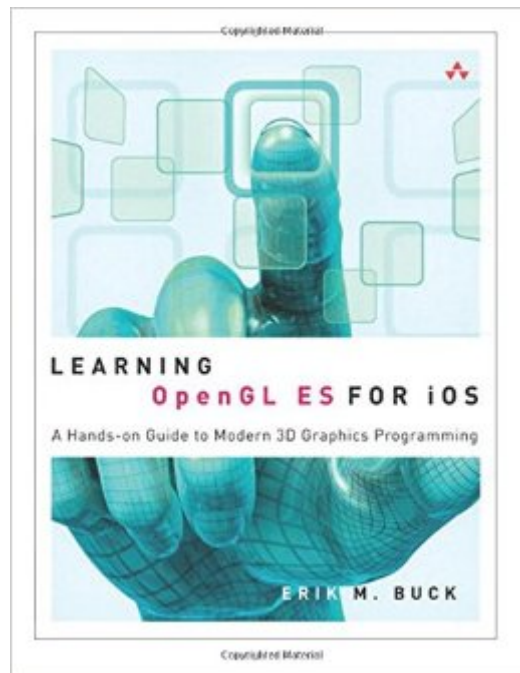# Learning OpenGL ES For IOS: A Hands-on Guide To Modern 3D Graphics Programming

Synopsis

Get Started Fast with Modern OpenGL ES Graphics Programming for iPhone, iPod touch, and iPad Â OpenGL ES technology underlies the user interface and graphical capabilities of Appleâ ™s iPhone, iPod touch, and iPadâ "as well as devices ranging from video-game consoles and aircraft-cockpit displays to non-Apple smartphones. In this friendly, thorough introduction, Erik M. Buck shows how to make the most ofÂ Open GL ES in Appleâ ™s iOS environment. Â This highly anticipated title focuses on modern, efficient approaches that use the newest versions ofÂ OpenGL ES, helping you avoid the irrelevant, obsolete, and misleading techniques that litter the Internet. Buck embraces Objective-C and Cocoa Touch, showing how to leverage Appleâ ™s powerful, elegant GLKit framework to maximize your productivity, achieve tight platform integration, and deliver exceptionally polished apps. Â If youâ ™ve written C or C++ code and knowÂ object-oriented programming basics, this titleÂ brings together everything you need to fullyÂ master OpenGL ES graphics for iOSâ "includingÂ downloadable examples specifically designed toÂ jumpstart your own projects. Â   Coverage includes Â â ¢ Understanding core OpenGL ES computer graphics concepts and iOS graphics architecture â ¢ Integrating Cocoa Touch with OpenGL ES to leverage the power of Appleâ ™s platform â ¢ Creating textures from start to finish: opacity, blending, multi-texturing, and compression â ¢ Simulating ambient, diffuse, and specular light â ¢ Using transformations to render 3D geometric objects from any point of view â ¢ Animating scenes by controlling time through application logic â ¢ Partitioning data to draw expansive outdoor scenes with rolling terrain â ¢ Detecting and handling user interaction with 3D geometry â ¢ Implementing special effects ranging from skyboxes to particles and billboards â ¢ Systematically optimizing graphics performance â ¢ Understanding the essential linear algebra concepts used in computer graphics â ¢ Designing and constructing a complete simulation that incorporates everything youâ ™ve learned

Book Information

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Customer Reviews

This is the only up to date book on iOS OpenGL ES2.0 I'm aware of, and I practically own every single textbook on the subject.All other competing texts fail to treat GLKit and most modern additions to iOS programming libraries and unlike this book don't use ARC based code.As the author states, this book does not contain obsolete code and gently guides the reader towards practical use of Open GL on iOS5.It includes a Math Cheat sheet wich I strongly suggest beginners start reading before everything else, in order to make things easier.This is not a math book and subject treatment is just a gentle introduction, this may not be enough for more advanced purposes.This book is a very complete introduction to OpenGL ES2.0 and is very specific to iOS development.It touches advanced topics as mesh importing, optimization, and skinning, but it is not nor aims at being complete and thorough treatment of advanced 3d graphics programming. It just places a beginner in the right direcation, and can also efficiently inform an advanced programmer of the newest iOS features about OpenGL programming.It is a lot more modern than comparable texts, and explains GLKit workings, in this sense, it can serve as a good starting point for an individual aiming at becoming an advanced iOS programmer.However, integrating high performance multitexturing invoving more than two textures will require shader programming, rather than the simple approach used in this book, there are far better ways to import efficiently 3d models in production code, and state of the art optimization of 3d code and shader fragments remains difficult.

Previously, I benefited enormously from Erik Buck's another book 'Cocoa Design Patterns'. The 'Patterns' book was so good and enjoyable to read that I immediately pre-ordered the OpenGL ES book when it was first announced by .com. Unfortunately, the project took much longer than expected to finish. And when it finally arrived, I was too busy on other things until recently I needed to learn about OpenGL ES. This book about how OpenGL operates is another great piece of work! The author demonstrates a consistent ability in laying out the complicated concepts in the clearest and most organized pattern. Erik Buck is such a disicpline writer whose responsible writing engages

my full attention on almost every single sentence. I have learned to entrust my patience with his progressive explanation, one statement at a time, and one page at a time, and so forth, knowing for sure that the investment of my time with him would surely not be wasted. My experience with his two books are quite similar and surprisingly pleasant - in both occassions I simply could not put down the book. In a single read, I easily bind myself to four chapters in both cases. For those who are new and a novice in particular (like me, an amateur ios programmer for hobby), I would invite you to follow the book closely and don't skip. The book does not just throw in some code about OpenGL ES. It cares to convey the concept of OpenGL ES so that you could develop a deep understanding from the ground up. Similar to the Cocoa Design Patterns book, Mr. Buck demonstrates an admirable tendency to reverse engineer some classes just so to showcase how the underlying engine operates. Such an emphasis is very rare yet crucial for a fundamental understanding of the complicated subject.

Learning OpenGL ES for iOS: A Hands-on Guide to Modern 3D Graphics Programming Apps: Mobile App Trends in 2015 (iOS, Xcode Programming, App Development, iOS App Development, App Programming, Swift, Without Coding) ((Android, Android ... App Programming, Rails, Ruby Programming)) OpenGL Programming Guide: The Official Guide to Learning OpenGL, Version 4.5 with SPIR-V OpenGL Programming Guide: The Official Guide to Learning OpenGL, Version 4.3 (8th Edition) OpenGL Programming Guide: The Official Guide to Learning OpenGL, Versions 3.0 and 3.1 (7th Edition) OpenGL Programming Guide: The Official Guide to Learning OpenGL, Version 4.3 OpenGL(R) Programming Guide: The Official Guide to Learning OpenGL(R), Version 2.1 (6th Edition) Learning: 25 Learning Techniques for Accelerated Learning - Learn Faster by 300%! (Learning, Memory Techniques, Accelerated Learning, Memory, E Learning, ... Learning Techniques, Exam Preparation) Programming #8:C Programming Success in a Day & Android Programming In a Day! (C Programming, C++programming, C++ programming language, Android , Android Programming, Android Games) Programming #57: C++ Programming Professional Made Easy & Android Programming in a Day (C++ Programming, C++ Language, C++for beginners, C++, Programming ... Programming, Android, C, C Programming) WebGL Programming Guide: Interactive 3D Graphics Programming with WebGL (OpenGL) IOS Programming For Beginners: The Simple Guide to Learning IOS Programming Fast! Computer Graphics Through OpenGL: From Theory to Experiments (Chapman & Hall/CRC Computer Graphics, Geometric Modeling, and Animation) SWIFT: PROGRAMMING ESSENTIALS (Bonus Content Included): Learn iOS development! Code and design apps with Apple's New programming language TODAY (iOS

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