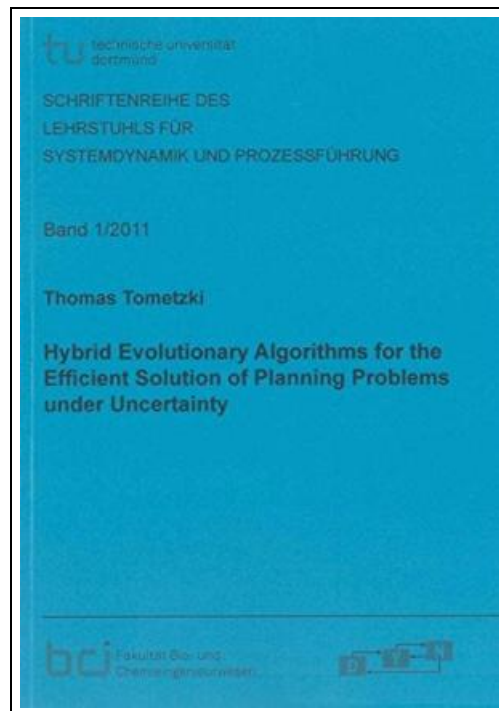


Hybrid Evolutionary Algorithms for the Efficient Solution of Planning Problems under Uncertainty



Filesize: 7.01 MB

Reviews

I actually started out looking at this publication. It normally is not going to cost too much. I am just happy to let you know that this is basically the finest publication i have got read through within my very own life and may be he very best publication for possibly.
(Karelle Rippin)

HYBRID EVOLUTIONARY ALGORITHMS FOR THE EFFICIENT SOLUTION OF PLANNING PROBLEMS UNDER UNCERTAINTY

[DOWNLOAD](#)

To get **Hybrid Evolutionary Algorithms for the Efficient Solution of Planning Problems under Uncertainty** PDF, you should access the web link listed below and download the ebook or get access to additional information which are highly relevant to **HYBRID EVOLUTIONARY ALGORITHMS FOR THE EFFICIENT SOLUTION OF PLANNING PROBLEMS UNDER UNCERTAINTY** book.

Shaker Verlag Aug 2011, 2011. Taschenbuch. Condition: Neu. Neuware - An important aspect of real-world planning problems is the presence of uncertainty in the problem data. The information and decision structure of planning under uncertainty enables recourse actions which correct the here-and-now decisions. This situation is reflected by a recourse model with a finite number of uncertainty scenarios in the form of a two-stage stochastic mixed-integer linear program. A stage decomposition based hybrid evolutionary algorithm employs an evolutionary algorithm to determine the here-and-now decisions and a standard mathematical method to optimize the recourse decisions. Empirical investigations exhibit that for problems with a high number of scenarios the hybrid algorithm generates good feasible solutions more quickly than a state-of-the-art exact algorithm. New systematic initialization techniques for the evolutionary algorithms are proposed which exploit the two-stage stochastic mixed-integer linear program in a preprocessing step. Three initialization approaches are presented which generate solutions of different quality in different preprocessing times. Two approaches are based on solutions of integer relaxations of the corresponding two-stage stochastic mixed-integer linear program. While the first approach uses the integer relaxation of all decisions, the second approach is based on integer relaxation of all recourse decisions only. The third initialization method uses the solution obtained by solving the so-called expected value problem. Numerical experiments show that the new initialization methods significantly improve the results in terms of faster convergence to solutions with better objective values. A search space analysis for a case study shows that complex constraints and disjunctive decisions can lead to solution spaces of the evolutionary algorithm which consist of many disjoint polyhedral subsets. From the analysis it is concluded that generic evolutionary algorithms are not suitable for search spaces with disjoint subsets of feasible solutions. The evolution of the population sometimes stagnates at solutions which are not satisfactory...

[Read Hybrid Evolutionary Algorithms for the Efficient Solution of Planning Problems under Uncertainty Online](#)[Download PDF Hybrid Evolutionary Algorithms for the Efficient Solution of Planning Problems under Uncertainty](#)

Other Books



[PDF] The Case for the Resurrection: A First-Century Investigative Reporter Probes History's Pivotal Event

Follow the link under to download and read "The Case for the Resurrection: A First-Century Investigative Reporter Probes History's Pivotal Event" PDF file.

[Save](#) [Book](#)

»



[PDF] Carrying the King's Pride

Follow the link under to download and read "Carrying the King's Pride" PDF file.

[Save](#) [Book](#)

»



[PDF] The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

Follow the link under to download and read "The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)" PDF file.

[Save](#) [Book](#)

»



[PDF] TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)

Follow the link under to download and read "TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)" PDF file.

[Save](#) [Book](#)

»



[PDF] TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)

Follow the link under to download and read "TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)" PDF file.

[Save](#) [Book](#)

»



[PDF] Genuine book Oriental fertile new version of the famous primary school enrollment program: the intellectual development of pre-school Jiang(Chinese Edition)

Follow the link under to download and read "Genuine book Oriental fertile new version of the famous primary school enrollment program: the intellectual development of pre-school Jiang(Chinese Edition)" PDF file.

[Save](#) [Book](#)

»