffman Compression -- 1 Introduction -- 2 Literature Review -- 3 Methodology -- 4 Result and Discussion -- 5 Conclusion -- References -- Decision Systems -- A Systematic Review on Phishing Detection: A Perspective Beyond a High Accuracy in Phishing Detection -- 1 Introduction -- 2 Methodology -- 2.1 Research Question Formulation

-- 2.2 Sourcing of Relevant Literature -- 2.3 Literature Selection -- 3 Phishing Detection Stages, When? -- 3.1 Prevention Stage -- 3.2 Diffusion Stage -- 3.3 Mitigation Stage -- 4 Phishing Information Sources ¿Where? -- 5 Phishing Characterization What? -- 5.1 Challenges for Feature Selection -- 6 Phishing Detection How?.

6.1 Surveyed Papers for Detecting Phishing -- 6.2 Blacklist-Whitelist Approach -- 6.3 Heuristic Approaches -- 6.4 Machine Learning -- 6.5 Detection Phishing Methods -- 7 Opportunities for Future Researches -- 7.1 Identifying Challenges in the Review -- 7.2 Include of Brand Information to Improve Phishing Representation -- 7.3 How Patterns and Brand Features Can be Used in Prevention Stages -- 8 Conclusions -- References -- Application of Duality Properties of Renyi Entropy for Parameter Tuning in an Unsupervised Machine Learning Task -- 1 Introduction -- 2 The Entropic Approach to Topic Modeling -- 2.1 Introduction into Topic Modeling -- 2.2 Free Energy of a Textual Collection -- 2.3 Renyi and Tsallis Entropies for Textual Collections -- 3 The Duality of Topic Modeling -- 4 Results and Discussion -- 4.1 Description of Numerical Experiments -- 4.2 Renyi Entropy of Topic Models with E-M Algorithms (pLSA and VLDA Models) -- 4.3 Renyi Entropy of LDA Gibbs Sampling Model -- 5 Conclusion -- References -- Preliminary Study for Impact of Social Media Networks on Traffic Prediction -- 1 Introduction -- 2 Background -- 2.1 Social Media and Traffic Prediction -- 3 Method and Experimental Setting -- 3.1 Information Diffusion Model -- 3.2 Prediction Model -- 3.3 Experimental Setting -- 4 Evaluation and Validation -- 4.1 Case Study 1: All of 511NYC Accounts and Followers -- 4.2 Case Study 2: Account 55009968 and Network -- 4.3 Case Study 3: Merged Networks from Case Studies 1 and 2 -- 5 Conclusions and Discussion -- References -- Website Phishing Detection Using Machine Learning Classification Algorithms -- 1 Introduction -- 2 Literature Review -- 2.1 Single Classification Algorithm -- 2.2 Hybrid Classification Algorithms -- 3 Dataset Description -- 4 Methodology -- 4.1 XGBoost -- 4.2 Random Forest (RF) -- 4.3 Support Vector Machine (SVM) -- 4.4 Naïve Bayes (NB). -- 4.5 Logistic Regression -- 4.6 K-Nearest Neighbours (KNN) -- 4.7 Decision Tree (DT) -- 4.8 AdaBoost -- 5 Implementation -- 6 Results and Discussion -- 7 Conclusions -- References -- Health Care Information Systems -- AESRSA: A New Cryptography Key for Electronic Health Record Security -- 1 Introduction -- 2 Background -- 2.1 Cryptography Keys -- 2.2 Common Cryptography Keys -- 3 Related Work -- 4 Approach for EHR Security Based on Improved Cryptography -- 4.1 Data Source -- 4.2 Implementation Environment -- 4.3 Implementation -- 4.4 Performance Evaluation -- 5 Experimental Result and Analysis -- 5.1 Result of EHR Data Encryption Evaluation -- 5.2 Result of EHR Data Decryption Process Evaluation -- 5.3 Analysis -- 6 Conclusions and Future Work -- References -- Detection of COVID-19 Using Denoising Autoencoders and Gabor Filters -- 1 Introduction -- 1.1 Artificial Intelligence (AI) -- 1.2 Chest Radiograph (CRG) -- 1.3 Computed Tomography (CT) Scan -- 2 Related Work -- 3 Existing Framework -- 3.1 DeepCoroNet -- 3.2 Deep Belief Networks (DBN) -- 3.3 Multilayer Perceptron (MLP) -- 3.4 Local Binary Patterns (LBP) -- 3.5 Issue Description -- 4 Datasets -- 5 Proposed Framework -- 5.1 Denoising Autoencoders -- 5.2 Gabor Filter -- 5.3 Architecture Explanation of Proposed Framework -- 6 Experimental Outcome -- 6.1 Overall Performance -- 6.2 Datasets for Training -- 6.3 Data Analysis -- 7 Conclusion -- References -- Development of a Mobile Application to Save Lives on Catastrophic Situations -- 1 Introduction -- 2 Seismic Hazards in Colombia -- 3 Natural Emergencies in Colombia -- 4

Colombian Geological Service -- 5 A Mobile Technology Strategy -- 5.1
Test and Operations -- 6 Conclusions -- References -- Internet of
Things with Wearable Devices and Artificial Intelligence for Elderly
Uninterrupted Healthcare Monitoring Systems -- 1 Introduction.
2 Materials and Methods.
