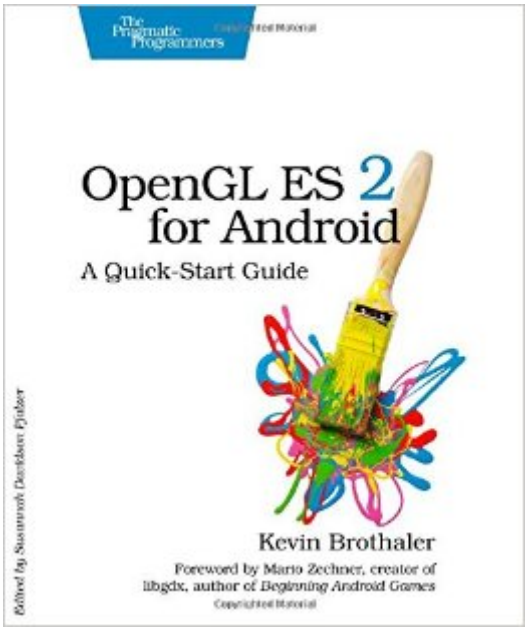
OpenGL ES 2 For Android: A Quick-Start Guide (Pragmatic Programmers)



Synopsis

Printed in full color.Android is booming like never before, with millions of devices shipping every day. It’s never been a better time to learn how to create your own 3D games and live wallpaper for Android. You’ll find out all about shaders and the OpenGL pipeline, and discover the power of OpenGL ES 2.0, which is much more feature-rich than its predecessor. If you can program in Java and you have a creative vision that you’d like to share with the world, then this is the book for you.This book will teach you everything you need to know to create compelling graphics on Android. You’ll learn the basics of OpenGL by building a simple game of air hockey, and along the way, you’ll see how to initialize OpenGL and program the graphics pipeline using shaders. Each lesson builds upon the one before it, as you add colors, shading, 3D projections, touch interaction, and more.Then, you’ll find out how to turn your idea into a live wallpaper that can run on the home screen. You’ll learn about more advanced effects involving particles, lighting models, and the depth buffer. You’ll understand what to look for when debugging your program, and what to watch out for when deploying to the market.OpenGL can be somewhat of a dark art to the uninitiated. As you read this book, you’ll learn each new concept from first principles. You won’t just learn about a feature; you’ll also understand how it works, and why it works the way it does. Everything you learn is forward-compatible with the just-released OpenGL ES 3, and you can even apply these techniques to other platforms, such as iOS or HTML5 WebGL.

Book Information

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Customer Reviews

This book has been paramount to me by facilitating a thorough understanding of using shaders with the Android SDK. Not only that, but this book also breaks down a lot of the complex math revolving around collision detection, game physics, and more. I think this book is great if you are a beginner in OpenGL ES 2, since this book will get you up to speed really fast.This book is also great if you already know shaders, but you are unfamiliar with using them with the Android SDK. Android can be a bit tricky at times and this book will navigate you through the Android SDK so that your shaders work as intended.There are chapters in the book that go over Textures, creating a SkyBox, using Vertex Buffer Objects, using Index Buffer Objects, Culling, developing Particle Shaders, Vertex Shader Fundamentals, Fragment Shader fundamentals, creating Terrain, enabling the Depth Buffer, simulating Lights, and MORE! Overall, great book!

So, let’s say that you’re a fairly experienced Java programmer. Maybe you have experience with Android, maybe not. You want to start creating a game for Android, but rather than jumping directly into Unity or something comparable, you want to get some OpenGL ES fundamentals under your belt. This could be the case for a variety of reasons, and it probably is a good idea to learn some OpenGL ES first before diving into a framework like Unity. You want a book that goes into more detail about the fundamental concepts than you are likely to find in online tutorials, but you aren’t looking for a reference book. You need something that is going to cover most of the stuff you would need to get your game up and running, but not something so dense that you never get through it. If you match the person I’ve described above, this is the book that you’re looking for. The book takes you through the basic concepts of OpenGL ES programming, from a primer on some of the mathematical concepts, through vertex and pixel shaders, vertex and index buffers, textures and lighting, touch controls, and particle systems. The book is by no means complete, but by probably the half way point you could stop and create a halfway decent game.This book reminds me of a comparable series for DirectX by Frank Luna, however compared to that series this book is VERY light on content. The DirectX series covers twice as much stuff in much greater detail, however I stuck with the five star rating because it is a "Quick-Start Guide" so it’s not like you’re being sold a false bill of goods. My only real complaint would be that it doesn’t cover loading models.

This is just what I was looking for. I am a decent Android dev and thought I’d be able to jump in a

figure out OpenGL by reading some online tutorials. Most of what I found was for OpenGL 1, not 2 and/or all over the place. It was frustrating. OpenGL definitely has a learning curve and this book fits right in teaching the skills you need to get up and running. I was hesitant to get it on Kindle but it's actually better for me than hardcopy. I just open it up in the Kindle Web Reader and program along with the chapters. I typically go with O'Reilly books because of how pragmatic they are, but it turns out The Pragmatic Programmer series (at least this book) is as-advertised.

Using Kevin Brothalers book it's a fairly easy job creating your first OpenGL ES app for the Android platform. The author covers all the basics from painting your first box on the screen to how to create a particle firework.Also, a lot of the math involved is explained in an easily understood way.If you plan to write a OpenGL ES powered game then this book should be in your library!

I bought this book after failing to find much good OpenGL ES 2.0 + Android material online. Experienced Android programmers will skim a couple of the sections that err on the side of over-explaining things, but it is written in such a way that makes it easy to skip ahead. I'm most of the way through and for me and programming books that's pretty rare. It gets you off the ground quickly with good sample code and the refresher on matrix math was surprisingly useful and well done. I docked a star because I would like to have had more coverage on creating meshes. I'm creating 3D scientific graphs and the height-map terrain example is limited.

This is a great book for beginners of opengl on Android. I was through this book in a couple of days, while typing the code into my project. I am not an opengl expert after reading this book, but the framework makes sense to me now.

Absolutely amazing book. After struggling for nearly a month trying to get a clear understanding of OpenGL ES for Android by looking at various websites, tutorials, and sample code I was still completely lost. My primary focus was improving the performance of a 2D Android game I am working on, and OpenGL just wasn't clicking for me. I finally decided to pick up this book and it was exactly what I needed. The examples are clear and detailed and all of them actually worked! (which sadly isn't the case for most programming books). The build up on existing code from chapter to chapter is paced very well in my opinion, and I highly recommend this book to anyone in a situation similar to mine.

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