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<<现代计算机代数(英文版)>>

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内容概要

Modern Computer Algebra Computer algebra systems are gaining more and more importance in all areasof science and engineering. This textbook gives a thorough introduction to thealgorithmic basis of the mathematical engine in computer algebra systems. It is designed to accompany one- or two-semester courses for advanced undergraduate or graduate students in computer science or mathematics. Its comprehensiveness and authority make it also an essential reference for professionals in the area. Special features include: detailed study of algorithms including time analysis; implementation reports on several topics; complete proofs of the mathematical underpinnings; a wide variety of applications (among others, in chemistry, coding theory, cryptography, computational logic, and the design of calendars and musical scales). Some of this material has never appeared before in book form. Finally, a great deal of historical information and illustration enlivens the text. Joachim yon zur Gathen has a PhD from Universitat Ztirich, taught at University of Toronto from 1981 to 1994, and is now at Universitat Paderbom. Jtirgen Gerhard is completing his PhD and is wissenschaftlicher Mitarbeiter at Universitat Paderborn.

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