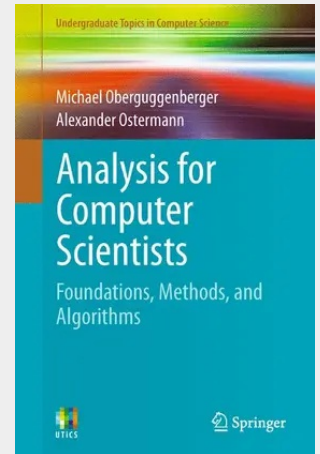


Analysis for Computer Scientists

Foundations, Methods, and Algorithms

This textbook presents an algorithmic approach to mathematical analysis, with a focus on modelling and on the applications of analysis. Fully integrating mathematical software into the text as an important component of analysis, the book makes thorough use of examples and explanations using MATLAB, Maple, and Java applets. Mathematical theory is described alongside the basic concepts and methods of numerical analysis, supported by computer experiments and programming exercises, and an extensive use of figure illustrations. Features: thoroughly describes the essential concepts of analysis; provides summaries and exercises in each chapter, as well as computer experiments; discusses important applications and advanced topics; presents tools from vector and matrix algebra in the appendices, together with further information on continuity; includes definitions, propositions and examples throughout the text; supplementary software can be downloaded from the book's webpage.

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