1. Record Nr. UNINA9910460282803321

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Titolo	OpenSceneGraph 3.0 [[electronic resource]] : beginner's guide : create high-performance virtual reality applications with OpenSceneGraph, one of the best 3D graphics engines / / Rui Wang, Xuelei Qian
Pubbl/distr/stampa	Birmingham, U.K., : Packt Open Source, 2010
ISBN	1-282-94775-3 9786612947759 1-84951-283-3
Edizione	[1st edition]
Descrizione fisica	1 online resource (412 p.)
Altri autori (Persone)	QianXuelei
Disciplina	005.3 006.6 006.6869
Soggetti	Application program interfaces (Computer software) Virtual reality - Computer programs Three-dimensional display systems Computer graphics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Copyright; Credits; Foreword; About the Authors; About the Reviewers; Table of Contents; Preface; Chapter 1: The Journey into OpenSceneGraph; A quick overview of rendering middleware; Scene graphs; The Birth and development of OSG; Components; Why OSG?; Who uses OSG?; Have a quick taste; Time for action - say ""Hello World"" OSG style; Live in community; Summary; Chapter 2: Compilation and Installation of OpenSceneGraph; System requirements; Using the installer; Time for action - installing OSG; Running utilities; Time for action - playing with osgviewer; Using the project wizard Time for action - creating your solution with one clickPrebuilts making trouble?; Cross-platform building; Starting CMake; Time for action - running CMake in GUI mode; Setting up options; Generating packages using Visual Studio; Time for action - building with a Visual Studio solution; Generating packages using gcc; Time for action - building

with a UNIX makefile; Configuring environment variables; Summary; Chapter 3: Creating Your First OSG Program; Constructing your own projects; Time for action - building applications with CMake; Using a root node
Time for action - improving the ""Hello World"" exampleUnderstanding memory management; ref_ptr and Referenced classes; Collecting garbage: why and how; Tracing the managed entities; Time for action - monitoring counted objects; Parsing command-line arguments; Time for action - reading the model filename from the; command line; Tracing with the notifier; Redirecting the notifier; Time for action - saving the log file; Summary; Chapter 4: Building Geometry Models; How OpenGL draws objects; Geode and Drawable classes; Rendering basic shapes; Time for action - quickly creating simple objects
Storing array dataVertices and vertex attributes; Specifying drawing types; Time for action - drawing a colored quad; Indexing primitives; Time for action - drawing an octahedron; Using polygonal techniques; Time for action - tessellating a polygon; Rereading geometry attributes; Customizing a primitive functor; Time for action - collecting triangle faces; Implementing your own drawables; Using OpenGL drawing calls; Time for action - creating the famous OpenGL teapot; Summary; Chapter 5: Managing Scene Graph; The Group interface; Managing parent nodes
Time for action - adding models to the scene graphTraversing the scene graph; Transformation nodes; Understanding the matrix; The MatrixTransform class; Time for action - performing translations of child nodes; Switch nodes; Time for action - switching between the normal and; damaged Cessna; Level-of-detail nodes; Time for action - constructing a LOD Cessna; Proxy and paging nodes; Time for action - loading a model at runtime; Customizing your own NodeKits; Time for action - animating the switch node; The visitor design pattern; Visiting scene graph structures
Time for action - analyzing the Cessna structure

Sommario/riassunto

Create high-performance virtual reality applications with OpenSceneGraph, one of the best 3D graphics engines.