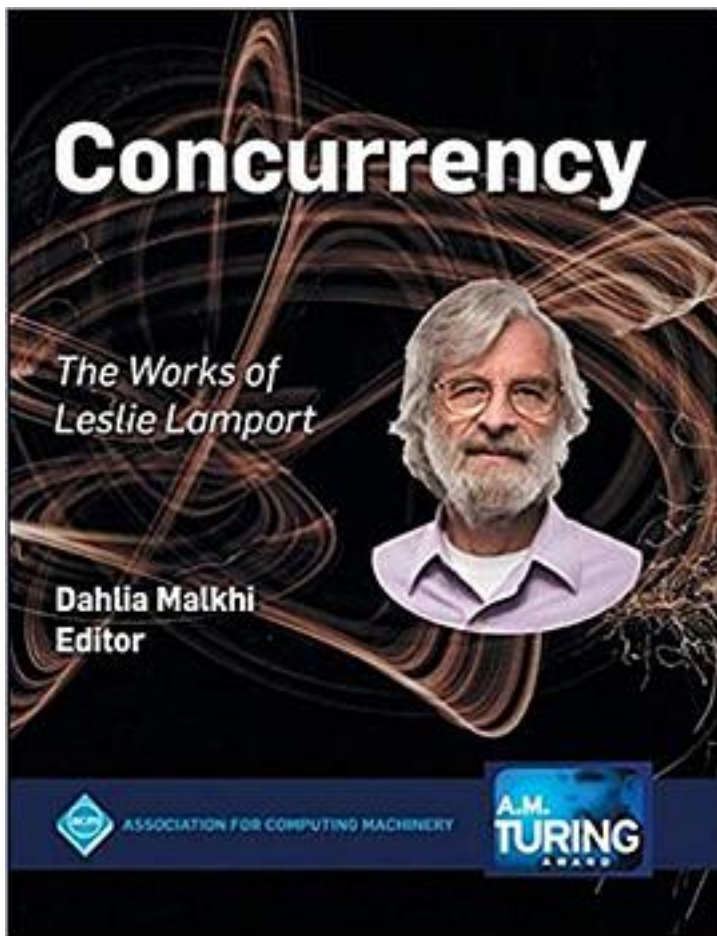


# Concurrency



[Concurrency\\_ 下载链接1](#)

著者:Jeff Magee

出版者:Wiley

出版时间:2006-6-16

装帧:Hardcover

isbn:9780470093559

Concurrency provides a thoroughly updated approach to the basic concepts and techniques behind concurrent programming. Concurrent programming is complex and demands a much more formal approach than sequential programming. In order

to develop a thorough understanding of the topic Magee and Kramer present concepts, techniques and problems through a variety of forms: informal descriptions, illustrative examples, abstract models and concrete Java examples. These combine to provide problem patterns and associated solution techniques which enable students to recognise problems and arrive at solutions. New features include: \* New chapters covering program verification and logical properties. \* More student exercises. \* Supporting website contains an updated version of the LTSA tool for modelling concurrency, model animation, and model checking. \* Website also includes the full set of state models, java examples, and demonstration programs and a comprehensive set of overhead slides for course presentation.

作者介绍:

目录: Preface  
Acknowledgments  
1 Introduction  
1.1 Concurrent Programs  
1.2 The Modeling Approach  
1.3 Practice  
1.4 Content Overview  
Summary  
Notes and Further Reading  
2 Processes and Threads  
2.1 Modeling Processes  
2.2 Implementing Processes  
Summary  
Notes and Further Reading  
Exercises  
3 Concurrent Execution  
3.1 Modeling Concurrency  
3.2 Multi-Threaded Programs  
Summary  
Notes and Further Reading  
Exercises  
4 Shared Objects and Mutual Exclusion  
4.1 Interference  
4.2 Mutual Exclusion in Java  
4.3 Modeling Mutual Exclusion  
Summary  
Notes and Further Reading  
Exercises  
5 Monitors and Condition Synchronization  
5.1 Condition Synchronization  
5.2 Semaphores  
5.3 Bounded Buffers  
5.4 Nested Monitors  
5.5 Monitor Invariants  
Summary  
Notes and Further Reading  
Exercises  
6 Deadlock  
6.1 Deadlock Analysis

6.2 Dining Philosophers Problem  
Summary  
Notes and Further Reading  
Exercises  
7 Safety and Liveness Properties  
7.1 Safety  
7.2 Single-Lane Bridge Problem  
7.3 Liveness  
7.4 Liveness of the Single-Lane Bridge  
7.5 Readers–Writers Problem  
Summary  
Notes and Further Reading  
Exercises  
8 Model-Based Design  
8.1 From Requirements to Models  
8.2 From Models to Implementation  
Summary  
Notes and Further Reading  
Exercises  
9 Dynamic Systems  
9.1 Golf Club Program  
9.2 Golf Club Model  
9.3 Fair Allocation  
9.4 Revised Golf Ball Allocator  
9.5 Bounded Overtaking  
9.6 Bounded Overtaking Golf Ball Allocator  
9.7 Master–Slave Program  
9.8 Master–Slave Model  
Summary  
Notes and Further Reading  
Exercises  
10 Message Passing  
11 Concurrent Architectures  
12 Timed Systems  
13 ihl Program Verification  
14 Logical Properties  
Appendix A: FSP Quick Reference  
Appendix B: FSP Language Specification  
Appendix C: FSP Semantics  
Appendix D: UML Class Diagrams  
Bibliography  
Index  
• • • • • ([收起](#))

[Concurrency\\_ 下载链接1](#)

标签

并行计算

计算机

java

进程演算

编程

建模

分布式计算

分布式

评论

-----  
[Concurrency\\_下载链接1](#)

书评

-----  
[Concurrency\\_下载链接1](#)