Patterns for Parallel Programming (Software Patterns Series)

Von Timothy G. Mattson, Beverly Sanders, Berna Massingill
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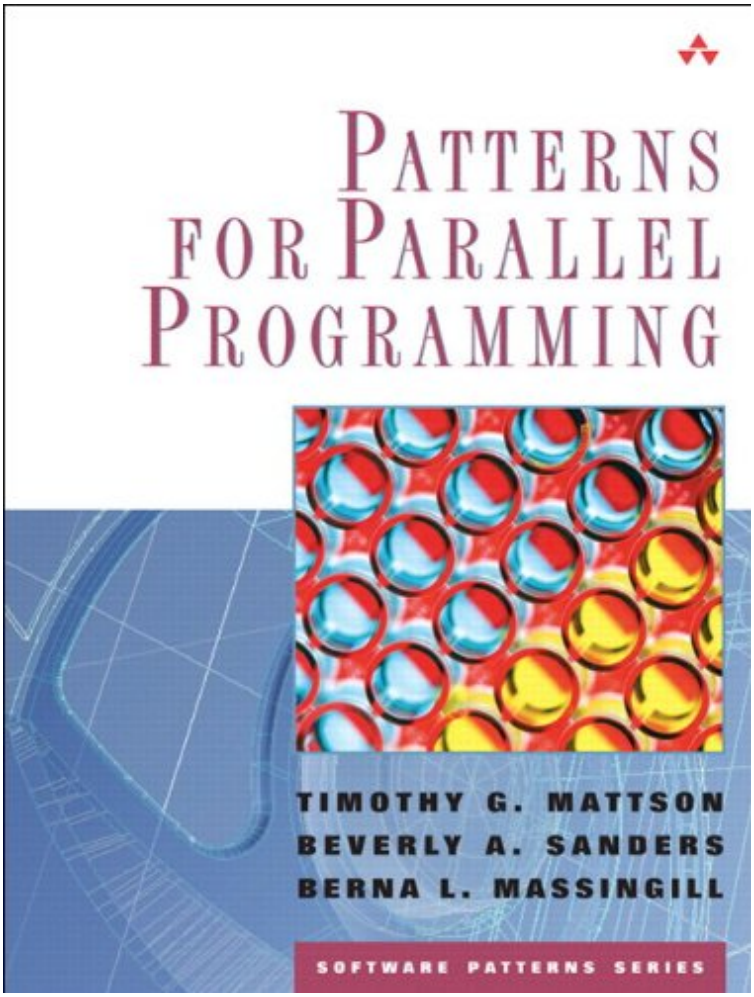

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Von Timothy G. Mattson, Beverly Sanders, Berna Massingill : Patterns for Parallel Programming (Software Patterns Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Patterns for Parallel Programming (Software Patterns Series):

KundenrezensionenHilfreichste Kundenrezensionen4 von 4 Kunden fanden die folgende Rezension hilfreich. an inspiring bookVon SwaegarThe book offers a sound introduction to parallel programming and parallel programming patterns. It is useful for a programmer and a designer who tackles parallel programming or parallel programme design. Especially it eases the first steps. The given source/pseudo code examples extensively complement the theoretical consideration. For me, the level of detail was sometimes too fine, as examples are even given in OpenMP, MPI and/or Java. For experienced developers this is even more the case. Nevertheless, the book provides a collection of the most common parallel programming patterns that are useful for experienced developers and programme designers.From my

perspective some minor issues that prevent a perfect "five" are: On the one hand I had the impression that the content of this book could be sharper. There is some redundant information within the book. Also some negligible information like the almost one page table 2.1. that lists "some parallel programming environments from the Mid-1990s". On the other hand I'd would have liked to read more about the differences between similar patterns.It is an inspiring book inspite or because of some negligible flaws.2 von 2 Kunden fanden die folgende Rezension hilfreich. Empfehlenswert als NachschlagewerkVon Jrn DinklaDie Autoren haben sich die Mhe gemacht, eine Art umfassende Anleitung fr die Erstellung von paralleler Software zu entwickeln. Dieses ist ein schwieriges Unterfangen, weil bei der Erstellung von parallelen Programmen sehr viele Punkte bercksichtigt werden mssen. Dementsprechend knnen auch nicht alle Aspekte bercksichtigt werden. Aber im Groen und Ganzen ist das Buch sehr ntzlich.Ausgangspunkt ist ein sequentielles Programm, das in vier Schritten in ein Paralleles umgeformt wird. Als Plattformen werden OpenMP, MPI und Java 2 1.5 benutzt. Jede Platform wird in einem eigenen Kapitel im Anhang kurz vorgestellt. Dass das Buch schon ein wenig lter ist, ist nicht so schlimm.Die Autoren haben eine praktische Sammlung von Patterns zusammengestellt. Es tauchen auch evtl. schon bekannte Patterns, wie Master/Worker oder Fork/Join auf. Aufgrund des Umfangs gibt es aber hchstwahrscheinlich auch fr fortgeschrittene parallele Programmierer viel Neues zu entdecken.Das Buch hat allerdings ein Problem: Es ist nicht einfach, es von Anfang bis Ende durchzulesen. Dieses hat seinen Grund in der Anordnung des Stoffes. Jeder der vier Schritte wird in einem eigenen Kapitel behandelt. Jedes dieser Kapitel enthlt dann alle Teilschritte, Mglichkeiten und Beispiele. Jedes Beispiel wird also nur Schritt-fr-Schritt mit Unterbrechungen behandelt. Dieses strt den Lesefluss.Das Buch ist nicht fr Anfnger der parallelen Programmierung geeignet. Man sollte schon ein paar Erfahrungen gemacht haben, um die Patterns nachvollziehen zu knnen.Als Nachschlagewerk ist das Buch allerdings hervorragend geeignet. Jeder parallele Programmierer sollte den Inhalt des Buches kennen.0 von 0 Kunden fanden die folgende Rezension hilfreich. sehr zu empfehlenVon M. LckeGerade zum Einstieg in die Welt des parallelen Programmierens sehr zu empfehlen. Behandelt werden verschiedene gelufige Technicken zur Funktionalen und Domain-Untertailenden Parallelisierung. Eher was fr Scientific Software Development (Richtung MPI/OpenMP), eher nicht fr Anwendersoftware (Serveranwendungen, Java), aber diese Grundlagen knnen niemandem Schaden. Sehr anschaulich beschrieben.

Kurzbeschreibung The Parallel Programming Guide for Every Software Developer From grids and clusters to next-generation game consoles, parallel computing is going mainstream. Innovations such as Hyper-Threading Technology, HyperTransport Technology, and multicore microprocessors from IBM, Intel, and Sun are accelerating the movement's growth. Only one thing is missing: programmers with the skills to meet the soaring demand for parallel software. That's where Patterns for Parallel Programming comes in. It's the first parallel programming guide written specifically to serve working software developers, not just computer scientists. The authors introduce a complete, highly accessible pattern language that will help any experienced developer "think parallel"-and start writing effective parallel code almost immediately. Instead of formal theory, they deliver proven solutions to the challenges faced by parallel programmers, and pragmatic guidance for using today's parallel APIs in the real world. Coverage includes: Understanding the parallel computing landscape and the challenges faced by parallel developers Finding the concurrency in a software design problem and decomposing it into concurrent tasks Managing the use of data across tasks Creating an algorithm structure that effectively exploits the concurrency you've identified Connecting your algorithmic structures to the APIs needed to implement them Specific software constructs for implementing parallel programs Working with today's leading parallel programming environments: OpenMP, MPI, and Java Patterns have helped thousands of programmers master object-oriented development and other complex programming technologies. With this book, you will learn that they're the best way to master parallel programming too. Kurzbeschreibung The Parallel Programming Guide for Every Software Developer From grids and clusters to next-generation game consoles, parallel computing is going mainstream. Innovations such as Hyper-Threading Technology, HyperTransport Technology, and multicore microprocessors from IBM, Intel, and Sun are accelerating the movement's growth. Only one thing is missing: programmers with the skills to meet the soaring demand for parallel software. That's where Patterns for Parallel Programming comes in. It's the first parallel programming guide written specifically to serve working software developers, not just computer scientists. The authors introduce a complete, highly accessible pattern language that will help any experienced developer "think parallel"-and start writing effective parallel code almost immediately. Instead of formal theory, they deliver proven solutions to the challenges faced by parallel programmers, and pragmatic guidance for using today's parallel APIs in the real world. Coverage includes: Understanding the parallel computing landscape and the challenges faced by parallel developers Finding the concurrency in a software design problem and decomposing it into concurrent tasks Managing the use of data across tasks Creating an algorithm structure that effectively exploits the concurrency you've identified Connecting your algorithmic structures to the APIs needed to implement them Specific software constructs for implementing parallel programs Working with today's leading parallel programming environments: OpenMP, MPI, and Java Patterns have helped thousands of programmers

master object-oriented development and other complex programming technologies. With this book, you will learn that they're the best way to master parallel programming too. Synopsis The Parallel Programming Guide for Every Software Developer From grids and clusters to next-generation game consoles, parallel computing is going mainstream. Innovations such as Hyper-Threading Technology, HyperTransport Technology, and multicore microprocessors from IBM, Intel, and Sun are accelerating the movement's growth. Only one thing is missing: programmers with the skills to meet the soaring demand for parallel software. That's where Patterns for Parallel Programming comes in. It's the first parallel programming guide written specifically to serve working software developers, not just computer scientists. The authors introduce a complete, highly accessible pattern language that will help any experienced developer "think parallel"-and start writing effective parallel code almost immediately. Instead of formal theory, they deliver proven solutions to the challenges faced by parallel programmers, and pragmatic guidance for using today's parallel APIs in the real world.Coverage includes: *Understanding the parallel computing landscape and the challenges faced by parallel developers*Finding the concurrency in a software design problem and decomposing it into concurrent tasks*Managing the use of data across tasks*Creating an algorithm structure that effectively exploits the concurrency you've identified*Connecting your algorithmic structures to the APIs needed to implement them*Specific software constructs for implementing parallel programs*Working with today's leading parallel programming environments: OpenMP, MPI, and Java Patterns have helped thousands of programmers master object-oriented development and other complex programming technologies.With this book, you will learn that they're the best way to master parallel programming too. 0321228111B08232004