



R - Heaps with Suspended Relaxation for Manipulating Priority Queues and a New Algorithm for Reweighting Graphs

By Ruth Shrairman

DISSERTATION.COM, United States, 2004. Paperback. Book Condition: New. 244 x 186 mm. Language: English Brand New Book ****** Print on Demand *****. This research is dedicated to two main problems in finding shortest paths in the graphs. The first problem is to find shortest paths from an origin to all other vertices in non-negatively weighted graph. The second problem is the same, except it is allowed that some edges are negative. This is a more difficult problem that can be solved by relatively complicated algorithms. We attack the first problem by introducing a new data structure - Relaxed Heaps that implements efficiently two main operations critical for the improvement of Dijkstra s shortest path algorithm. R2-heaps with suspended relaxation proposed in this research gives the best known worst-case time bounds of O(1) for a decrease key operation and O(logn) for a delete min operation. That results in the best worst-case running time for Dijkstra's algorithm O(m+nlogn), and represents an improvement over Fibonacci Heaps, which give the same, but amortized time bounds. The new data structure is simple and efficient in practical implementation. The empirical study with R2-heaps demonstrated strong advantage of its use for Dijkstra's algorithm over the raw...



Reviews

I actually began reading this article book. It is actually filled with wisdom and knowledge I realized this pdf from my i and dad recommended this publication to learn.

-- Rhea Toy

Very useful to all group of folks. This really is for all who statte there was not a worthy of reading. I am very happy to explain how this is the best pdf i have study inside my personal life and can be he greatest book for actually.

-- Marcelle Homenick

You May Also Like



Weebies Family Halloween Night English Language: English Language British Full Colour

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Children's Weebies Family Halloween Night Book 20 starts to teach Pre-School and Junior Children how to read with this...



What Do You Expect? Shes a Teenager!: A Hope and Happiness Guide for Moms with Daughters Ages 11-19

Sourcebooks, Inc, United States, 2011. Paperback. Book Condition: New. 208 x 140 mm. Language: English . Brand New Book. If your little girl has suddenly turned into one big eye roll, then Arden Greenspan-Goldberg s What Do You Expect? She's a...



Read Write Inc. Phonics: Grey Set 7 Non-Fiction 2 a Flight to New York

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 213 x 98 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books is carefully levelled to match childrens growing...



A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half

Createspace, United States, 2014. Paperback. Book Condition: New. 251 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****. The ultimate learn-by-doing approach Written for beginners, useful for experienced developers who want to sharpen their skills and dont mind...



Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition)

SAGE Publications Ltd. Paperback. Book Condition: new. BRAND NEW, Environments for Outdoor Play: A Practical Guide to Making Space for Children (New edition), Theresa Casey, 'Theresa's book is full of lots of inspiring, practical, 'how to go about it ideas' coupled with...



Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner's Crochet Guide with Pictures)

 $Create space, United States, 2015.\ Paperback.\ Book\ Condition: New.\ 229\ x\ 152\ mm.\ Language: English.\ Brand\ New\ Book\ ***** Print\ on\ Demand\ ******. Getting\ Your\ FREE\ Bonus\ Download\ this\ book,\ read\ it\ to\ the\ end\ and\ see\ BONUS:\ Your\ FREE\ Gift\ chapter\ after...$