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Soggetti	Application software - Development Mobile computing Computer games - Programming Electronic books.
Lingua di pubblicazione	Inglese
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Nota di contenuto	Game and Graphics Programming for iOS and Android® with OpenGL® ES 2.0; Contents; Introduction; Chapter 1: Getting Started; Software Requirements; For iOS Developers; For Android Developers; Downloading the Book's SDK; Importing Projects; For iOS Developers; For Android Developers; The Template; Summary; Chapter 2: Setting Up Your Graphic Projections; The Three Basic Types of Projections; Orthographic 2D Projection; Program and Project Initialization; Vertex and Fragment Shader; Linking a Shader Program; The Drawing Code; Orthographic Projection; Getting Orthographic; Perspective Projection Summary Chapter 3: Dealing With Complex Geometry; The Wavefront File Format; Cube.obj; Cube.mtl; Preparing the OBJ Viewer Code; Loading an OBJ; Building the Shaders; The Vertex Shader; The Fragment Shader; Vertex Buffer Object; Storing the Vertex Data; Building the Vertex Data Array VBO; Building the Element Array VBO; Building the VAO; Rendering Momo; Handling Touche; Per-Vertex Lighting; Vertex Shader Light Calculation; Modifying the Fragment Shader; More Uniforms; Making Momo Furrier; Loading the Texture; Adjusting the Vertex Data; Adding UV Support to the Vertex Shader

Adding Texture Support to Your Fragment Shader Binding the Texture;
Summary; Chapter 4: Building a Scene; Handling Multiple Objects; The
Code Structure; Loading and Drawing the Scene; The Shaders Code; The
Different Object Types; The Drawing Sequence; Fixing the Scene; Uber
Shader; Using Your Uber Shader; Render Loop Objects Categorization;
Double-Sided; Per-Pixel Lighting; Making the Vertex Shader Even
Fatter; Getting the Fragment Shader More Uber; Wrapping up the
Implementation; Summary; Chapter 5: Optimization; The Base App;
Triangles to Triangle Strips; Building Triangle Strips
Texture Optimization Adding 16-Bit Texture Conversion; PVR Texture
Compression; Faking Details; Bump Mapping Implementation; Precision
Qualifiers Optimization; The Normal Map Lighting Calculation; Adding
Specularity; Geometry and Shaders LOD; Texture Atlas; Managing States
in Software; Automatic Shader Optimization; Summary; Chapter 6:
Real-Time Physics; Types of Physical Objects; Physics Shapes; Using
Bullet; Hello Physics; Collision Callbacks, Triggers, and Contacts;
Contact-Added Callback; Near Callback; Contact Points; 2D Physics;
More Shapes!; Building the Physical Objects
Camera Tracking User Interactions; The Game Logic; 3D Physics; The
Bullet File Format; 3D Pinball Game; Summary; Chapter 7: Camera;
Touch and Go!; The Camera Frustum; How to Build the Frustum;
Frustum Clipping Implementation; More Clipping Functions; Camera Fly
Mode; First-Person Camera with Collision Detection; 3D Camera
Tracking; Third-Person Camera with Collision; Summary; Chapter 8:
Pathfinding; Recast and Detour; Navigation; Creating the Navigation
Mesh; 3D Physics Picking; Player's Auto Drive; Visualizing the Way
Points; Catch Me If You Can!; Know Your Enemy; Game State Logic;
Summary
Chapter 9: Audio and Other Cool Game Programming Stuff

Sommario/riassunto

Develop graphically sophisticated apps and games today! The smart phone app market is progressively growing, and there is new market gap to fill that requires more graphically sophisticated applications and games. Game and Graphics Programming for iOS and Android with OpenGL ES 2.0 quickly gets you up to speed on understanding how powerful OpenGL ES 2.0 technology is in creating apps and games for amusement and effectiveness. Leading you through the development of a real-world mobile app with live code, this text lets you work with all the best features and tools that Open GL E
