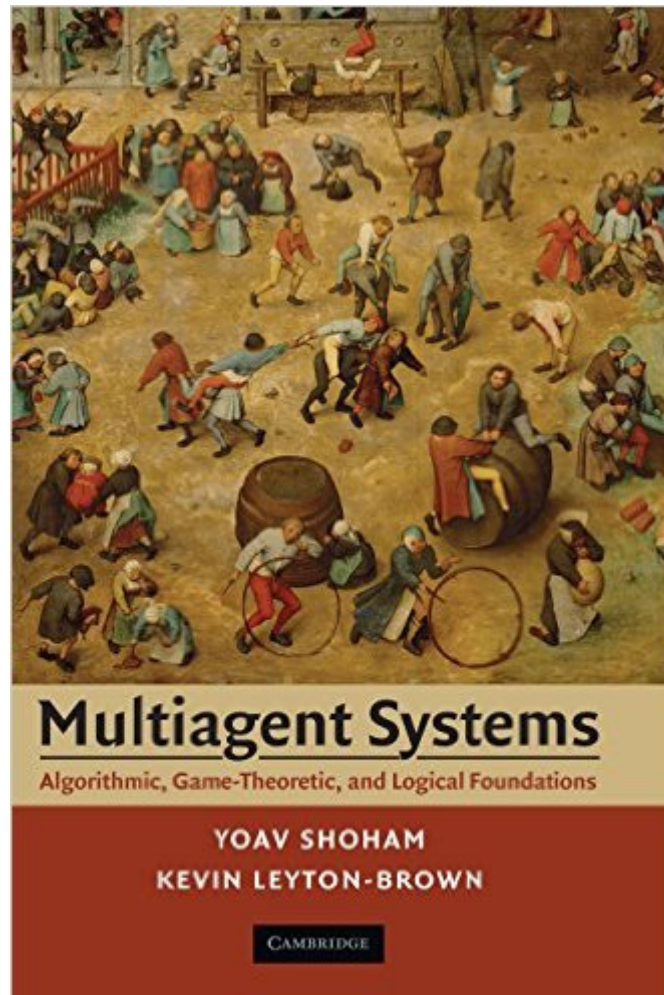


The book was found

# Multiagent Systems: Algorithmic, Game-Theoretic, And Logical Foundations



## Synopsis

This exciting and pioneering new overview of multiagent systems, which are online systems composed of multiple interacting intelligent agents, i.e., online trading, offers a newly seen computer science perspective on multiagent systems, while integrating ideas from operations research, game theory, economics, logic, and even philosophy and linguistics. The authors emphasize foundations to create a broad and rigorous treatment of their subject, with thorough presentations of distributed problem solving, game theory, multiagent communication and learning, social choice, mechanism design, auctions, cooperative game theory, and modal logics of knowledge and belief. For each topic, basic concepts are introduced, examples are given, proofs of key results are offered, and algorithmic considerations are examined. An appendix covers background material in probability theory, classical logic, Markov decision processes and mathematical programming. Written by two of the leading researchers of this engaging field, this book will surely serve as THE reference for researchers in the fastest-growing area of computer science, and be used as a text for advanced undergraduate or graduate courses.

## Book Information

Hardcover: 504 pages

Publisher: Cambridge University Press; 1 edition (December 15, 2008)

Language: English

ISBN-10: 0521899435

ISBN-13: 978-0521899437

Product Dimensions: 7 x 1.1 x 10 inches

Shipping Weight: 2.2 pounds (View shipping rates and policies)

Average Customer Review: 4.3 out of 5 stars [See all reviews](#) (10 customer reviews)

Best Sellers Rank: #344,534 in Books (See Top 100 in Books) #31 in [Books > Computers & Technology > Computer Science > AI & Machine Learning > Natural Language Processing](#) #84 in [Books > Science & Math > Evolution > Game Theory](#) #91 in [Books > Textbooks > Computer Science > Artificial Intelligence](#)

## Customer Reviews

This book is a fantastic introduction to game theory where the authors are cleverly worried about the algorithms used to solve the problems. Therefore, it provides a great link among computer science, economic theory and operational research. The structure of the book is based on very clear definitions, elucidating examples and theorems (not all proved, but several ones are proved). A

great point of the book is the updated list of references in the last section of each chapter that can help the interested reader find additional information about each topic being taught in the book. Chapter 1 introduces the problem of Distributed constraint satisfaction that will be used later in the book to compute the Nash equilibrium. Chapter 2 is a basic introduction to dynamic programming and auction theory. Chapters 3, 4 and 5 provide an introduction to decision theory and basic game theory. The bonus of these chapters is the list of algorithms that are presented in order to compute the equilibriums. It is worth mentioning that these chapters are as good as the best available introductions to game theory. All the basic topics are clearly covered. Chapter 6 presents more specific representations of games. Some of them are very common in other books (such as Repeated games and Bayesian games), but others (such as congestion games) are not very common. Chapter 7 deals with learning and teaching.

[Download to continue reading...](#)

Multiagent Systems: Algorithmic, Game-Theoretic, and Logical Foundations A Logical First Step: A DIY Primer on Logical Reasoning Model Selection and Multimodel Inference: A Practical Information-Theoretic Approach A User's Guide to Measure Theoretic Probability (Cambridge Series in Statistical and Probabilistic Mathematics) Algorithmic Game Theory Twenty Lectures on Algorithmic Game Theory Data Structures and Algorithms Made Easy: Data Structure and Algorithmic Puzzles Data Structures and Algorithms Made Easy in Java: Data Structure and Algorithmic Puzzles Common Liver Diseases and Transplantation: An Algorithmic Approach to Work Up and Management Machine Learning: An Algorithmic Perspective, Second Edition (Chapman & Hall/Crc Machine Learning & Pattern Recognition) Algorithmic Puzzles Common Surgical Diseases: An Algorithmic Approach to Problem Solving Hierarchical Decision Making in Stochastic Manufacturing Systems (Systems & Control: Foundations & Applications) Foundations of Museum Studies: Evolving Systems of Knowledge: Evolving Systems of Knowledge What Is the Name of This Book?: The Riddle of Dracula and Other Logical Puzzles (Dover Recreational Math) Como Se Llama Este Libro / What is the Name of this Book?: El Enigma de Dracula y Otros Pasatiempos Logicos / The Riddle of Dracula and other Logical Puzzles (Teorema / Theorem) (Spanish Edition) Mastering Logical Fallacies: The Definitive Guide to Flawless Rhetoric and Bulletproof Logic Mastering Logical Fallacies: How to Win Arguments and Refute Misleading Logic The Fox LSAT Logical Reasoning Encyclopedia: Or: Disrespecting the LSAT Logical Chess: Move By Move: Every Move Explained New Algebraic Edition

[Dmca](#)