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Nota di contenuto	1 Basic Concepts -- 2 State Value and Bellman Equation -- 3 Optimal State Value and Bellman Optimality Equation -- 4 Value Iteration and Policy Iteration -- 5 Monte Carlo Learning -- 6 Stochastic Approximation -- 7 Temporal-Difference Learning -- 8 Value Function Approximation -- 9 Policy Gradient -- 10 Actor-Critic Methods
Sommario/riassunto	This book provides a mathematical yet accessible introduction to the fundamental concepts, core challenges, and classic reinforcement learning algorithms. It aims to help readers understand the theoretical foundations of algorithms, providing insights into their design and functionality. Numerous illustrative examples are included throughout. The mathematical content is carefully structured to ensure readability and approachability. The book is divided into two parts. The first part is on the mathematical foundations of reinforcement learning, covering topics such as the Bellman equation, Bellman optimality equation, and stochastic approximation. The second part explicates reinforcement learning algorithms, including value iteration and policy iteration, Monte Carlo methods, temporal-difference methods, value function methods, policy gradient methods, and actor-critic methods. With its comprehensive scope, the book will appeal to undergraduate and graduate students, post-doctoral researchers, lecturers, industrial

researchers, and anyone interested in reinforcement learning