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Descrizione fisica	1 online resource (849 p.)
Classificazione	ST 320
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Soggetti	Computer animation Computer graphics Three-dimensional display systems
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Nota di contenuto	mental ray for Maya 3ds Max and XSI; Dedication; Acknowledgements; About the Author; Contents at a Glance; Contents; Introduction; Chapter 1: Introduction to mental ray; What Is mental ray?; Why Use mental ray?; The Structure of mental ray; mental ray Integration; Command-Line Rendering and the Stand-Alone Renderer; mental ray Shaders and Shader Libraries; Indirect Illumination; Chapter 2: Rendering Algorithms; Introduction to Synthetic Lighting; Rendering under the Hood; mental ray Rendering Algorithms; Scanline Rendering in Depth; Raytrace Rendering in Depth; Hardware Rendering Chapter 3: mental ray Outputmental ray Data Types; The Frame Buffer; Frame Buffer Options; mental ray Cameras; Output Statements; Chapter 4: Camera Fundamentals; Camera Basics and Aspect Ratios; Camera Lenses; Host Application Settings; Chapter 5: Quality Control; Sampling and Filtering in Host Applications; Raytrace Acceleration; Diagnostic and BSP Fine-Tuning; Chapter 6: Lights and Soft Shadows; mental ray Lights; Area Lights; Host Application Settings; Light Profiles; Chapter 7: Shadow Algorithms; Shadow Algorithms; Raytrace Shadows; Depth-Based Shadows; Stand-Alone and Host Settings

Chapter 8: Motion Blur mental ray Motion Blur; Motion-Blur Options; Motion-Blur Render Algorithms; Host Settings; Chapter 9: The Fundamentals of Light and Shading Models; The Fundamentals of Light; Light Transport and Shading Models; mental ray Shaders; Chapter 10: mental ray Shaders and Shader Trees; Installing Custom Shaders; DGS and Dielectric Shading Models; Glossy Reflection and Refraction Shaders; Brushed Metals with the Glossy and Anisotropic Shaders; The Architectural (mia) Material; Chapter 11: mental ray Textures and Projections; Texture Space and Projections; mental ray Bump Mapping mental ray Projection and Remapping Shaders Host Application Settings; Memory Mapping, Pyramid Images, and Image Filtering; Chapter 12: Indirect Illumination; mental ray Indirect Illumination; Photon Shaders and Photon-Casting Lights; Indirect Illumination Options and Fine-Tuning; Participating Media (PM) Effects; Chapter 13: Final Gather and Ambient Occlusion; Final Gather Fundamentals; Final Gather Options and Techniques; Advanced Final Gather Techniques; Ambient Occlusion; Chapter 14: Subsurface Scattering; Advanced Shading Models; Nonphysical Subsurface Scattering; An Advanced Shader Tree Physical Subsurface Scattering Appendix: About the Companion CD; What You'll Find on the CD; Customer Care; Index; mental ray Color Gallery; mental ray Shaders and Shader Trees (excerpt); The Architectural (mia) Material; Surface Approximation Methods; mental ray Approximations; Approximation Techniques and Styles; Polygon and Subdivision Surfaces; Host Application Approximation Settings

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## Sommario/riassunto

Turn 3D models into film-worthy digital animations by mastering mental ray rendering once and for all. This must-have guide is the only book on the market to focus exclusively on mental ray in Maya, 3ds Max, and XSI, and it's packed with techniques and insights you can't get anywhere else. Best of all, the book's advanced rendering concepts apply to other rendering software as well, including V-Ray, Brazil, Maxwell and RenderMan. Discover advanced lighting, camera, and workflow techniques that usually take professionals years to figure out.

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