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	Collana	IEEE press series on computational intelligence ; ; 2
	Altri autori (Persone)	SiJennie
	Disciplina	519.7/03
	Soggetti	Dynamic programming
		Automatic programming (Computer science)
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		Control theory
		Systems engineering
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	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Foreword. -- 1. ADP: goals, opportunities and principles. -- Part I: Overview. -- 2. Reinforcement learning and its relationship to supervised learning. -- 3. Model-based adaptive critic designs. -- 4. Guidance in the use of adaptive critics for control. -- 5. Direct neural dynamic programming. -- 6. The linear programming approach to approximate dynamic programming. -- 7. Reinforcement learning in large, high-dimensional state spaces. -- 8. Hierarchical decision making. -- Part II: Technical advances. -- 9. Improved temporal difference methods with linear function approximation. -- 10. Approximate dynamic programming for high-dimensional resource allocation problems. -- 11. Hierarchical approaches to concurrency, multiagency, and partial observability. -- 12. Learning and optimization - from a system theoretic perspective. -- 13. Robust

reinforcement learning using integral-quadratic constraints. -- 14. Supervised actor-critic reinforcement learning. -- 15. BPTT and DAC - a common framework for comparison. -- Part III: Applications. -- 16. Near-optimal control via reinforcement learning. -- 17. Multiobjective control problems by reinforcement learning. -- 18. Adaptive critic based neural network for control-constrained agile missile. -- 19. Applications of approximate dynamic programming in power systems control. -- 20. Robust reinforcement learning for heating, ventilation, and air conditioning control of buildings. -- 21. Helicopter flight control using direct neural dynamic programming. -- 22. Toward dynamic stochastic optimal power flow. -- 23. Control, optimization, security, and self-healing of benchmark power systems.

Sommario/riassunto	. A complete resource to Approximate Dynamic Programming (ADP), including on-line simulation code. Provides a tutorial that readers can use to start implementing the learning algorithms provided in the book. Includes ideas, directions, and recent results on current research issues and addresses applications where ADP has been successfully implemented. The contributors are leading researchers in the field.