1.	Record Nr.	UNISA996558567803316
	Titolo	Applied Computer Sciences in Engineering [[electronic resource]] : 10th Workshop on Engineering Applications, WEA 2023, Cartagena, Colombia, November 1–3, 2023, Proceedings / / edited by Juan Carlos Figueroa-García, German Hernández, Jose Luis Villa Ramirez, Elvis Eduardo Gaona García
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
	ISBN	3-031-46739-6
	Edizione	[1st ed. 2023.]
	Descrizione fisica	1 online resource (445 pages)
	Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 1928
	Disciplina	929.605
	Soggetti	Software engineering Computer networks Application software Computer systems Social sciences - Data processing Software Engineering Computer Communication Networks Computer and Information Systems Applications Computer System Implementation Computer Application in Social and Behavioral Sciences
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Artificial Intelligence -- Algorithmic trading system using auto-machine learning as a filter rule -- An algorithmic trading strategy for the Colombian US dollar inter-bank bulk market SET-FX based on an evolutionary TPOT AutoML predictive model -- Evaluating the incidence of different factors on the level of service at interceptions without traffic lights -- Physically Informed Neural Networks Applied to Financial Derivatives Valuation in Markets with Liquidity Risk -- Application of hierarchical risk parity with Latin ADRs -- Experimental Analysis of a Peregrine Falcon 3D Prototype with oscillating feathers -- Optimal portfolio selection using a Robust-Bayesian model -- Impact

of Pruning Distribution in Compressed CNN Models: A Case Study -- Open-loop stability analysis of interval dynamic systems -- Acquisition of motor images of the left and right hand by means of the Emotiv epoc+ headset for their classification using the EEGNet neural network -- Natural Language Contents Evaluation System for Multi-class News Categorization Using Machine Learning and Transformers -- Automatic Assessment of Voice Disorders Using Phase Plots -- Medical Image Compression techniques comparison using open-source libraries -- Implementation of a reinforced learning algorithm in a simulation environment for path planning of a robot manipulator with 3 degrees of freedom -- MACHINE LEARNING FOR RICE (Oryza sativa L.) PHENOLOGICAL IDENTIFICATION -- wGMU: A Novel Fusion Strategy to Identify the Important Parts of Sentence for Relation Classification -- Effect of preprocessing in deep learning systems to aid the diagnosis using X-ray pulmonary images -- Topological Data Analysis to characterize fluctuations in the Latin American Integrated Market -- Implementation of the chaotic systems Lorenz, Rossler, and Chen on an 8 bit microcontroller -- Enhancing Impaired Waist-to-Height Ratio Classification Using Neural Networks -- Application of artificial intelligence tools, data processing, and analysis in the forecasting of level and flow variables in wells with little data from the Morroa Aquifer -- Voltage Regulation for Microgrids Based on a Data-Driven Predictor -- Generalized nonlinear rectification function for estimating Mel Cepstral coefficients from Colombian birdsongs -- Optimization -- Global Sensitivity Analysis in Optimization - the Case of Positive Definite Quadratic Forms -- MPC-Based Path Tracking of a Differential-Drive Mobile Robot with Optimization for Improved Control Performance -- A Mixed Integer Linear Programming Model for School Timetable in Cartagena -- Evaluation of a Mixed-Product Production System Performance with Unreliable Machines -- Distributionally Robust Optimization for Networked Microgrids: An Overview -- Pickup and delivery vehicle routing problems in bike sharing systems: a review -- MATHEMATICAL OPTIMIZATION MODELS FOR THE DESIGN AND APPLICATION OF INDUSTRIAL SYMBIOSIS NETWORKS: CHALLENGES AND TRENDS -- Simulation -- Static and Dynamic Electrical Characterization of Flexible Photovoltaic Panels for Optimization of their Performance -- Rural Migration in Colombia -- Investigation of the conductive properties of the electro-polymerized thiophene and pyrrole derivatives: correlation between experimental and theoretical parameters -- Strategies, information technologies and models for knowledge management in software development companies: A systematic review of the literature -- Smart Substation Communication with Virtual Networks -- Development of a farm animal tracking device using LoRaWAN -- In-silico study of the effect of particulate matter from Medell´n on virtual ventricular tissue.

| Sommario/riassunto | This book constitutes the refereed proceedings of the 10th Workshop on Engineering Applications, WEA 2023, held in Cartagena, Colombia, during November 1–3, 2023. The 37 full papers included in this book were carefully reviewed and selected from 93 submissions. They were organized in topical sections as follows: artificial intelligence; optimization; and simulation. |