



METADATA

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Abstract

The book aims to cover the material of one (or more) introductory courses in computer science, in the second or third year of study. It consists of two parts: -The first part includes an extensive introduction to the most important topics in Theoretical Computer Science, such as algorithms, computability, complexity, computation models, graph theory, parallel and distributed computing.

- The second part consists of individual modules focusing on topics in Applied Computer Science, such as databases, computer graphics, cryptography and security, computational biology, algorithmic game theory, knowledge representation and management, and web technologies. Particular emphasis is placed on the rigorous mathematical foundation of the concepts and techniques presented.

