



Efficient Synchronization on Multiprocessors with Shared Memory (Classic Reprint)

By Clyde P Kruskal

Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Excerpt from Efficient Synchronization on Multiprocessors With Shared Memory Shared memory provides convenient communication between processes in a tightly coupled multiprocessing system. Shared variables can be used for data sharing, information transfer between processes, and, in particular, for coordination and synchronization. Constructs such as the semaphore introduced by Dijkstra inDi, and the many variants that followed, provide convenient solutions to many synchronization problems involving arbitrary number of processes. These constructs are supported in hardware by machine instructions that atomically execute a Read-Modify-Write cycle. Such instructions exist on most modern CPUs. An atomic Read-Modify-Write operation only requires that it be semantically atomic, although it is often processed atomically also. The serial bottleneck created by this atomic processing, while acceptable for small scale parallelism, can seriously impair the performance of a system with thousands of processors. Frequent accesses to a shared variable not only slow down those processes performing the access, but may cause the entire machine to thrash. Large-scale shared memory parallel processors are likely to use multistage packet switched interconnection networks for processor to memory traffic. These...

Reviews

Definitely among the best book I have got possibly study. I am quite late in start reading this one, but better then never. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Olga Ledner MD

Complete guide for publication enthusiasts. I have read and i am sure that i will going to study again once again in the future. Your way of life period will be transform once you total looking over this publication.

-- Shayne O'Conner

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Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book. An epic war has broken out and NO ONE IS SAFE! Byhaven was once a peaceful city, but that all changed when the war...



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Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 172 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It is based on Oxford Reading Tree which...



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Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 215×108 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...



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Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****. Excerpt from The Sunday Kindergarten Game Gift and Story: A Manual for Use in the Sunday, Schools and in...



Hope for Autism: 10 Practical Solutions to Everyday Challenges

Seaborough Enterprises Publishing, United States, 2015. Paperback. Book Condition: New. Initial ed.. 203 x 127 mm. Language: English . Brand New Book ***** Print on Demand *****. Hope for Autism: 10 Practical Solutions to Everyday Challenges, provides answers to the many questions...



Hurry Up and Slow Down

Oxford University Press. Paperback. Book Condition: new. BRAND NEW, Hurry Up and Slow Down, Layn Marlow, Hare is always raring to go. He races through the day while the everpatient Tortoise does his best to keep up. Hare, it certainly seems to...