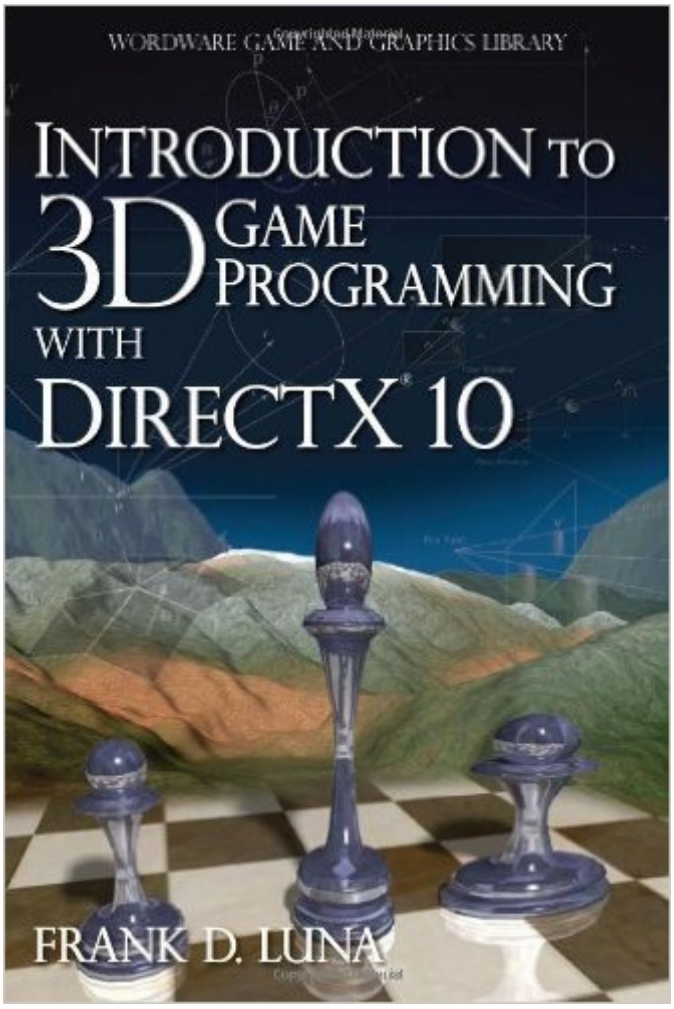
Introduction To 3D Game Programming With DirectX 10



Synopsis

Introduction to 3D Game Programming with DirectX 10 provides an introduction to programming interactive computer graphics, with an emphasis on game development, using DirectX 10. The book is divided into three main parts. Part I explores basic mathematical tools, Part II shows how to implement fundamental tasks in Direct3D, and Part III demonstrates a variety of techniques and special effects. With this book understand how vectors, matrices, and transfomations are used in the creation of computer games; discover how to implement lighting, texture mapping, blending, and stenciling to increase the realism of your scenes; explore techniques for creating special effects, including terrain rendering, shadow mapping, particle systems, and reflections; learn about new Direct3D 10 features such as geometry shaders, the stream out pipeline stage, texture arrays, and primitive IDs; test your knowledge and programming skills with the end-of-chapter exercises.

Book Information

Paperback: 502 pages

Publisher: Jones & Bartlett Learning; 1 edition (October 25, 2008)

Language: English

ISBN-10: 1598220535

ISBN-13: 978-1598220537

Product Dimensions: 6.1 x 1.1 x 9.2 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.9 out of 5 starsÂ Â See all reviewsÂ (13 customer reviews)

Best Sellers Rank: #1,373,611 in Books (See Top 100 in Books) #16 inÂ Books > Computers & Technology > Programming > Graphics & Multimedia > DirectX #1012 inÂ Books > Computers & Technology > Games & Strategy Guides > Game Programming #1688 inÂ Books > Textbooks > Computer Science > Graphics & Visualization

Customer Reviews

As the title says, this book is an excellent introduction to Direct X 10 programming.If you are new to DirectX programming, this book is pretty much what you should start with. I have tried several others, but Frank’s books seem to still be the best and this third incarnation is no different.With this in mind, there are some necessary pre-requisites before you read this book.First, you should have some prior knowledge in matrix algebra. Frank does dedicate a section to this, but you definitely should have taken a course prior.Secondly, you must be familiar with basic C++ concepts. If you are unfamiliar with classes, structures and pointers this book is not for you. Get a good book on C++

programming before hand. Finally, although it is not strictly necessary, you should have some knowledge in WIN32 programming.This is definitely a good beginner book, and I highly recommend it.

While I am only halfway through this book, I must say it is superb. I had no previous knowledge on DirectX and it is being a great introduction. The text is clear, the code is neat, and the examples at the end of every chapter are complete and entertaining. What I like the most is the author's verbosity on the maths; he explains how and why everything works, from projection matrices to lighting calculations. This provides a better understanding of the subject and makes coding easier afterward. For those not too used to vector and matrix algebra, the introductory chapters cover just that. Also, even though Win32 programming knowledge is assumed, the author has included a brief tutorial in appendix A which covers the topics he touches during the first chapters.Another aspect to point out is the way the chapters are laid out. Every chapter so far starts off by shooting you with some theory and providing ad-hoc code snippets. This gives you the chance to put everything together yourself and then compare your work with the author's. In my opinion this is the best approach the author could have taken. By the way, the author's code actually works, so you won't have to spend any time reverse engineering faulty sample code.In conclusion, this is a must read for anyone getting started on dx10!

Frank D. Luna's Direct3D books have been the standard ever since the release of his first in 2003. While his second book was a fairly extensive rewrite focusing on the introduction of shaders, The DirectX 10 book is a fairly direct translation of the DirectX 9 shader approach book. While there is not a great amount of new content focusing on new shader effects, this book does a great job of translating the material to DirectX 10. The geometry shader chapters do provide new content and explains the topics well. The one disappointment is in the removal of some chapters from the last book. There are several that are missing that would provide more value and I do not understand their being missing. While DirectX has been updated to version 11, the DirectX 10 feature set still provides a good basis for DirectX 11. When Luna releases the update for DirectX 11 it will undoubtedly be of the same quality as his previous works.

Most outstanding graphics programming book I had ever read. I got this book in June 2011 and after studying it in detail, was much better informed about graphics technology in general and Microsoft DirectX specifically. Frank Luna explains these topics well and his writing is superb.When

I read the book, I was using technologies that were based on DirectX. Today, not so much. Regardless, the description of graphics concepts as presented by Frank Luna can provide some strong insight into graphics technology. If we could see a book from this author related to OpenGL, that may be a great next step.

Having some experience with DX9, I wanted a text that clearly explained the capabilities of DX10. I previously had purchased and used Wendy Jones' and Peter Walsh's books on DX10. I was disappointed in them because they never bothered to take on the topic of window resizing. Why?Frank Luna's latest is a welcome treat. I would have liked to have seen it sooner, but better late than never.Those readers fearful of vector and matrix arithmetic and algebra will undoubtedly stiffen up because Luna starts with these prerequisites. Such readers should try to tough it out. It will be worth it. Luna's treatment is thorough. Get through it, but with thorough understanding.I've been through Chapters 1-6, and every paragraph and example program has been worthwhile. Good work, Frank.

From previous attempts to learn DirectX, I was fed up with the API and convinced that OpenGl was far superior. But...This book is great. It made me realize how powerful DirectX and DirectX shader technology is, despite Microsoft's tendency to write old school complex C-style API's. The author shows a different way of thinking about the API, and how to encapsulate the complexity in C++, yet maintain the possibility of exposing the ultimate flexibility underlying.The sequence of topics is great, and very aggressive. The example code is very useful. This text is not watered down at all, and you will learn everything you need to know to understand all of the Microsoft SDK examples, and to start building your own shaders.And yet it reads like an easy introductory text.Nicely done!!

Training) Bundle Programming #45: Python Programming Professional Made Easy & Android Programming In a Day! (Python Programming, Python Language, Python for beginners, ... Programming Languages, Android Programming) Introduction to 3D Game Programming with DirectX 10 Real-Time 3D Rendering with DirectX and HLSL: A Practical Guide to Graphics Programming (Game Design) Beginning DirectX 11 Game Programming Programming a Multiplayer FPS in DirectX (Game Development Series) Beginning DirectX 10 Game Programming Managed DirectX 9 Kick Start: Graphics and Game Programming Ultimate Game Programming with DirectX Programming: Computer Programming for Beginners: Learn the Basics of Java, SQL & C++ - 3. Edition (Coding, C Programming, Java Programming, SQL Programming, JavaScript, Python, PHP) Raspberry Pi 2: Raspberry Pi 2 Programming Made Easy (Raspberry Pi, Android Programming, Programming, Linux, Unix, C Programming, C+ Programming) Android: Programming in a Day! The Power Guide for Beginners In Android App Programming (Android, Android Programming, App Development, Android App Development, ... App Programming, Rails, Ruby Programming) DOS: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of DOS programming (DOS, ADA, Programming, DOS Programming, ADA ... LINUX, RPG, ADA Programming, Android, JAVA) ASP.NET: Programming success in a day: Beginners guide to fast, easy and efficient learning of ASP.NET programming (ASP.NET, ASP.NET Programming, ASP.NET ... ADA, Web Programming, Programming) C#: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of C# programming (C#, C# Programming, C++ Programming, C++, C, C Programming, C# Language, C# Guide, C# Coding)