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Titolo	Panda3D 1.7 game developer's cookbook [[electronic resource]] : over 80 recipes for developing 3D games with Panda3D, a full-scale 3D game engine // Christoph Lang
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Descrizione fisica	1 online resource (336 p.)
Collana	Quick answers to common problems
Disciplina	794.8
Soggetti	Video games Video games - Design Three-dimensional display systems
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Formato	Materiale a stampa
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Note generali	"Quick answers to common problems"--Cover. Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Author; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Setting Up Panda3D and Configuring Development Tools; Introduction; Downloading and configuring NetBeans to work with Panda3D; Configuring Visual Studio 2008 to work with Panda3D; Understanding Panda3D's runtime configuration options; Setting up the game structure; Building Panda3D from source code; Chapter 2: Creating and Building Scenes; Introduction; Loading terrain; Loading and attaching sounds to objects; Creating a scene using C++; Adding an additional camera Inspecting and modifying the scene Modifying the scene graph; Moving objects based on time; Controlling actions using intervals; Making animations fit to intervals; Making objects follow a predefined path; Making the camera smoothly follow an object; Generating geometry at runtime; Loading data asynchronously; Chapter 3: Controlling the Renderer; Introduction; Changing a model's render attributes; Adding an alpha mask to a texture; Creating a splitscreen mode; Controlling

the rendering order; Using multiple displays; Chapter 4: Scene Effects and Shaders; Introduction; Adding lights and shadows
Using light ramps
Creating particle effects; Animating textures; Adding ribbon trails to an object; Creating a flashlight effect; Making objects reflect the scene; Adding a custom shader generator; Applying a custom Cg shader; Chapter 5: Post-Processing & Screen Space Effects; Introduction; Adding built-in post-processing effects; Building custom effects; Adding a scanline and vignette effect; Adding a color grading effect; Adding a depth of field effect; Building a deferred rendering pipeline; Chapter 6: 2D Elements and User Interfaces; Introduction; Rendering text to the screen
Rendering images to the 2D layer
Playing a movie file; Creating an interactive user interface; Making the user interface data-driven using XML; Chapter 7: Application Control; Introduction; Toggling window and fullscreen modes; Controlling game state; Decoupling modules using events; Handling events more elegantly; Managing recurring tasks; Chapter 8: Collision Detection and Physics; Introduction; Using the built-in collision detection system; Using the built-in physics system; Using the ODE physics engine; Using the PhysX physics engine; Integrating the Bullet physics engine
Chapter 9: Networking
Introduction; Downloading a file from a server; Using assets hosted on a server; Sending high scores to a server; Establishing a network connection; Sending and receiving custom datagrams; Synchronizing object state between server and client; Chapter 10: Debugging and Performance; Introduction; Debugging Python code; Debugging C++ code; Using the PStats tool for finding performance bottlenecks; Improving performance by flattening scenes; Implementing performance critical code in C++; Chapter 11: Input Handling; Introduction; Handling keyboard and mouse input
Implementing an abstraction layer for supporting multiple input methods

Sommario/riassunto

This is a cookbook with over 80 recipes offering solutions to common game development problems with Panda3D with explained sample code and screenshots added in. If you are a developer with experience in Python, Panda3D, and optionally C++ and shading languages and you are looking for quick and easy to integrate solutions to common game development problems with Panda3D, this book is for you.
