1. Record Nr. UNINA9910913787103321

Autore	Raza Khalid
Titolo	Solving with Bees : Transformative Applications of Artificial Bee Colony Algorithm / / edited by Khalid Raza
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819773442 981977344X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (212 pages)
Collana	Springer Tracts in Nature-Inspired Computing, , 2524-5538
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Image processing Computational Intelligence Artificial Intelligence Image Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Fundamentals of Artificial Bee Colony Algorithms and Its Variants -- The Rise of Artificial Bee Colony Algorithms in Data Science and Machine Learning is Notable -- Swarm Intelligence for Optimization: A Bee's-Eye View on Multi-objective and Dynamic Challenges -- Artificial Bee Colony Algorithms in Control Systems, Robotics and Automation -- Integrating Artificial Bee Colony Algorithms for Deep Learning Model Optimization: A Comprehensive Review -- An IoMT Enabled Iterative Artificial Bee Colony Approach Using Federated Learning for Detection of Heart Disease -- Optimal Design of a Biomedical Amplifier for Minimum Offset Using a Modified ABC Algorithm -- Using Honeybees for Gene Expression Profiling: The Artificial Bee Colony Algorithm to Identify Robust Gene Biomarkers for Clinical Diagnosis -- Smart Diagnostics for Diabetic Retinopathy: Integrating Artificial Bee Colony Algorithms into Medical Image Analysis -- Artificial Bee Colony Algorithms in Gene Expression Studies: A Case Study -- Artificial Bee Colony Algorithm in Multi-Omics Analysis: A Case Study.
Sommario/riassunto	This book is a comprehensive volume, which delves into the versatile

world of Artificial Bee Colony (ABC) algorithms, their variants, and myriad applications in a wide range of fields. This book is designed to be an essential resource for researchers, practitioners, students, and anyone intrigued by the fascinating realm of swarm intelligence and optimization. This book serves as a bridge between the theoretical foundations of ABC algorithms and their practical implementations across diverse domains. The book offers a deep understanding of these algorithms and how they can be harnessed to tackle complex real-world challenges.