

1. Record Nr.	UNISA996466430403316
Titolo	Mining Intelligence and Knowledge Exploration [[electronic resource]] : 5th International Conference, MIKE 2017, Hyderabad, India, December 13–15, 2017, Proceedings / / edited by Ashish Ghosh, Rajarshi Pal, Rajendra Prasath
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-71928-9
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XX, 438 p. 125 illus.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 10682
Disciplina	006.3
Soggetti	Artificial intelligence Application software Data mining Computer vision Biometric identification Algorithms Artificial Intelligence Computer and Information Systems Applications Data Mining and Knowledge Discovery Computer Vision Biometrics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Functional Link Artificial Neural Network for Multi-label Classification -- 1 Introduction -- 2 Related Works -- 3 Preliminaries -- 3.1 Functional Link Artificial Neural Network (FLANN) -- 3.2 Representation of Multi-label Data -- 4 The Proposed Multi-label FLANN (MLFLANN) -- 4.1 Architecture of the Network -- 4.2 Training Phase -- 4.3 Testing Phase -- 5 Experimental Details and Analysis of Results -- 5.1 Datasets Used -- 5.2 Results and Analysis -- 6 Conclusion -- References -- Emotion Recognition Through Facial Gestures - A Deep Learning Approach -- Abstract -- 1 Introduction -- 2 Dataset -- 3 Preprocessing -- 4 Emotion Prediction

Using SVM -- 5 System Architecture -- 5.1 Training Phase -- 5.2 Testing Phase -- 6 Convolutional Neural Network -- 7 Various Attempted Networks, Their Comparisons and the Selection of Proposed Network -- 8 Proposed Network Architecture -- 9 Results -- 10 Conclusion -- References -- Supervised Approaches to Assign Cooperative Patent Classification (CPC) Codes to Patents -- 1 Introduction -- 2 Related Work and Background -- 3 Datasets -- 4 Methods: Label Scoring, Reranking, and Thresholding -- 4.1 Label Scoring -- 4.2 Label (re)ranking -- 4.3 Label Cut-Off/Thresholding -- 5 Experiment and Results -- 6 Conclusion -- References -- A Betweenness Centrality Guided Clustering Algorithm and Its Applications to Cancer Diagnosis -- 1 Introduction -- 2 Clustering Using Betweenness Centrality on Spanning Subgraph -- 3 Experimental Analysis -- 4 Conclusion and Future Scope -- References -- MahalcusFilter: A Hybrid Undersampling Method to Improve the Minority Classification Rate of Imbalanced Datasets -- 1 Introduction -- 2 Related Work -- 2.1 Undersampling -- 3 Proposed Method -- 3.1 Motivation for the Proposed Method -- 3.2 Theoretical Background of Proposed Method.

3.3 Framework for the Proposed Method -- 3.4 Results -- 4 Conclusions -- References -- Bezier Curve Based Continuous Medial Representation for Shape Analysis: A Theoretical Framework -- Abstract -- 1 Introduction -- 2 Proposed Methodology -- 3 Polygonal Approximation -- 4 Construction and Regularization of the Skeleton -- 5 Bezier Curve Description -- 6 Data Structure -- 7 Experimental Results -- 8 Conclusion -- Acknowledgements -- References -- Trust Distrust Enhanced Recommendations Using an Effective Similarity Measure -- 1 Introduction -- 2 Related Work -- 2.1 Collaborative Filtering -- 2.2 Trust Model -- 3 Trust Distrust Enhanced Recommendation Framework -- 4 Experiment Setup -- 4.1 Design of Experiments -- 4.2 Performance Evaluation -- 4.3 Experiments -- 4.4 Result -- 5 Conclusion -- References -- Language Identification Based on the Variations in Intonation Using Multi-classifier Systems -- Abstract -- 1 Introduction -- 2 Proposed Work -- 3 Implementation -- 4 Results and Discussion -- 5 Conclusion -- Acknowledgment -- References -- Cognitive Decision Making for Navigation Assistance Based on Intent Recognition -- 1 Introduction -- 2 Model of Intention Prediction -- 2.1 Features -- 2.2 Intention Recognition -- 2.3 Orientation and Distance -- 3 Implementation and Results -- 3.1 Navigation Path -- 3.2 Avoiding Obstacle -- 4 Analysis -- 5 Conclusion -- References -- Clinical Intelligence: A Data Mining Study on Corneal Transplantation -- Abstract -- 1 Introduction -- 2 Background -- 2.1 Cornea -- 2.2 Clinical Intelligence System -- 2.3 Related Work -- 3 Methods and Tools -- 4 Case Study -- 4.1 Business Understanding -- 4.2 Data Understanding -- 4.3 Data Preparation -- 4.4 Modeling -- 4.5 Evaluation -- 5 Discussion -- 6 Conclusions and Future Work -- Acknowledgement -- References.

High-Quality Medical Image Compression Using Discrete Orthogonal Cosine Stockwell Transform and Optimal Integer Bit Allocated Quantization -- Abstract -- 1 Introduction -- 2 Proposed Medical Image Codec -- 2.1 Designing of the Image Transformation Block for the Proposed Codec -- 2.2 Optimal Bit Allocated Quantization Block for the Proposed Codec -- 3 Results and Discussions -- 3.1 Time Complexity Analysis of the Proposed Medical Image Codec -- 4 Conclusions -- References -- Coprime Mapping Transformation for Protected and Revocable Fingerprint Template Generation -- 1 Introduction -- 1.1 Background -- 1.2 Existing Approaches -- 1.3 Contributions -- 2 Proposed Scheme -- 2.1 Pre-processing and

Minutiae Extraction -- 2.2 Feature Extraction -- 2.3 Cancelable Template Generation -- 2.4 Matching -- 3 Experimental Results and Analysis -- 3.1 Validation of Parameter: Number of Sectors (s) -- 3.2 Performance -- 3.3 Baseline Comparison -- 3.4 Comparison with Existing Approaches -- 4 Security Analysis -- 4.1 Irreversibility Analysis -- 4.2 Revocability Analysis -- 4.3 Diversity Analysis -- 5 Conclusion -- References -- Supervised Asymmetric Metric Extraction: An Approach to Combine Distances -- 1 Introduction -- 2 Metric Approaches in Machine Learning -- 3 Supervised Asymmetric Metric Extraction -- 4 Biometric Applications -- 4.1 Datasets and Original Metrics -- 4.2 Learned Metrics -- 4.3 Performance Test -- 5 Conclusion -- References -- Interval-Valued Writer-Dependent Global Features for Off-line Signature Verification -- Abstract -- 1 Introduction -- 2 Proposed Method -- 2.1 Feature Computation -- 2.2 Selection of Writer-Dependent Features -- 2.3 Fixation of Feature Dimension and Threshold for Individual Writer -- 2.4 Clustering and Creation of Interval-Valued Feature Vector -- 2.5 Verification -- 3 Experimentation and Results -- 4 Comparative Analysis.

5 Conclusion -- References -- Despeckling with Structure Preservation in Clinical Ultrasound Images Using Historical Edge Information Weighted Regularizer -- 1 Introduction -- 2 Proposed Approach -- 3 Experimental Analysis -- 3.1 Dataset -- 3.2 Result and Analysis -- 4 Conclusion -- References -- Fingerprint Image Quality Assessment and Scoring -- 1 Introduction -- 2 Related Work -- 3 Proposed Method -- 3.1 Block Quality Labeling -- 3.2 Fingerprint Quality Score Computation -- 4 Experimental Results -- 5 Conclusions -- References -- A Multi-objective Evolutionary Algorithm for Color Image Segmentation -- 1 Introduction -- 2 Proposed Approach -- 2.1 Representation of Individuals -- 2.2 Generation of Initial Segments -- 2.3 Objective Functions -- 2.4 Evolutionary Operators -- 3 Evaluation Criterion: Modified PRI -- 4 Experiments and Results -- 4.1 Experimental Setup -- 4.2 Results and Discussion -- 5 Conclusion -- References -- Face Recognition by RBF with Wavelet, DCV and Modified LBP Operator Face Representation Methods -- Abstract -- 1 Introduction -- 2 Face Representation -- 2.1 Wavelet Transformation -- 2.2 Wavelet Packet Transformation -- 2.3 Discriminative Common Vector -- 2.4 Proposed Local Binary Pattern -- 3 Recognition by Radial Basis Function Neural Network -- 3.1 Algorithm -- 4 Results and Discussions -- 5 Conclusion -- References -- DNN-HMM Acoustic Modeling for Large Vocabulary Telugu Speech Recognition -- 1 Introduction -- 2 IIIT-H Telugu Speech Corpus -- 3 System Overview -- 4 DNN-HMM Modeling -- 4.1 Deep Neural Networks -- 4.2 Ergodic HMMs -- 4.3 Training for DNN-HMM -- 4.4 Testing for DNN-HMM -- 5 Results and Discussion -- 6 Conclusion and Future Scope -- References -- Memetic Algorithm Based on Global-Best Harmony Search and Hill Climbing for Part of Speech Tagging -- Abstract -- 1 Introduction -- 2 Related Works.

2.1 Traditional Approaches to Build POS Taggers -- 2.2 Metaheuristic Algorithms as an Approach to Build POS Taggers -- 2.3 Tagsets for Tagging Corpus and Tagged Corpus -- 3 Harmony Search Algorithm -- 4 Algorithm Proposed for the Tagging Problem -- 4.1 Part-of-Speech Tagging (POST) Problem -- 4.2 Part-of-Speech Tagging as an Optimization Problem -- 4.3 Global-Best Harmony Search Tagger -- 5 Experiments, Analyses, and Comparisons -- 5.1 Configuration -- 5.2 Results -- 6 Conclusions and Future Work -- Acknowledgements -- References -- A Study on Crossmodal Correspondence in Sensory Pathways Through Forced Choice Task and Frequency Ba ... -- Abstract -- 1 Introduction -- 2 Theory -- 3 Materials and Methods -- 3.1 Participants -- 3.2 Stimuli -- 3.3 Procedure -- 3.4 Analysis of Words

-- 4 Results and Discussion -- 5 Conclusions -- References -- Point Process Modeling of Spectral Peaks for Low Resource Robust Speech Recognition -- 1 Introduction -- 2 Baseline HMM Recognizer -- 3 Spectral Peak Based Point Process Representation of Speech -- 3.1 Identification of Spectral Peaks -- 3.2 Removal of Spurious Spectral Peaks -- 4 Bankwise Segmentation of Spectral Peaks -- 5 Point Process Model Based Isolated Word Recognizer -- 6 Experimentation and Results -- 7 Conclusion -- References -- Significance of DNN-AM for Multimodal Sentiment Analysis -- 1 Introduction -- 2 Databases -- 2.1 Spanish Database -- 2.2 Hindi Database -- 3 Audio Sentiment Classification -- 3.1 DNNAM -- 4 Sentiment Analysis Using Text Features -- 5 Multimodal Sentiment Analysis -- 6 Summary and Conclusions -- References -- Pattern Based Information Retrieval Approach to Discover Extremist Information on the Internet -- Abstract -- 1 Introduction -- 2 Proposed Approach -- 2.1 General Scheme -- 2.2 "N-Gram Vs Sentence" Matrix Text Representation Model -- 2.3 Extracting Hidden Topics Using ONMF. 2.4 Using N-Gram Based Topics for Keywords Extraction and Document's Relevance Estimation.

Sommario/riassunto

This book constitutes the refereed post-conference proceedings of the 5th International Conference on Mining Intelligence and Knowledge Exploration, MIKE 2017, held in Hyderabad, India, in December 2017. The 40 full papers presented were carefully reviewed and selected from 139 submissions. The papers were grouped into various subtopics including artificial intelligence, machine learning, image processing, pattern recognition, speech processing, information retrieval, natural language processing, social network analysis, security, and fuzzy rough sets.
