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Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I: Foundations -- Introduction -- Genetic Algorithms -- Parameters -- Part II: Solution Spaces -- Multimodality -- Constraints -- Multiple Objectives -- Part III: Advanced Concepts -- Theory -- Machine Learning -- Applications -- Part IV: Ending -- Summary and Outlook -- Index -- References.
Sommario/riassunto	This book introduces readers to genetic algorithms (GAs) with an emphasis on making the concepts, algorithms, and applications discussed as easy to understand as possible. Further, it avoids a great deal of formalisms and thus opens the subject to a broader audience in comparison to manuscripts overloaded by notations and equations. The book is divided into three parts, the first of which provides an introduction to GAs, starting with basic concepts like evolutionary operators and continuing with an overview of strategies for tuning and controlling parameters. In turn, the second part focuses on solution space variants like multimodal, constrained, and multi-objective solution spaces. Lastly, the third part briefly introduces theoretical tools for GAs, the intersections and hybridizations with machine learning, and highlights selected promising applications.