

# Seven Concurrency Models in Seven Weeks

The Pragmatic  
Programmers

## Seven Concurrency Models in Seven Weeks When Threads Unravel



**Paul Butcher**

Series editor: Bruce A. Tate  
Development editor: Jacquelyn Carter

[Seven Concurrency Models in Seven Weeks\\_下载链接1](#)

著者:Paul Butcher

出版者:Pragmatic Bookshelf

出版时间:2014-6-30

装帧:Paperback

isbn:9781937785659

Your software needs to leverage multiple cores, handle thousands of users and terabytes of data, and continue working in the face of both hardware and software failure. Concurrency and parallelism are the keys, and *Seven Concurrency Models in Seven Weeks* equips you for this new world. See how emerging technologies such as actors and functional programming address issues with traditional threads and locks

development. Learn how to exploit the parallelism in your computer's GPU and leverage clusters of machines with MapReduce and Stream Processing. And do it all with the confidence that comes from using tools that help you write crystal clear, high-quality code. This book will show you how to exploit different parallel architectures to improve your code's performance, scalability, and resilience. Learn about the perils of traditional threads and locks programming and how to overcome them through careful design and by working with the standard library. See how actors enable software running on geographically distributed computers to collaborate, handle failure, and create systems that stay up 24/7/365. Understand why shared mutable state is the enemy of robust concurrent code, and see how functional programming together with technologies such as Software Transactional Memory (STM) and automatic parallelism help you tame it. You'll learn about the untapped potential within every GPU and how GPGPU software can unleash it. You'll see how to use MapReduce to harness massive clusters to solve previously intractable problems, and how, in concert with Stream Processing, big data can be tamed. With an understanding of the strengths and weaknesses of each of the different models and hardware architectures, you'll be empowered to tackle any problem with confidence. What You Need: The example code can be compiled and executed on \*nix, OS X, or Windows. Instructions on how to download the supporting build systems are given in each chapter.

作者介绍:

Paul Butcher

资深程序员，涉猎广泛，从单片机编码到高级声明式编程无所不精。Paul是一位少年天才，8岁时就已经开始在8位机上编写游戏。最近几年他开始痴迷于赛车，想要去叫板汉密尔顿。除本书外，还著有在亚马逊获得全五星好评的《软件调试修炼之道》。

黄炎 现供职于上海爱可生，从事数据库高可用软件开发。简介和代码一样简洁。

目录:

[Seven Concurrency Models in Seven Weeks 下载链接1](#)

标签

Concurrency

并发

Programming

计算机

编程

programming

软件开发

concurrency

## 评论

发现书不是很好，讲代码花费了太多时间，应该直接介绍概念（图），然后再讲代码。当然对于想实际写代码的人来说有帮助。

-----  
this book is just to get you wet. refer to other resources to delve deep

-----  
Thread Functional Actor Channel GPU MapReduce

-----  
seven in seven这个系列真是鸡肋，不如按着章节标题写一篇综述文章

-----  
感觉这些才是可以修炼内功的东西

-----  
科普一下自己

-----  
5个通用模式外加2个专用模式。本来是奔着csp去的，结果没用go讲,用clojure讲的

-----  
都是浅尝辄止，讲太多语言相关的东西了

-----  
太粗浅了。

-----  
不知道是作者写作抽象能力不行还是出版要求所致，这本书至少有2/3的内容是废话。真正有用的concept，抽出来差不多也就几篇普通博客文章的长度，剩下的代码示例，作用聊胜于无。actor部分还不如 <http://bit.ly/2IGb7tH> 这篇文章；另外作者你热衷clojure我懂，但是讲CSP还要用clojure做范例也太夹带私货了，先不说go，单从chromium里抽一个实现出来分析都比这个好。总结起来就是，这书的内容结构和定位严重不符，让人看起来莫名其妙。听说7-week系列都是一个德行，看来以后可以直接跳过了。

-----  
浅尝辄止，看完concurrency in Go，以及普渡大学的一个concurrency课程主页之后，这类入门书看起来觉得很不过瘾

-----  
点到为止的书，学了一堆专有名词：clojure居然自带STM，go的csp太酷了，玩gpu是外星程序员，lambda arch很好（kappa才是方向？ES/CQRS算是微服务里面的lambda arch，lambda arch算是big data里面的ES），居然没有FRP。

-----  
太宽泛和浅显，不要对这本书期望太高，只适合科普和扫盲

-----  
大概了解了几种模型

-----  
只能当做一个glance

-----  
Better than Seven Languages in Seven Weeks.

-----  
已弃疗。

-----  
还有个附加pdf actor in scala

-----  
[Seven Concurrency Models in Seven Weeks\\_ 下载链接1](#)

## 书评

刚看完Thread and locks章节，感觉非常有收获。作为java水平停留在thinking in java的人，没想到java的并发控制竟然还有这么多学问，这些知识在网上往往是分散的不全面的，在此书中进行了整理对比。相信其他的章节也能带来同样的收获。

-----  
## chap3 函数式编程 - clojure可以将串行操作并行化，使用clojure.core.reducers包 - 具有引用透明性的函数可以进行数据流（dataflow）式编程，使代码在其依赖的数据准备好时再运行 ## chap4 分离标识（identity）和状态（state） - 持久数据结构使用了共享结构（有点类似git...

-----  
[Seven Concurrency Models in Seven Weeks\\_ 下载链接1](#)