

1. Record Nr.	UNISA996546820303316
Autore	Kulkarni Anand J
Titolo	Optimization Methods for Product and System Design [[electronic resource] /] / edited by Anand J. Kulkarni
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9915-21-X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (266 pages)
Collana	Engineering Optimization: Methods and Applications, , 2731-4057
Disciplina	658.5752
Soggetti	Computer-aided engineering Industrial engineering Production engineering Engineering design Computer-Aided Engineering (CAD, CAE) and Design Industrial and Production Engineering Engineering Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Multi-objective Optimization of Ventilated Brake Disc based on Finite Element Simulation -- Multi Response Optimization on Process Parameters of WEDM for Ti-6Al-4V Alloy Using Grey Relational Approach -- Tuning of Complex Coefficient Fractional Complex Order Controllers for a Generalized System Structure - An Optimisation Approach -- A Review on Intelligent Optimization Techniques based Fault Detection and Diagnosis in Power System Applications -- Prediction of Surface Roughness using Desirability Concept and Support Vector Machine for Fused Deposition Modeling Part -- An Extremum Model for the Performance Analysis of a Loop Heat Pipe using Nano-fluids -- Selected Multi-Criteria Decision-Making Methods and their Applications to Product and System Design -- Cohort Intelligence Solution to Bank Asset Liability Management -- Cohort Intelligence Solution to Goal Programming Problems from Financial Management Domain -- Solving Asset and Liability Management Problem using Cohort Intelligence and Goal Programming -- Proposing a New Feature Clustering Method in order to the Binary Classification of Covid-19 in

Computed Tomography Images -- Deep Learning Framework for Brain Tumor and Alzheimer Disease Prognosis using MRI Images -- Genetic Algorithm to Maximize the Tourist's Satisfaction: An Assessment of Technology Adoption for a Tourist App.

Sommario/riassunto

This edited book provides a platform to discuss the state-of-the-art developments associated with traditional and advanced single-/multi-objective criteria optimization methods for addressing problems of performance enhancement of the products and systems design. The book in detail discusses the core ideas, underlying principles, mathematical formulations, critical reviews and experimentations, and solutions to complex problems from within the domains such as mechanical engineering design and manufacturing, fault detection and diagnosis, control systems, financial systems, machine learning in medical image processing as well as problems from operations research domain. It will serve as a valuable reference to academicians and industry practitioners involved in improving the efficiency, cost, performance, and durability of the products and systems. The chapters in this book may further give impetus to explore new avenues leading towards multidisciplinary research discussions associated with the resilience and sustainability of the existing systems.
