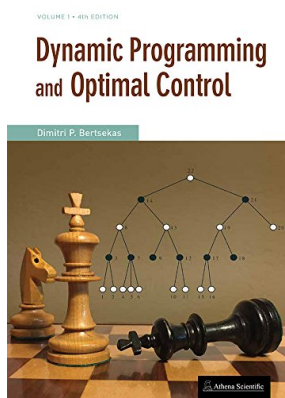# [PDF] Dynamic Programming And Optimal Control, Vol. I, 4th Edition

Dimitri Bertsekas - pdf download free book

Books Details:
Title: Dynamic Programming and Optim
Author: Dimitri Bertsekas
Released:
Language:
Pages: 576
ISBN: 1886529434
ISBN13: 9781886529434
ASIN: 1886529434

[CLICK HERE FOR DOWNLOAD](#)

pdf, mobi, epub, azw, kindle

Description:

This 4th edition is a major revision of Vol. I of the leading two-volume dynamic programming textbook by Bertsekas, and contains a substantial amount of new material, particularly on approximate DP in Chapter 6. This chapter was thoroughly reorganized and rewritten, to bring it in line, both with the contents of Vol. II, whose latest edition appeared in 2012, and with recent developments, which have propelled approximate DP to the forefront of attention.

Some of the highlights of the revision of Chapter 6 are an increased emphasis on one-step and multistep lookahead methods, parametric approximation architectures, neural networks, rollout, and Monte Carlo tree search. Among other applications, these methods have been instrumental in the recent spectacular success of computer Go programs. The material on approximate DP also provides an introduction and some perspective for the more analytically oriented treatment of Vol. II.

The book includes a substantial number of examples, and exercises, detailed solutions of many of which are posted on the internet. It was developed through teaching graduate courses at M.I.T., and is supported by a large amount of educational material, such as slides and videos, posted at the MIT Open Courseware, the author's, and the publisher's web sites.

Contents: 1. The Dynamic Programming Algorithm. 2. Deterministic Systems and the Shortest Path Problem. 3. Problems with Perfect State Information. 4. Problems with Imperfect State Information. 5. Introduction to Infinite Horizon Problems. 6. Approximate Dynamic Programming. 7. Deterministic Continuous-Time Optimal Control.

- Title: Dynamic Programming and Optimal Control, Vol. I, 4th Edition
- Author: Dimitri Bertsekas
- Released:
- Language:
- Pages: 576
- ISBN: 1886529434
- ISBN13: 9781886529434
- ASIN: 1886529434