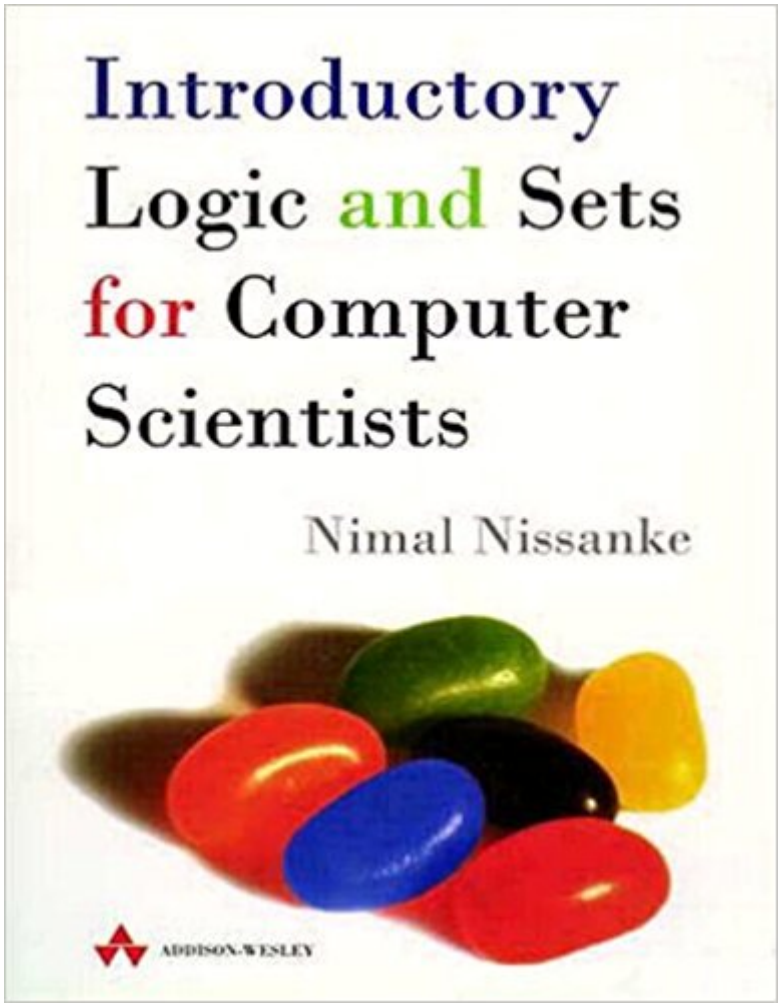
Introductory Logic And Sets For Computer Scientists (International Computer Science Series)



Synopsis

This text provides a practical, modern approach to teaching logic and set theory, equipping students with the necessary mathematical understanding and skills required for the mathematical specification of software. It covers all the areas of mathematics that are considered essential to computer science including logic, set theory, modern algebra (group theory), graph theory and combinatorics, whilst taking into account the diverse mathematical background of the students taking the course. In line with current undergraduate curricula this book uses logic extensively, together with set theory, in mathematical specification of software. Languages such as Z and VDM are used for this purpose.

Book Information

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Customer Reviews

This book not only covers discrete mathematics well, but shows real professionalism in education. I have over twenty years of software experience and this book was arranged to allow me to refresh or learn for the first time precisely the material I wanted.Not only this, but Dr Nissanke is well aware of common misconceptions and misunderstandings that students may have in learning discrete mathematics. Examples are the differences between bound and free variables, unknowns and genuine variables, what to guard against in building proofs, and more. For me, I had missed in my education the material from the entire chapters on Interpretation of Formulae and Proofs in Predicate Logic, and never had the time and patience to piece this together from textbooks where this material was learned by osmosis or "between-the-lines".Another big plus for me was the

introductory material to Z, formal specification, functional programming, and lambda calculus. These were done very straightforwardly and user-friendly.The book also spends more than a tenth of its 400 pages on giving solutions to its exercises.Finally, it is reasonably priced, especially considering that other introductory textbooks in discrete mathematics run $100 to $125 but are still short on the educational know-how.My only regrets are that it does not cover posets and graphs. However, this may be a good division of labor between this and a follow-on course.

I like this book very much. It’s very clearly written and a delight to read. I especially like the chapters on transformational proofs and propositional logic. The author makes the topics easy for students to grasp the theory and understand the fundamentals of what may seem to be a difficult subject.

a nice sophomore-level book. it introduces basic set theory and logic concepts, but at "gentle" pace. the type of book that would be used at a liberal arts college, but not at a "real" engineering school. has a nice examples and does a decent job in explaining the basics.

Series) Critical Thinking: Decision Making with Smarter Intuition and Logic! (Critical Thinking, Decision Making, Logic, Intuition) Set Theory (Studies in Logic: Mathematical Logic and Foundations) Logic: Propositional Logic (Quickstudy: Academic) Introduction to Logic: Propositional Logic, Revised Edition (3rd Edition) Maternity Nursing: An Introductory Text, 11e (MATERNITY NURSINGAN INTRODUCTORY TEXT (BURROUGHS)) 11th (Eleventh) Edition Logic for Applications (Texts in Computer Science)