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Descrizione fisica	1 online resource (959 p.)
Collana	Interactive 3D technology series
Disciplina	794.8/1526
Soggetti	Computer games - Programming Physics - Computer simulation Computer graphics Three-dimensional display systems Electronic books.
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Title Page; Copyright Page; Dedication; Table of Contents; Trademarks; Figures; Tables; Preface to theSecond Edition; Preface to theFirst Edition; About the CD-ROM; Chapter 1.Introduction; 1.1 A Brief History of the World; 1.2 A Summary of the Topics; 1.3 Examples and Exercises; Chapter 2.Basic Concepts from Physics; 2.1 Rigid Body Classification; 2.2 Rigid Body Kinematics; 2.2.1 Single Particle; 2.2.2 Particle Systems and Continuous Materials; 2.3 Newton's Laws; 2.4 Forces; 2.4.1 Gravitational Forces; 2.4.2 Spring Forces; 2.4.3 Friction and Other Dissipative Forces; 2.4.4 Torque 2.4.5 Equilibrium2.5 Momenta; 2.5.1 Linear Momentum; 2.5.2 Angular Momentum; 2.5.3 Center of Mass; 2.5.4 Moments and Products of Inertia; 2.5.5 Mass and Inertia Tensor of a Solid Polyhedron; 2.6 Energy; 2.6.1 Work and Kinetic Energy; 2.6.2 Conservative Forces and Potential Energy; Chapter 3. Rigid Body Motion; 3.1 Newtonian Dynamics; 3.2 Lagrangian Dynamics; 3.2.1 Equations of Motion for a Particle; 3.2.2 Time-Varying Frames or Constraints; 3.2.3 Interpretation of the Equations of Motion; 3.2.4 Equations of Motion for a System of

Particles; 3.2.5 Equations of Motion for a Continuum of Mass
3.2.6 Examples with Conservative Forces3.2.7 Examples with Dissipative Forces; 3.3 Euler's Equations of Motion; Chapter 4. Deformable Bodies; 4.1 Elasticity, Stress, and Strain; 4.2 Mass-Spring Systems; 4.2.1 One-Dimensional Array of Masses; 4.2.2 Two-Dimensional Array of Masses; 4.2.3 Three-Dimensional Array of Masses; 4.2.4 Arbitrary Configurations; 4.3 Control Point Deformation; 4.3.1 B-Spline Curves; 4.3.2 NURBS Curves; 4.3.3 B-Spline Surfaces; 4.3.4 NURBS Surfaces; 4.3.5 Surfaces Built from Curves; 4.4 Free-Form Deformation; 4.5 Implicit Surface Deformation; 4.5.1 Level Set Extraction
4.5.2 Isocurve Extraction in 2D Images4.5.3 Isosurface Extraction in 3D Images; Chapter 5.Fluids and Gases; 5.1 Vector Calculus; 5.1.1 Gradient, Directional Derivative, and Total Derivative; 5.1.2 Vector Fields, Divergence, and Laplacian; 5.1.3 Curl; 5.1.4 Line Integrals; 5.1.5 Surface Integrals and Stokes' Theorem; 5.1.6 Volume Integrals and the Divergence Theorem; 5.1.7 Green's Theorem, Laplace's Equation, and Poisson'sEquation; 5.1.8 Vector Field Decomposition; 5.2 Strain and Stress; 5.2.1 Strain Tensor; 5.2.2 Stress Tensor; 5.2.3 The Relationship Between Strain and Stress
5.3 Conservation Laws5.3.1 Conservation of Mass; 5.3.2 Conservation of Momentum; 5.4 A Simplified Model for Fluid Flow; 5.5 Implementing the Simplified 2D Model; 5.5.1 The Density Equation; 5.5.2 The Diffusion Term; 5.5.3 The Advection Term; 5.5.4 The Source-Sink Term; 5.5.5 The Total Density Update; 5.5.6 The Velocity Equations; 5.5.7 Specialized Boundary Handling; 5.6 Implementing the Simplified 3D Model; 5.7 Variations of the Simplified Model; 5.7.1 Vorticity Confinement and Vortex Particles; 5.7.2 Separate Pressure Term; 5.7.3 Omit Diffusion Terms; 5.7.4 Density and Velocity Dissipation
5.7.5 Include Temperature

Sommario/riassunto

Create physically realistic 3D Graphics environments with this introduction to the ideas and techniques behind the process. Author David H. Eberly includes simulations to introduce the key problems involved and then gradually reveals the mathematical and physical concepts needed to solve them. He then describes all the algorithmic foundations and uses code examples and working source code to show how they are implemented, culminating in a large collection of physical simulations. The book tackles the complex, challenging issues that other books avoid, including Lagrangian dynamics, rigid body dynamics, impulse methods, resting contact, linear complementarity problems, deformable bodies, mass-spring systems, friction, numerical solution of differential equations, numerical stability and its relationship to physical stability, and Verlet integration methods. This book even describes when real physics isn't necessary - and hacked physics will do.

2.

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Autore	Naumann Sebastian
Titolo	The Politics of Serial Television Fiction : Structural Developments, Narrative Themes, and the Nonlinear Turn
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Edizione	[1st ed.]
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Collana	Serien- und Fernsehforschung : TRSSEFE ; ; 2
Altri autori (Persone)	ArndtMaria
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Soggetti	SOCIAL SCIENCE / Media Studies
Lingua di pubblicazione	Inglese
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Nota di contenuto	Frontmatter -- Contents -- Acknowledgements -- List of Abbreviations -- List of Figures -- 1. Introduction -- 2. Contemporary TV, Complexity, Power Struggles and the Cynical Turn -- 3. Actors, Games, and Players -- 4. Royal Performance and the Queen’s Three Bodies -- 5. Overcoming Omnishambles -- 6. The Curious Case of Volodymyr Zelensky and Vasyl Petrovych Holoborodko -- 7. Modelling Malfunction and Inverting the Populist Quest -- 8. Starting “from some kind of scratch” -- 9. Conclusion -- List of Contemporary Polit-Series -- Bibliography
Sommario/riassunto	Fictional TV politics played a pivotal role in the popular imaginaries of the 2010s across cultures. Examining this curious phenomenon, Sebastian Naumann provides a wide-ranging analysis of the rapidly evolving landscape of contemporary polit-series. Proposing a novel structural model of serial television, he offers an innovative methodological framework for comparative textual analysis that integrates sociocultural, economic, sociotechnical, narratological, and aesthetic perspectives. This study furthermore explores how the changing affordances of (nonlinear) television impact serial storytelling and identifies key narrative trends and recurring themes in contemporary TV polit-fiction.