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Nota di contenuto	Introduction -- The Bees algorithm -- Empirical study -- Analytical study -- Case study: Robot control optimisation -- Case study: PCB assembly optimisation -- Case study: Multi-solution problems -- Latest developments -- Appendices.
Sommario/riassunto	This book offers an extensive guide to understanding, implementing, and applying the Bees Algorithm, a powerful nature-inspired optimisation metaheuristic that mimics the foraging behaviour of honey bees. In today's highly interconnected world, systems have become more difficult to optimise. This book addresses the challenge of solving

complex optimisation problems efficiently and effectively by drawing inspiration from the remarkable problem-solving abilities observed in nature. The Bees Algorithm provides an elegant, simple, robust, and adaptable approach to navigate the complexities of high-dimensional, multimodal, or time-varying problems that often stymie traditional optimisation methods. This book offers an in-depth exploration of the algorithm, providing a thorough understanding of its underlying principles and mechanisms. It establishes a mathematical framework for the algorithm, facilitating a clearer insight into its behaviour and performance. Through empirical studies and benchmarks, the book demonstrates the algorithm's effectiveness across a range of optimisation problems. Additionally, it showcases practical applications of the Bees Algorithm in diverse fields such as engineering design, robotics, and manufacturing. Finally, it discusses the latest developments and variants of the algorithm, highlighting its potential for future research and innovation. With its accessible style and step-by-step guidance, this book equips readers—be they researchers, practitioners, or students in computer science, engineering, or optimisation—with the knowledge and tools to leverage the principles of swarm intelligence and biomimicry to solve the real-world optimisation challenges of the new industrial age.