1. Record Nr. UNISA996495567303316

Titolo	Advances in computational intelligence . Part II. : 21st Mexican international conference on artificial intelligence, MICAI 2022, Monterrey, Mexico, October 24-29, 2022, proceedings / / edited by Obdulia Pichardo Lagunas, Juan Martinez-Miranda, and Bella Martinez Seis
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-19496-9
Descrizione fisica	1 online resource (402 pages)
Collana	Lecture Notes in Computer Science ; ; v.13613
Disciplina	006.3
Soggetti	Computational intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Conference Organization -- Contents - Part II -- Contents - Part I -- Natural Language Processing -- Urdu Named Entity Recognition with Attention Bi-LSTM-CRF Model -- 1 Introduction -- 2 Related Work -- 2.1 Rule-Based Techniques -- 2.2 Statistical Techniques -- 2.3 Hybrid Techniques -- 3 Our Proposal -- 3.1 Embedding Layer -- 3.2 Bi-LSTM Module -- 3.3 Attention Layer -- 3.4 Encoder Layer -- 3.5 Conditional Random Field (CRF) -- 3.6 Prediction Layer -- 4 Experimental Setup -- 4.1 Data -- 4.2 Experiments -- 4.3 Evaluation Metrics -- 5 Results -- 6 Conclusions -- References -- Impact Evaluation of Multimodal Information on Sentiment Analysis -- 1 Introduction -- 2 Dataset -- 3 Method -- 3.1 Text Processing and Feature Extraction -- 3.2 Emoji Processing -- 3.3 Text in Image Detection -- 3.4 Image Sentiment Label -- 3.5 Feature Fusion -- 3.6 Classification Algorithm -- 4 Experimental Results -- 5 Conclusions and Future Work -- References -- .26em plus .1em minus .1emImproving Neural Machine Translation for Low Resource Languages Using Mixed Training: The Case of Ethiopian Languages -- 1 Introduction -- 1.1 High vs Low Resource Languages -- 2 Related Work -- 3 Dataset -- 4 Methodology -- 4.1 Data Pre-processing -- 4.2 Model -- 5 Experiments and Results -- 5.1 Experiments -- 5.2 Dataset

Split -- 5.3 Results -- 6 Conclusions and Future Work -- References -- Machine Translation of Texts from Languages with Low Digital Resources: A Systematic Review -- 1 Introduction -- 2 Method -- 2.1 Phase 1: Documentary Search -- 2.2 Phase 2: Description of Selection Criteria -- 2.3 Phase 3: Analysis and Categorization -- 2.4 Phase 4: Discussion -- 3 Conclusions -- References -- Comparison Between SVM and DistilBERT for Multi-label Text Classification of Scientific Papers Aligned with Sustainable Development Goals -- 1 Introduction -- 2 Related Work.
2.1 Problem Transformation Method and Classification Algorithm -- 2.2 Transfer Learning Model -- 3 Methodology -- 3.1 Framework for Multi-label Text Classification -- 4 Model Experiments -- 4.1 Dataset -- 4.2 Data Preprocessing -- 4.3 Models Building -- 4.4 Model Evaluation -- 5 Results and Discussion -- 6 Conclusion and Future Work -- References -- A Hybrid Methodology Based on CRISP-DM and TDSP for the Execution of Preprocessing Tasks in Mexican Environmental Laws -- 1 Introduction -- 2 Methodology Conceptualization for the Preprocessing of Legislative Documents -- 2.1 Methodology Description -- 3 Methodology Implementation for the Preprocessing of Legislative Documents -- 3.1 Judiciary of Mexico -- 3.2 Text Preprocessing Use Case for Environmental Laws -- 4 Validation of the Results -- 4.1 Business Understanding Deliverables -- 4.2 Data Understanding Deliverables -- 4.3 Data Preparation Deliverables -- 4.4 Experimental Process Deliverables -- 4.5 Experimental Process Results -- 5 Conclusions -- References -- News Intention Study and Automatic Estimation of Its Impact -- 1 Introduction -- 2 State of the Art -- 2.1 Difference of This Proposal with Respect to the State of the Art Presented Above -- 3 Solution Development -- 3.1 Description of the Solution -- 3.2 Scientific Novelty -- 3.3 Evaluation -- 4 Experiments and Results -- 5 Conclusions and Future Work -- References -- Evaluation of a New Representation for Noise Reduction in Distant Supervision -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Dataset -- 3.2 Baseline of Representation Learning Methods -- 3.3 Unsupervised Representation Learning Methods -- 3.4 Anomaly Detection Methods -- 3.5 Experimental Design -- 4 Experiments and Evaluation -- 5 Conclusions -- References -- Automatic Identification of Suicidal Ideation in Texts Using Cascade Classifiers -- 1 Introduction.
2 Related Works -- 3 Proposed Method -- 3.1 Datasets -- 3.2 Weighing of Terms -- 3.3 Cascade Classification -- 4 Experimentation and Results -- 5 Conclusions -- References -- Web Crawler and Classifier for News Articles -- 1 Introduction -- 2 Web Crawling and Corpus Creation -- 3 Classifier -- 4 Web Application -- 5 Conclusions and Future Work -- References -- Sentiment Analysis in the Rest-Mex Challenge -- 1 Introduction -- 2 Corpus and Task Description -- 3 Method -- 3.1 Lexicon-Based Approach -- 3.2 Machine Learning Approach -- 4 Experiments and Results -- 4.1 Experiments with the Lexicon-Based Approach -- 4.2 Experiments with the Machine Learning Approach -- 5 Conclusions and Future Work -- References -- A Bibliometric Review of Methods and Algorithms for Generating Corpora for Learning Vector Word Embeddings -- 1 Introduction -- 2 Methodology -- 2.1 Methods -- 2.2 Materials -- 3 Results -- 3.1 Publications and Citations by Year -- 3.2 Top Conferences and Journals -- 3.3 Top Institutions and Funding Organizations -- 3.4 Top Influential Publications -- 3.5 Top Countries by Publications -- 4 Discussion -- 5 Conclusion -- References -- Evaluating the Impact of OCR Quality on Short Texts Classification Task -- 1 Introduction -- 2 Related Work -- 3 Dataset -- 3.1 Selection of Classification Categories

-- 3.2 Obtaining OCRed Text -- 3.3 The Human Typed Text and Its Approximations -- 3.4 Train/Test Split -- 4 Classification Approaches -- 4.1 Fuzzy Substring Search -- 4.2 CNN -- 4.3 BERT -- 4.4 RoBERTa -- 5 Experiments and Results -- 5.1 Evaluation Metrics -- 5.2 Experiments -- References -- Techniques for Generating Language Learning Resources: A System for Generating Exercises for the Differentiation of Literal and Metaphorical Context -- 1 Introduction -- 2 Characteristics of Automatic Generation Systems for Learning. 2.1 NLP Tasks at Automatic Generation Systems for Language Learning -- 2.2 Creation Sources -- 2.3 Technical and Methodological Aspects of Automatic Generation Systems for Learning -- 2.4 Text Preprocessing -- 3 An Automatic Generation System for Learning the English Language: Literal Language and Metaphorical Language -- 3.1 Corpus Selection -- 3.2 System Development: General Preprocessing -- 3.3 System Development: Exercises -- 4 Results -- 4.1 The Exercises Generated and Their Validation -- 5 Conclusion -- References -- Exploratory Data Analysis for the Automatic Detection of Question Paraphrasing in Collaborative Environments -- 1 Introduction -- 2 Theorical Framework -- 3 State of the Art -- 3.1 Scientific Novelty and Difference with the State of the Art -- 4 Solution Development -- 4.1 Initial EDA -- 4.2 Preprocessing -- 4.3 Feature Extraction -- 4.4 Analysis of Preprocessed Data -- 4.5 Classifier Models -- 4.6 Model Comparison -- 5 Conclusions and Future Work -- References -- Best Paper Award -- Diachronic Neural Network Predictor of Word Animacy -- 1 Introduction -- 2 Data and Method -- 3 Results -- 4 Case Study -- 5 Conclusion -- References -- Sequential Models for Sentiment Analysis: A Comparative Study -- 1 Introduction -- 2 Literature Review -- 3 Experimental Setup -- 4 Results and Discussion -- 5 Conclusion -- References -- Intelligent Applications and Robotics -- Analysis of Procedural Generated Textures for Video Games Using a CycleGAN -- 1 Introduction -- 2 Related Work -- 2.1 Procedural Content Generation -- 2.2 Generative Adversarial Networks -- 2.3 CycleGAN -- 3 Proposed Approach -- 4 Experimental Results -- 4.1 CycleGAN Training Details -- 4.2 CycleGAN Results -- 4.3 Emotional Data Collection -- 4.4 Emotional Results -- 5 Conclusions -- References.
Vibration Analysis of an Industrial Motor with Autoencoder for Predictive Maintenance -- 1 Introduction -- 1.1 A Subsection Sample -- 2 Background -- 3 Methodology -- 3.1 Materials and Test Bench Construction -- 4 Methodology -- 5 Results -- 6 Conclusions and Future Work -- References -- Modeling and Simulation of Swarm of Foraging Robots for Collecting Resources Using RAOI Behavior Policies -- 1 Introduction -- 2 Foraging Behavior -- 3 Swarm Features -- 3.1 Robot Mathematical Model -- 3.2 Limitations of Sensory Capacity of Robots -- 3.3 Local Behavior Rules -- 4 Simulation Environment -- 5 Results -- 6 Conclusion -- References -- Data-Driven Adaptive Force Control for a Novel Soft-Robot Based on Ultrasonic Atomization -- 1 Introduction -- 2 Actuation and Soft-Robot Design -- 2.1 Ultrasonic Atomization -- 2.2 Rapid Actuator Design -- 2.3 Mini Soft-Robot Design -- 3 Intelligent Control -- 3.1 Neuro-Fuzzy Architecture -- 3.2 Adaptation Algorithm -- 4 Experimental Results -- 5 Conclusions -- References -- Data-driven-modelling and Control for a Class of Discrete-Time Robotic System Using an Adaptive Tuning for Pseudo Jacobian Matrix Algorithm -- 1 Introduction -- 2 Data-driven Model for Discrete-Time System -- 2.1 Equivalent Model Stability Analysis -- 2.2 Neuro-fuzzy Network and Adaptive Step Parameter -- 3 Control Law -- 4 Results -- 5 Conclusions -- References -- Retrieval-based Statistical Chatbot in a Scientometric Domain -- 1 Introduction -- 2 Methodology -- 2.1 Natural Language Processing -- 2.2 Intent

Classificaiton and Entity Extraction -- 2.3 Data Labeling -- 2.4 Model Training -- 2.5 Scientometric Indicator Identification -- 2.6 Natural Language Transformation into Cypher Query -- 2.7 Chatbot Deployment -- 3 Results and Discussion -- 3.1 Goal Completion Rate -- 3.2 Survey Evaluation -- 4 Conclusion -- References.
Red Light/Green Light: A Lightweight Algorithm for, Possibly, Fraudulent Online Behavior Change Detection.