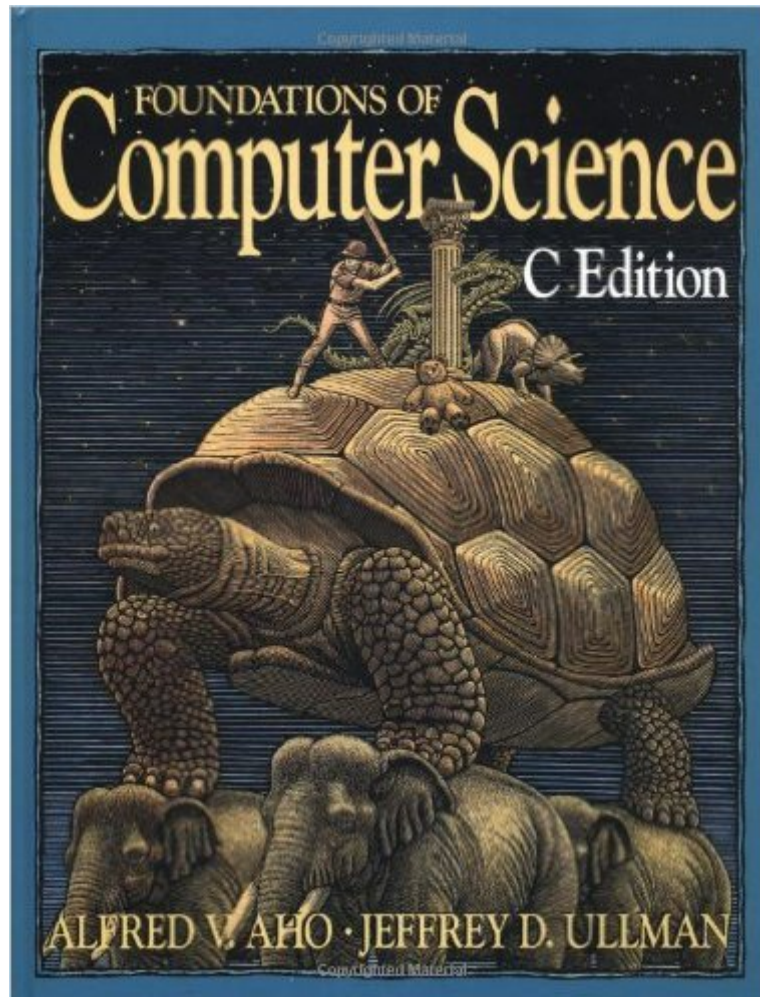# Foundations Of Computer Science: C Edition (Principles Of Computer Science Series)

Synopsis

This text combines the theoretical foundations of computing with essential discrete mathematics. It follows the same organization as its predecessor, Foundations of Computer Science (also published by W.H. Freeman), with all examples and exercises in C.

Book Information

Series: Principles of Computer Science Series

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Average Customer Review: 4.5 out of 5 starsÂ Â See all reviewsÂ (17 customer reviews)

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Customer Reviews

I've studied a lot of theoretical computer science and mathematics. I've been studying the "MMIXware: A RISC Computer for the Third Millennium" by Knuth, and the MMIX processor is implemented in C. I don't know C well, and I'm still learning to "code", so I have been looking for a book that discusses both. I ultimately ended up going with "C Programming: A Modern Approach, 2nd Edition". It's highly informal and verbose. None of the examples have any depth to them. There are no proofs.I then went with "Algorithms in C" by Sedgewick. There is depth there, but still verbose. In most cases this book's a great reference when I'm stuck understanding something in "The Art of Computer Programming". There are few proofs in "Algorithms in C". I know Sedgewick is world-class though, and that he's "dumbed down" his "algorithms" books; so much content regarding some topics is omitted, and the explanations are usually missing a lot. I know this because Sedgewick's definitions usually contain much less information than Knuth's when discussing topics both cover. His other two books are highly proof-based and outstanding, but neither deal explicitly with C. ("Analytic Combinatorics" and "An Introduction to the Analysis of

Algorithms".)This book is a perfect blend of theory and implementation. The reader is introduced to inductive proofs, predicate logic, regular expressions, probability, combinatorics, etc.After purchasing or perusing many other introductory programming books, this is the best one. None of the contemporary introductory programming books I've browsed through match the depth or breadth of this book. Not even close. It's great to see programs written by masters, too.

Foundations of Computer Science: C Edition (Principles of Computer Science Series) Logic for Computer Science: Foundations of Automatic Theorem Proving, Second Edition (Dover Books on Computer Science) HACKING: Beginner's Crash Course - Essential Guide to Practical: Computer Hacking, Hacking for Beginners, & Penetration Testing (Computer Systems, Computer Programming, Computer Science Book 1) Face Image Analysis by Unsupervised Learning (The Kluwer International Series in Engineering and Computer Science, Volume 612) (The Springer International Series in Engineering and Computer Science) Study Guide for Foundations of Maternal-Newborn and Women's Health Nursing, 6e (Murray, Study Guide for Foundations of Maternal-Newborn & Women's Health Nursing) Foundations of Set Theory (Studies in Logic and the Foundations of Mathematics) Mathematics and Computer Science in Medical Imaging (Nato a S I Series Series III, Computer and Systems Sciences) Computability, Complexity, and Languages, Second Edition: Fundamentals of Theoretical Computer Science (Computer Science and Scientific Computing) The Complete Works of Herbert Spencer: The Principles of Psychology, The Principles of Philosophy, First Principles and More (6 Books With Active Table of Contents) Foundations of Analog and Digital Electronic Circuits (The Morgan Kaufmann Series in Computer Architecture and Design) Computer Architecture: Fundamentals and Principles of Computer Design Introduction to Computer Organization and Data Structures, Pdp-11 Edition (McGraw-Hill computer science series) Principles of Compiler Design (Addison-Wesley series in computer science and information processing) Discover Delphi: Programming Principles Explained (International Computer Science Series) Principles and Foundations of Health Promotion and Education (6th Edition) Principles and Foundations of Health Promotion and Education (5th Edition) Hacking: Beginner to Expert Guide to Computer Hacking, Basic Security, and Penetration Testing (Computer Science Series) Introductory Logic and Sets for Computer Scientists (International Computer Science Series) Principles Of Health Care Management: Foundations For A Changing Health Care System The Rorschach, Basic Foundations and Principles of Interpretation Volume 1