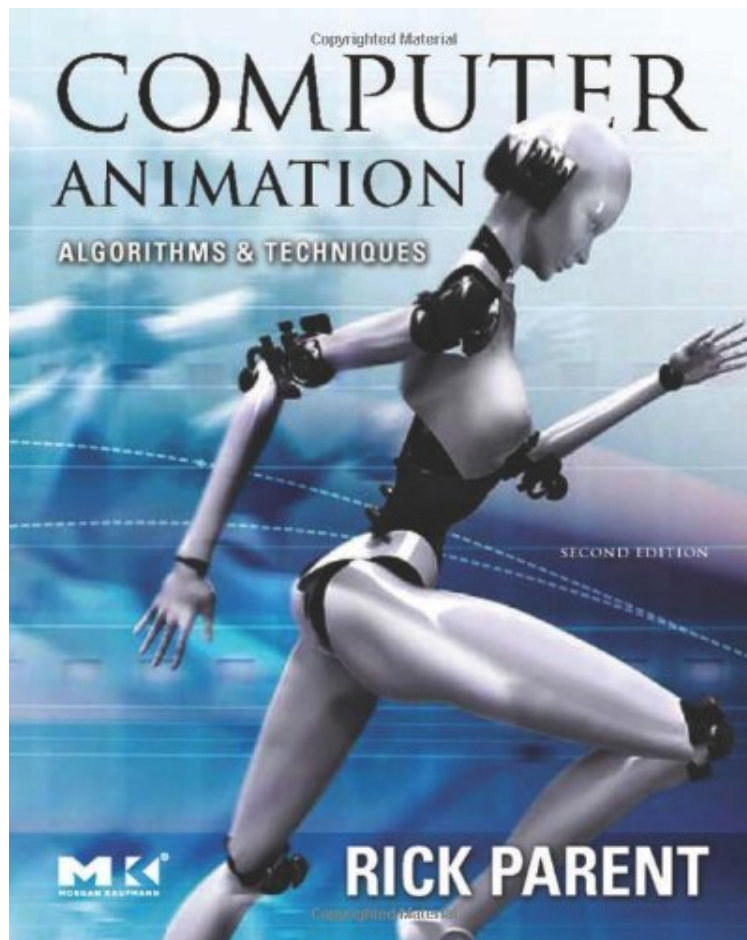


[Read and download] Computer Animation: Algorithms and Techniques (The Morgan Kaufmann Series in Computer Graphics)

## Computer Animation: Algorithms and Techniques (The Morgan Kaufmann Series in Computer Graphics)

Von Rick Parent

\*Download PDF | ePub | DOC | audiobook | ebooks



[Download](#)

[Read Online](#)

Produktinformation - Verkaufsrang: #1790233 in eBooks Veröffentlicht am: 2007-11-01 Erscheinungsdatum: 2007-11-01 File Name: B00440E0P8 | File size: 28.Mb

**Von Rick Parent : Computer Animation: Algorithms and Techniques (The Morgan Kaufmann Series in Computer Graphics)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Computer Animation: Algorithms and Techniques (The Morgan Kaufmann Series in Computer Graphics):

Kundenrezensionen Hilfreichste Kundenrezensionen 0 von 0 Kunden fanden die folgende Rezension hilfreich. leider nicht ganz ausgereift Von Jean Gilbert Das Buch bietet einen brauchbaren Einstieg in das Feld Computeranimation und stellt im umfangreichen Anhang meist eine kleine Erluterung der mathematischen Bezüge und Algorithmen zur Verfügung. Dort sind manche Algorithmen leider nur mit ausuferndem Quellcode erläutert, so dass es manchmal unnötig lange dauert den Überblick zu bekommen. Ein andere Schwäche des Buches sind trotz 2ter Auflage die oft vorkommenden Fehler bei Formeln und Rechnungen. Vorkenntnisse in Computergrafik und Wissen in den Bereichen

Trigonometrie, Geometrie(3D) und Matrizenalgebra sollte man zumindest ansatzweise haben.

**Kurzbeschreibung** Driven by the demands of research and the entertainment industry, the techniques of animation are pushed to render increasingly complex objects with ever-greater life-like appearance and motion. This rapid progression of knowledge and technique impacts professional developers, as well as students. Developers must maintain their understanding of conceptual foundations, while their animation tools become ever more complex and specialized. The second edition of Rick Parent's *Computer Animation* is an excellent resource for the designers who must meet this challenge. The first edition established its reputation as the best technically oriented animation text. This new edition focuses on the many recent developments in animation technology, including fluid animation, human figure animation, and soft body animation. The new edition revises and expands coverage of topics such as quaternions, natural phenomenon, facial animation, and inverse kinematics. The book includes up-to-date discussions of Maya scripting and the Maya C++ API, programming on real-time 3D graphics hardware, collision detection, motion capture, and motion capture data processing. New up-to-the-moment coverage of hot topics like real-time 3D graphics, collision detection, fluid and soft-body animation and more!

**Companion site** with animation clips drawn from research entertainment and code samples

**Describes the mathematical and algorithmic foundations of animation that provide the animator with a deep understanding and control of technique.** de

What many digital animators fail to realize is that someone needs to make the software that's used to bring images to life. Without the tools, the ideas can never be materialized. In *Computer Animation: Algorithms and Techniques*, the concepts and formulas used behind the scenes and under the hood of contemporary animation software are clearly explained for the programmer and the technical director.

Hardbound, liberally illustrated, and with an eight-page color gallery, there are six chapters and three appendices. The book starts with an overview of animation and works through some technical background information, and then delves into interpolation and basic techniques for representing 3-D motion and space on a 2-D display. Later chapters walk through advanced algorithms (kinematics, rigid body simulation, constraints) and then a discussion of ways to represent natural phenomena. There's also a focus on modeling and animating articulated figures. It's important to note that these chapters are not about which buttons to push in a given software package, but rather about the use and explanation of formulas for representing a specific simulation. Perhaps the best feature of the book is the information and samples available on a companion Web site. Rather than include a CD-ROM, which raises the cost of the book and whose information can grow stale, the reader can find sample animations and ready-to-use code snippets, as well as links to other relevant Web sites.

There are any number of books available on computer animation software packages, but precious few on how they do what they do. *Computer Animation: Algorithms and Techniques* is an invaluable resource, a textbook for anyone interested in computer animation programming or for anyone who simply wants to get under the hood of their favorite animation application. --Mike Caputo

**Pressestimmen** "There is no serious competition for my course. Parent is by far the best text out there. A new edition would be great. If not, then please keep the first one in print!" --Christian Darken, Naval Postgraduate School