

1. Record Nr.	UNISA996464506403316
Titolo	Advanced Informatics for Computing Research : 4th International Conference, ICAICR 2020, Gurugram, India, December 26–27, 2020, Revised Selected Papers, Part I // edited by Ashish Kumar Luhach, Dharm Singh Jat, Kamarul Hawari Bin Ghazali, Xiao-Zhi Gao, Pawan Lingras
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-3660-5
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (698 pages)
Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 1393
Disciplina	004
Soggetti	Artificial intelligence Computer engineering Computer networks Social sciences - Data processing Education - Data processing Image processing - Digital techniques Computer vision Artificial Intelligence Computer Engineering and Networks Computer Application in Social and Behavioral Sciences Computers and Education Computer Imaging, Vision, Pattern Recognition and Graphics Informàtica Congressos Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Organization -- Contents - Part I -- Contents - Part II -- Computing Methodologies -- Analysis of Developers' Sentiments in Commit Comments -- 1 Introduction -- 2 Related Literature -- 3 Research Methodology -- 3.1 Research Data -- 3.2 Sentiment Analysis

-- 4 Results -- 5 Threat to Validity -- 6 Conclusions -- References --  
Design of UML Diagrams for Intervention for Autism Children (IAC System) -- 1 Introduction -- 2 Functionalities of the System -- 3 Proposed IAC System -- 3.1 System Architecture -- 3.2 Data Flow Diagram -- 4 UML Diagrams -- 4.1 UML Usecase Diagram -- 4.2 UML Class Diagram -- 4.3 UML Activity Diagram -- 4.4 UML Sequence Diagram -- 4.5 UML Collaboration Diagram -- 4.6 UML State Machine Diagram -- 4.7 UML Component Diagram -- 4.8 UML Deployment Diagram -- 5 Experimental Results -- 6 Conclusion and Future Enhancement -- References -- Data Analysis and Forecasting of COVID-19 Outbreak in India Using ARIMA Model -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Proposed Methodology -- 4 Result Analyss -- 5 Conclusion -- References -- Analysis Paper on Different Algorithm, Dataset and Devices Used for Fundus Images -- 1 Introduction -- 2 Analysis Color Fundus Images -- 2.1 Image Pre-processing -- 2.2 Dataset -- 2.3 DRISHTI-GS -- 3 Partitioning -- 4 Fundus Photography Sustainability with the Latest Devices in Current Health-Care Also -- 5 Limitations in the Earlier Fundus Camera -- 6 Machine Learning Methods for Vessel Extraction -- 7 Conclusion -- References -- Fuzzy Controller for Indoor Air Quality Control: A Sport Complex Case Study -- 1 Introduction -- 2 Background -- 3 Model -- 4 Fuzzy Controller -- 5 Results -- 6 Conclusion -- References -- Cancer Prediction Using Novel Ranking Algorithms and Machine Learning -- 1 Introduction -- 2 Literature Survey -- 3 Research Methodology.  
3.1 Ranking Based Algorithms -- 3.2 MAR (Mean Accuracy Ranking) -- 3.3 CDR (Class Differential Ranking) -- 3.4 PCR (Per Class Ranking) -- 4 Experimentation and Results -- 4.1 Dataset -- 4.2 Evaluation Metrics -- 4.3 Applying Base Classifiers -- 4.4 Applying Ranking Based Algorithms -- 4.5 Final Model -- 4.6 Comparison of Results with Previous Work -- 5 Conclusion -- References -- Supervsed Learning Algorithm: A Survey -- 1 Introduction -- 2 Methodologies Analysis in Supervised Learning -- 2.1 Logistic Regression -- 2.2 Support Vector Classifier -- 2.3 Decision Tree -- 2.4 Random Forest Classifiers -- 3 Related Work -- 4 Chart of References -- 5 Conclusion and Future Scope -- References -- Searching Sub-classes Within Type Ia Supernova Using DBSCAN -- 1 Introduction -- 2 Data Set -- 3 Methodology -- 3.1 Validity of DBSCAN -- 4 Results -- 5 Conclusions -- 6 Scope of Study -- References -- Abnormality Detection Based on ECG Segmentation -- 1 Introduction -- 2 Literature Review -- 3 Proposed Model -- 3.1 Software Requirements -- 3.2 Our Methodology -- 4 Flowchart of the Proposed Model -- 5 Experiments and Results -- 5.1 Observation Table -- 6 Conclusion -- References -- Detection and Classification of Toxic Comments by Using LSTM and Bi-LSTM Approach -- 1 Introduction -- 2 Literature Review -- 3 Algorithms and Techniques Used -- 3.1 Long Short-Term Memory (LSTM) -- 3.2 Bi-directional Long Short-Term Memory (Bi-LSTM) -- 4 Proposed Methodology -- 4.1 Dataset Description -- 4.2 Data Analysis -- 4.3 Data Pre-processing -- 4.4 Data Conversion to Input Matrix -- 4.5 Build LSTM and Bi-LSTM Model -- 5 Experimental Results and Analysis -- 6 Conclusion and Future Scope -- References -- On the Effects of Substitution Matrix Choices for Pairwise Gapped Global Sequence Alignment of DNA Nucleotides -- 1 Background -- 2 Methods -- 3 Results and Discussion.  
4 Conclusion and Future Work -- References -- Case Based Reasoning Approaches for Reuse and Adaptation in Community Question Answering System -- 1 Introduction -- 2 Research Perspective -- 2.1 CQA Approach -- 2.2 Case Based Analysis for Reuse of Information --

2.3 Textual Comparison Systems -- 2.4 Graphical Textual Likelihood Approach -- 2.5 Bayesian System for Query-Responses -- 3 Experimentation and Methodology -- 3.1 Graphical Configuration -- 3.2 Initial Processing -- 3.3 Similarity Methods -- 3.4 Reuse and Adaptation -- 4 Assessment -- 4.1 Characteristics and Threshold Limits -- 4.2 Association with Human Assessment -- 4.3 Recall and Precision -- 5 Discussion -- 6 Conclusions -- References -- Depression Detection During the Covid 19 Pandemic by Machine Learning Techniques -- 1 Introduction -- 2 Related Work -- 3 Proposed Methodology -- 4 Result Analysis from Literature Survey -- 5 Limitation -- 6 Conclusion and Future Work -- References -- Mucus Plug Blockage Detection in COVID-19 Patient's Chest X-Ray Using Instance Segmentation -- 1 Introduction -- 2 Literature Survey -- 3 Proposed Methodology and Result Analysis -- 4 Conclusion -- References -- Applying Machine Learning to Detect Depression-Related Texts on Social Networks -- 1 Introduction -- 2 Related Works -- 3 Methodology -- 3.1 Data Collection and Analysis -- 3.2 Tools -- 4 Data Exploration -- 5 Experiment Results -- 6 Conclusion and Future Work -- References -- Usability Improvements in E-Governance Applications with Simple and Usable Interface (Design Stage) -- 1 Introduction -- 2 Literature Survey -- 3 Proposed Methodology -- 3.1 Proposed Tools and Technique -- 3.2 Proposed Data -- 4 Result and Discussion -- 5 Conclusion and Future Scope -- 5.1 Future Scope for Researchers -- 5.2 Future Scope for Public Administrator -- References.

PGF Cyberpolicing to Defuse Fake Government of Telangana (FGoT), Fake Government of India (FGoI) and Cybercriminal Legacy -- 1 Introduction -- 2 What Is Fake Government of India - The First FGIIH? -- 3 PGF's AI Solution Approach to CSFGoT -- 4 Disaster Management of Big Data Crimes -- 4.1 The Corona Menace vis-a-vis the FGoT/FGoI Menace -- 5 Cognitive Visuals of Cyberpolicing R&D -- D Chief's PGF Organizational Efforts for Adaptive Academic Management: Google Plus Social Network Account, Kcraiah's Snapshots -- 6 Conclusions -- References -- Energy Consumption Analysis of R-Based Machine Learning Algorithms for Pandemic Predictions -- 1 Introduction -- 2 Related Work -- 3 Energy Analysis - An Extended Version -- 4 COVID-19 and ML Algorithms -- 4.1 RandomForest - A Brief -- 4.2 COVID-19 Predictions -- 4.3 Popular Packages -- 5 Experimental Results -- 5.1 Validation Analysis -- 5.2 Prediction Analysis -- 5.3 Energy Consumption Analysis -- 6 Conclusion -- References -- Performance Analysis of Deep Learning Classification for Agriculture Applications Using Sentinel-2 Data -- 1 Introduction -- 2 Study Area and Satellite Dataset -- 3 Methodology -- 3.1 Preprocessing -- 3.2 Deep Learning Process -- 3.3 Classification -- 4 Experimental Analysis -- 5 Conclusion -- References -- Smart Approach for Identification of Pneumonia Using Real-Time Convolutional Neural Networks -- 1 Introduction -- 2 Literature Review -- 3 System Blueprint -- 3.1 Processing System -- 3.2 Setting up System for Use -- 3.3 Anaconda IDE and Jupyter Notebook -- 3.4 Project Environment -- 3.5 Proposed Model -- 3.6 Modeling -- 3.7 Training -- 4 Experimental Results and Outcomes -- 4.1 Data Enrichment -- 4.2 Performance Measures -- 5 Experimental Results -- 5.1 Results -- 5.2 Accuracy and Loss of Proposed Model -- 6 Conclusion and Future Scopes -- References.

A Comparative Study of Deep Learning Techniques for Emotion Estimation Based on E-Learning Through Cognitive State Analysis -- 1 Introduction -- 1.1 Emotion Identification with Facial Expressions -- 1.2 Facial Expression Analysis in E-Learning Systems -- 1.3 Introduction to Cognitive State Analysis in Education -- 2 Related Work

-- 3 Comparison Among Various Methods -- 4 Result Analysis from Literature Review -- 5 Conclusion -- References -- Detection of Epileptic Seizures in Long-Term Human EEG by Improved Linear Discriminant Analysis (ILDA) -- 1 Introduction -- 2 Literature Survey -- 3 Methodology -- 4 Convolutional Neural Networks -- 4.1 Linear Discriminant Analysis -- 5 Results -- 5.1 Performance Analysis -- 6 Conclusion -- References -- Facial Emotional Recognition Using Legion Kernel Convolutional Neural Networks -- 1 Introduction -- 2 Method -- 2.1 Model Architecture -- 2.2 Dataset Training Flowchart -- 2.3 Output Data Flowchart -- 3 Experiment and Results -- 3.1 Procedure -- 3.2 Results -- 4 Advantages and Disadvantages -- 4.1 Advantages -- 4.2 Disadvantages -- 5 Conclusion -- References -- An Attention Based Automatic Image Description Generation -- 1 Introduction -- 2 Related Work -- 3 Proposed Work -- 3.1 Architecture -- 4 Training Process -- 5 Experiments Conduction and Result Analysis -- 5.1 Data set -- 5.2 Visualizations from Our Attention Models -- 5.3 Results Obtained -- 6 Conclusion -- 7 Future Scope -- References -- Providing Safety for Citizens and Tourists in Cities: A System for Detecting Anomalous Sounds -- 1 Introduction -- 2 Materials and Methods -- 2.1 Audio Features in the Time Domain -- 2.2 Zero-Crossing Rate -- 3 Results -- 3.1 Dataset -- 4 Conclusion -- References -- Mobilenet V2-FCD: Fake Currency Note Detection -- 1 Introduction -- 2 Literature Study -- 3 Proposed System -- 3.1 Data Collection -- 3.2 Data Pre-processing.

3.3 Data Augmentation.

---

### Sommario/riassunto

This two-volume set (CCIS 1393 and CCIS 1394) constitutes selected and revised papers of the 4th International Conference on Advanced Informatics for Computing Research, ICAICR 2020, held in Gurugram, India, in December 2020. The 34 revised full papers and 51 short papers presented were carefully reviewed and selected from 306 submissions. The papers are organized in topical sections on computing methodologies; hardware; networks; security and privacy. .

---