

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming

Dimitri P. Bertsekas



Click here if your download doesn"t start automatically

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming

Dimitri P. Bertsekas

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming Dimitri P. Bertsekas

This 4th edition is a major revision of Vol. II of the leading two-volume dynamic programming textbook by Bertsekas, and contains a substantial amount of new material, as well as

a reorganization of old material. The length has increased by more than 60% from the third edition, and most of the old material has been restructured and/or revised. Volume II now numbers more than 700 pages and is larger in size than Vol. I. It can arguably be viewed as a new book!

Approximate DP has become the central focal point of Vol. II, and occupies more than half of the book (the last two chapters, and large parts of Chapters 1-3). Thus one may also view Vol. II as a followup of the author's 1996 book ``Neuro-Dynamic Programming" (coauthored with John Tsitsiklis). The present book focuses to a great extent

on new research that became available after 1996. On the other hand, the textbook style of the book has been preserved, and some material has been explained at an intuitive or informal level, while referring to the journal literature or the Neuro-Dynamic Programming book for a more mathematical treatment.

As the book's focus shifted, increased emphasis was placed on new or recent research in approximate DP and simulation-based methods, as well as on asynchronous iterative methods, in view of the central role of simulation, which is by nature asynchronous. A lot of this material is an outgrowth of research conducted in the six years since the previous edition. Some of the highlights, in the order appearing in the book, are: (a) A broad spectrum of simulation-based, approximate value iteration, policy iteration, and Q-learning methods based on projected equations and aggregation.

(b) New policy iteration and Q-learning algorithms for stochastic shortest path problems with improper policies.

(c) Reliable Q-learning algorithms for optimistic policy iteration.

(d) New simulation techniques for multistep methods, such as geometric and free-form sampling, based on generalized weighted Bellman equations.

(e) Computational methods for generalized/abstract discounted DP, including convergence analysis and error bounds for approximations.

(f) Monte Carlo linear algebra methods, which extend the approximate DP methodology to broadly applicable problems involving large-scale regression and systems of linear equations.

The book was developed through teaching graduate courses at M.I.T.

Contents: 1. Discounted Problems - Theory. 2. Discounted Problems - Computational Methods. 3. Stochastic Shortest Path Problems. 4. Undiscounted Problems. 5. Average Cost per Stage Problems. 6. Approximate Dynamic Programming - Discounted Models. 7. Approximate Dynamic Programming - Nondiscounted Models and Generalizations.

<u>Download</u> Dynamic Programming and Optimal Control, Vol. II, ...pdf

<u>Read Online Dynamic Programming and Optimal Control, Vol. II ...pdf</u>

From reader reviews:

Nannie Hand:

Book is to be different for every grade. Book for children until eventually adult are different content. As it is known to us that book is very important for all of us. The book Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming ended up being making you to know about other know-how and of course you can take more information. It is rather advantages for you. The reserve Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Control, Vol. II, 4th Edition: Approximate Dynamic Programming is not only giving you far more new information but also to be your friend when you truly feel bored. You can spend your current spend time to read your reserve. Try to make relationship using the book Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming. You never really feel lose out for everything if you read some books.

Tommy Heckman:

Here thing why this particular Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming are different and trustworthy to be yours. First of all reading through a book is good but it really depends in the content from it which is the content is as delightful as food or not. Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming giving you information deeper since different ways, you can find any guide out there but there is no guide that similar with Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming. It gives you thrill examining journey, its open up your own eyes about the thing this happened in the world which is maybe can be happened around you. You can actually bring everywhere like in area, café, or even in your means home by train. If you are having difficulties in bringing the printed book maybe the form of Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming in e-book can be your option.

Freddie Valdez:

Now a day individuals who Living in the era just where everything reachable by connect with the internet and the resources inside it can be true or not call for people to be aware of each data they get. How individuals to be smart in acquiring any information nowadays? Of course the answer then is reading a book. Reading through a book can help individuals out of this uncertainty Information specifically this Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming book because this book offers you rich information and knowledge. Of course the info in this book hundred percent guarantees there is no doubt in it you may already know.

Tanya Caggiano:

Do you like reading a e-book? Confuse to looking for your preferred book? Or your book ended up being rare? Why so many query for the book? But almost any people feel that they enjoy regarding reading. Some

people likes examining, not only science book but in addition novel and Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming as well as others sources were given information for you. After you know how the good a book, you feel need to read more and more. Science publication was created for teacher or perhaps students especially. Those publications are helping them to add their knowledge. In some other case, beside science e-book, any other book likes Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming to make your spare time more colorful. Many types of book like this one.

Download and Read Online Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming Dimitri P. Bertsekas #7F46ROS8IZB

Read Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas for online ebook

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas books to read online.

Online Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas ebook PDF download

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas Doc

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas Mobipocket

Dynamic Programming and Optimal Control, Vol. II, 4th Edition: Approximate Dynamic Programming by Dimitri P. Bertsekas EPub