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Sommario/riassunto	This textbook comprehensively explores the foundational principles, algorithms, and applications of intelligent optimization, making it an

ideal resource for both undergraduate and postgraduate artificial intelligence courses. It remains equally valuable for active researchers and individuals engaged in self-study. Serving as a significant reference, it delves into advanced topics within the evolutionary computation field, including multi-objective optimization, dynamic optimization, constrained optimization, robust optimization, expensive optimization, and other pivotal scientific studies related to optimization. Designed to be approachable and inclusive, this textbook equips readers with the essential mathematical background necessary for understanding intelligent optimization. It employs an accessible writing style, complemented by extensive pseudo-code and diagrams that vividly illustrate the mechanisms, principles, and algorithms of optimization. With a focus on practicality, this textbook provides diverse real-world application examples spanning engineering, games, logistics, and other domains, enabling readers to confidently apply intelligent techniques to actual optimization problems. Recognizing the importance of hands-on experience, the textbook introduces the Open-source Framework for Evolutionary Computation platform (OFEC) as a user-friendly tool. This platform serves as a comprehensive toolkit for implementing, evaluating, visualizing, and benchmarking various optimization algorithms. The book guides readers on maximizing the utility of OFEC for conducting experiments and analyses in the field of evolutionary computation, facilitating a deeper understanding of intelligent optimization through practical application.