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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Metaheuristic Stochastic Optimization -- Benchmarking Theory -- Introduction to Statistical Analysis -- Approaches to Statistical Comparisons -- Deep Statistical Comparison in Single-Objective Optimization -- Deep Statistical Comparison in Multiobjective Optimization -- DSCTool: A Web-Service-Based E-Learning Tool -- Summary.
Sommario/riassunto	Focusing on comprehensive comparisons of the performance of stochastic optimization algorithms, this book provides an overview of the current approaches used to analyze algorithm performance in a range of common scenarios, while also addressing issues that are often overlooked. In turn, it shows how these issues can be easily avoided by applying the principles that have produced Deep Statistical Comparison and its variants. The focus is on statistical analyses performed using single-objective and multi-objective optimization data. At the end of

the book, examples from a recently developed web-service-based e-learning tool (DSCTool) are presented. The tool provides users with all the functionalities needed to make robust statistical comparison analyses in various statistical scenarios. The book is intended for newcomers to the field and experienced researchers alike. For newcomers, it covers the basics of optimization and statistical analysis, familiarizing them with the subject matter before introducing the Deep Statistical Comparison approach. Experienced researchers can quickly move on to the content on new statistical approaches. The book is divided into three parts: Part I: Introduction to optimization, benchmarking, and statistical analysis – Chapters 2-4. Part II: Deep Statistical Comparison of meta-heuristic stochastic optimization algorithms – Chapters 5-7. Part III: Implementation and application of Deep Statistical Comparison – Chapter 8.