

1. Record Nr.	UNINA9910632483803321
Titolo	Applied Computer Sciences in Engineering : 9th Workshop on Engineering Applications, WEA 2022, Bogotá, Colombia, November 30 – December 2, 2022, Proceedings // edited by Juan Carlos Figueroa-García, Carlos Franco, Yesid Díaz-Gutierrez, Germán Hernández-Pérez
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2022
ISBN	9783031206115 3031206118
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (494 pages)
Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 1685
Disciplina	005.1
Soggetti	Software engineering Artificial intelligence Computer networks Application software Computer systems Social sciences - Data processing Software Engineering Artificial Intelligence Computer Communication Networks Computer and Information Systems Applications Computer System Implementation Computer Application in Social and Behavioral Sciences Informàtica Enginyeria Processament de dades Congressos Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Artificial Intelligence -- Comparison of Higher-order Approximations

to Solve Dynamical Systems using Interval Constraint Solving -- Globally explainable AutoML evolved models of corporate credit risk -- Bioactivity Predictors for the Inhibition of Staphylococcus aureus Quinolone Resistance Protein -- Comparison of Named Entity Recognition Methods on Real-World and Highly Imbalanced Business Document Datasets -- Colombian Dialect Recognition From Call-Center Conversations Using Fusion Strategies -- Risk Automatic Prediction for Social Economy Companies using Camels -- Energy Performance Estimation in a Hybrid System using Clustering and Data Visualization algorithms -- Classification of fruits integrating machine vision and collaborative robotics -- Artificial Intelligence for Prevention of Breast Cancer -- Predictive method proposal for a manufacturing system with industry 4.0 technologies -- Artificial Intelligence Methods to Solve Energy Transmission Problems Through Data Analysis from Different Data Sources -- A knowledge-based expert system for risk management in health audit projects -- Effect of speckle filtering in the performance of segmentation of ultrasound images using CNNs -- Multivariate Financial Time Series Forecasting with Deep Learning -- Optimization -- The Notion of the Quasicentral Path in Linear Programming -- P-Median equivalence and Partitioning in Logistics Problems -- A Hybrid Algorithm based on Ant Colony System for Flexible Job Shop -- Cost optimization of an assembly sequence of an electric propulsion module of an electro-solar boat -- Hybrid ILS-VND Algorithm for the Vehicle Routing Problem with Release Times -- The organization of fruit collection transport in conditions of extreme rurality: A rural cVRP case -- Design of electric vessels test routes using image processing and optimization techniques -- Optimization of Routes for Covered Walkways at University Campus by Kruskal Algorithm -- Stating on French troop allocation optimization in World War 1 via a hierarchic-transport model clio-combinatorics approach -- Simulation -- Methodology for selecting scenarios in improvement process with Agent-Based Simulation Model For The Validation Of An Organizational Structure Aiming At Self-Organization And Increasing Agility multiple performance measures -- Replicator dynamics of the Hawk-Dove game with Agent-based simulation -- Food availability dynamic model for Colombia -- A Low-cost 3D Mapping System for Indoor Scenes Based on a 2D LiDAR on-board an UGV -- Power simulation process through the analysis of geometry, irradiance and interconnection impact in photovoltaic roof tiles -- Temperature performance simulation in a solar-electric vessel battery design -- Simulation and Prototype of Flexible Sensor Devices using Graphite on Paper Substrate -- software for simulating robot swarm aggregation -- Full State Feedback of DC-Motor Position and Speed Control Using LQR and Kalman Filter -- Applications -- Experimental data-driven insertion force analyses of hypodermic needles in a soft tissue with an in-house test bench -- Simulation based GNU radio tool for DSP significant learning -- Design of a self-adjusting reactive power compensation prototype for residential application -- A Machine Learning Based Command Voice Recognition Interface -- Photovoltaic Power Predictor Module based on Historical Production and Weather Conditions Data -- Vehicle Detection and Counting Framework in aerial images based on SoC-FPGA.

Sommario/riassunto

This book constitutes the proceedings of the 9th Workshop on Engineering Applications on Applied Computer Sciences in Engineering, WEA 2022, which took place in Bogotá, Colombia, in November/December 2022. The 39 papers presented in this volume were carefully reviewed and selected from 143 submissions. They were organized in topical sections as follows: Artificial Intelligence;

