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# Autodesk Maya Api White Paper

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Creating Augmented and Virtual Realities  
Learning Vulkan  
Real-Time 3D Rendering with DirectX and HLSL  
Computer Graphics Programming in OpenGL with C++  
Autodesk Vred 2021 User Guide  
The Art of Rigging  
Vulkan Programming Guide  
Advanced Guide to Python 3 Programming  
Game Engine Architecture  
Postmortems from Game Developer  
Whittle's Gait Analysis - E-Book  
Metal by Tutorials (Third Edition): Beginning Game Engine Development With Metal  
The Art of Maya  
Python Projects  
3D Graphics Rendering Cookbook  
Introduction to 3D Game Programming with DirectX 12  
Creating Visual Effects in Maya  
Google SketchUp and SketchUp Pro 7 Bible  
Mastering Android Game Development with Unity  
Residential Design Using Autodesk Revit Architecture 2011  
Openscenegraph 3.0  
Maya Python for Games and Film  
The Art of Maya

Game Coding Complete  
Fundamentals of Multimedia  
Learn OpenGL  
Real-Time Rendering  
Computational Support for Sketching in Design  
Mastering Autodesk Navisworks 2013  
Practical Maya Programming with Python  
OpenCL Programming Guide  
The Art of Fluid Animation  
Edgeloop Character Modeling For 3D  
Professionals Only  
WebGL Programming Guide  
The Cg Tutorial  
Physically Based Rendering  
Mobile 3D Graphics  
Introduction to 3D Game Programming with  
DirectX 11  
Maya Programming with Python Cookbook  
The Art of Maya

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*White*        [aofithealth.com](http://aofithealth.com)  
*Paper*        *by guest*

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**CINDY  
STEWART**

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Creating  
Augmented  
and Virtual  
Realities Packt  
Publishing Ltd  
This updated  
bestseller

provides an  
introduction to  
programming  
interactive  
computer  
graphics, with  
an emphasis  
on game  
development  
using DirectX  
11. The book  
is divided into

three main  
parts: basic  
mathematical  
tools,  
fundamental  
tasks in  
Direct3D, and  
techniques  
and special  
effects. It  
includes new  
Direct3D 11

features such as hardware tessellation, the compute shader, dynamic shader linkage and covers advanced rendering techniques such as screen-space ambient occlusion, level-of-detail handling, cascading shadow maps, volume rendering, and character animation. Includes a companion CD-ROM with code and figures. eBook Customers: Companion files are available for

downloading with order number/proof of purchase by writing to the publisher at [info@merclearning.com](mailto:info@merclearning.com). [Learning Vulkan](#) Elsevier Health Sciences Game Coding Complete, Second Edition is the essential hands-on guide to developing commercial quality games written by master game programmer, Mike McSahffry. This must-have second edition has been

expanded from the bestselling first edition to include the absolute latest in exciting new techniques in game interface design programming, game audio programming, game scripting, 3D programming, network game programming and game engine technology. All of the code in the book has been completely updated to work with all of the latest compiler technology.

Real-Time 3D Rendering with DirectX and HLSL John Wiley & Sons  
 Create enthralling Android games with Unity Faster Than Ever Before About This Book Develop complex Android games with the help of Unity's advanced features such as artificial intelligence, high-end physics, and GUI transformation s. Create amazing Graphical User Interfaces (GUIs) with

Unity's new uGUI system Unravel and deploy exciting games across Android devices Who This Book Is For If you are a Unity 5 developer and want to expand your knowledge of Unity 5 to create high-end complex Android games, then this book is for you. Readers are expected to have a basic understanding of Unity 5, working with its environment, and its basic concepts.

What You Will Learn Develop your own Jetpack Joyride clone game Explore the advanced features of Unity 5 by building your own Action Fighting game Develop remarkable Graphical User Interfaces (GUIs) with Unity's new uGUI system Enhance your game by adding stunning particle systems and complex animations Build pleasing virtual worlds with special effects, lights, sky cube

maps, and cameras Make your game more realistic by providing music and sound effects Debug and deploy your games on different Android devices In Detail Game engines such as Unity are the power-tools behind the games we know and love. Unity is one of the most widely-used and best loved packages for game development and is used by everyone, from hobbyists to

large studios, to create games and interactive experiences for the Web, desktop, mobile, and console. With Unity's intuitive, easy-to-learn toolset and this book, it's never been easier to become a game developer. You will begin with the basic concepts of Android game development, a brief history of Android games, the building blocks of Android games in Unity 5, and

the basic flow of games. You will configure an empty project for the Jetpack Joyride Clone Game, add an environment and characters, and control them. Next you will walk through topics such as particle systems, camera management, prefabs, animations, triggers, colliders, and basic GUI systems. You will then cover the basic setup for 3D action fighting games, importing

models, textures and controlling them with a virtual on-screen joystick. Later you will set up Scene for 3D Configuration, create basic gameplays, and manage input controls. Next you will learn to create the interface for the main menu, gameplay, game over, achievements, and high score screens. Finally you will polish your game with stats, sounds, and Social Networking, followed by testing the

game on Android devices and then publishing it on Google Play, Amazon, and OUYA Stores. Style and approach A step-by-step and detailed guide to developing high-end complex Android games utilizing the advanced concepts of Unity. Computer Graphics Programming in OpenGL with C++ Createspace Independent Publishing Platform Despite

popular forays into augmented and virtual reality in recent years, spatial computing still sits on the cusp of mainstream use. Developers, artists, and designers looking to enter this field today have few places to turn for expert guidance. In this book, Erin Pangilinan, Steve Lukas, and Vasanth Mohan examine the AR and VR development pipeline and provide hands-on

practice to help you hone your skills. Through step-by-step tutorials, you'll learn how to build practical applications and experiences grounded in theory and backed by industry use cases. In each section of the book, industry specialists, including Timoni West, Victor Prisacariu, and Nicolas Meuleau, join the authors to explain the technology behind spatial computing. In three parts,

this book covers: Art and design: Explore spatial computing and design interactions, human-centered interaction and sensory design, and content creation tools for digital art Technical development: Examine differences between ARKit, ARCore, and spatial mapping-based systems; learn approaches to cross-platform development on head-mounted displays Use cases: Learn

how data and machine learning visualization and AI work in spatial computing, training, sports, health, and other enterprise applications [Autodesk Vred 2021 User Guide](#) Mercury Learning and Information Wavefront's Maya is the premier tool for 3D modeling, animation, and rendering, used by top studios to create everything from ads to movies to computer games. This

book is an official, heavily illustrated, full-color guide to Maya essentials, straight from the creators of the program.

*The Art of Rigging* Sybex

Cg is a complete programming environment for the fast creation of special effects and real-time cinematic quality experiences on multiple platforms. This text provides a guide to the Cg graphics language.

*Vulkan Programming*

*Guide* CRC Press  
Advanced Guide to Python 3 Programming delves deeply into a host of subjects that you need to understand if you are to develop sophisticated real-world programs. Each topic is preceded by an introduction followed by more advanced topics, along with numerous examples, that take you to an advanced level. There are nine

different sections within the book covering Computer Graphics (including GUIs), Games, Testing, File Input and Output, Databases Access, Logging, Concurrency and Parallelism, Reactive programming, and Networking. Each section is self-contained and can either be read on its own or as part of the book as a whole. This book is aimed at the those who have



learnt the basics of the Python 3 language but want to delve deeper into Python's ecosystem of additional libraries and modules, to explore concurrency and parallelism, to create impressive looking graphical interfaces, to work with databases and files and to provide professional logging facilities.

*Advanced Guide to Python 3 Programming*  
John Wiley &

Sons  
Fluid simulation is a computer graphic used to develop realistic animation of liquids in modern games. The Art of Fluid Animation describes visually rich techniques for creating fluid-like animations that do not require advanced physics or mathematical skills. It explains how to create fluid animations like water, smoke, fire, and explosions

through computer code in a fun manner. The book presents concepts that drive fluid animation and gives a historical background of the computation of fluids. It covers many research areas that include stable fluid simulation, flows on surfaces, and control of flows. It also gives one-paragraph summaries of the material after each section for reinforcement. This book

includes computer code that readers can download and run on several platforms so they can extend their work beyond what is described in the book. The material provided here is designed to serve as a starting point for aspiring programmers to begin creating their own programs using fluid animation. [Game Engine Architecture](#)  
Addison-Wesley Professional  
Learn the secrets for

breathing life into your characters with this guide to edgeloop modeling, and create a character with personality, realistic form, and natural motion.

**Postmortems from Game Developers**

Morgan Kaufmann  
Build your own low-level game engine in Metal! This book introduces you to graphics programming in Metal - Apple's framework for programming on the GPU. You'll build your own

game engine in Metal where you can create 3D scenes and build your own 3D games. Who This Book Is For This book is for intermediate Swift developers interested in learning 3D graphics or gaining a deeper understanding of how game engines work. Topics Covered in Metal by Tutorial The Rendering Pipeline: Take a deep dive through the graphics pipeline. 3D

Models: Import 3D models with Model I/O and discover what makes up a 3D model.Coordin ate Spaces: Learn the math behind 3D rendering.Ligh ting: Make your models look more realistic with simple lighting techniques.Sh ading: Understand how vertex and fragment shaders work.Textures & Materials: Design textures and surfaces for micro detail.Multipas s Rendering:	Add shadows with advanced lighting effects.Tile- based Deferred Rendering: Take full advantage of your Apple GPU with this rendering technique.GPU -Driven Rendering: Move the rendering setup to the GPU.Tessellati on: Discover how to use tessellation to add a higher level of detail using fewer resources.Envi ronment: Add realistic skies and water to your scenes.Particl e Systems:	Learn how to make stunning visual effects using GPU compute shaders.Chara cter Animation: Bring your 3D models to life with joints and animation.Ray tracing: Learn how to perform raytracing on the GPU.Advanced Lighting & Shadows: Discover signed distance fields and render beautiful shadows.Perfo rmance Optimization: Tune up your game with Xcode's new
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tools. After reading this book, you'll be prepared to take full advantage of graphics rendering with the Metal framework. [Whittle's Gait Analysis - E-Book](#) Elsevier The Art of Maya 3rd edition is an introduction to 3D computer graphics unlike any other. Join the thousands of users who've garnered the knowledge they needed to enter the 3rd dimension with this full color visual exploration of the theory of

Maya. Rich with diagrams and illustrations that demonstrate the critical concepts of 3D time and space, this book will help you understand the concepts critical to conveying your artistic vision through the medium of 3D. If you are an artist looking to incorporate 3D into your toolkit, this is the resource you need. Understand: \* 3D Computer Graphics \* Time and Space \*

Animation \*  
 Setting Keys \*  
 Non-linear Animation \*  
 Rigid Body Dynamics \*  
 Modeling \*  
 NURBS \*  
 Polygons \*  
 Subdivision Surfaces \*  
 Deformations \*  
 \* Deforming Objects \*  
 Lattices and Clusters \*  
 Character Animation \*  
 Materials and Textures \*  
 Shading Networks \*  
 Texture Maps \*  
 \* Bumps and Displacements \*  
 \* Digital Cinematography \*  
 \* Shadows \*  
 \* Lighting \*  
 Cameras \*  
 Rendering \*  
 Effects \*

Particle Effects * Paint Effects * Maya Fluid Effects * Maya Cloth * Maya Long Hair * Interactive 3D * Game Creation * Building Levels The Art of Maya includes Maya Personal Learning Edition to allow you to start practicing right away. The book closes with a series of Production Notes detailing how skilled Maya artists have worked with the software to create	production quality films, games, visualizations and animations. Get an inside look at the use of Maya by: * The Canadian Broadcast Corporation * Turner Studios * Digital Domain for the making of I-Robot * Weta Digital in the making of The Lord of the Rings: The Return of the King * The AOES Medialab * BioDigital * The Mill * Oddworld Inhabitants in the making of Oddworld	Stranger's Wrath <b>Metal by Tutorials (Third Edition): Beginning Game Engine Development With Metal</b> Packt Publishing Ltd Residential Design Using Revit Architecture 2011 is designed for the architectural student new to Revit Architecture 2011. This text takes a project based approach to learning Revit Architecture in which the student develops a
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single family residence all the way to photo-realistic renderings like the one on the cover. Each book comes with a DVD containing numerous video presentations in which the author shows and explains the many tools and techniques used in Revit Architecture 2011. This book starts with an optional basic introduction to hand sketching techniques and concepts intended to

increase your ability to sketch design ideas by hand and to think three-dimensionally. The lessons then begin with an introduction to Revit Architecture 2011. The first four chapters are intended to get the reader familiar with the user interface and many of the common menus and tools. Throughout the rest of the book a residential building is created and the many tools and

features of Revit Architecture 2011 are covered in greater detail. Using step-by-step tutorial lessons, the residential project is followed through to create elevations, sections, floor plans, renderings, construction sets, etc. Videos The videos contained on the included DVD make it easy to see the menu selections and will make learning Revit Architecture straightforward

d and simple. At the start of each chapter the reader is prompted to watch a video that previews the topics that will be covered in the proceeding chapter. This allows the reader to be familiar with the menu selections and techniques before they begin the tutorial. Readers will feel more confident in what they are doing and have a better understanding of the desired outcome of each lesson by watching these videos.

*The Art of Maya*  
Razeware LLC  
Google SketchUp & SketchUp Pro Bible will target design professionals who are increasingly turning to SketchUp and SketchUp Pro to easily create professional quality designs and design presentations. This book will cover creating 2D and 3D designs, exporting models to Google Earth, and using LayOut to create professional quality design presentations. Offering everything that a professional or hobbyist needs to know, Google SketchUp and SketchUp Pro Bible will include tips and tricks to make using this software easy and efficient. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

*Python Projects*  
"O'Reilly Media, Inc."  
Hailed as a

<p>"must-have textbook" (CHOICE, January 2010), the first edition of Game Engine Architecture provided readers with a complete guide to the theory and practice of game engine software development. Updating the content to match today's landscape of game engine architecture, this second edition continues to thoroughly cover the major components that make up a typical</p>	<p>commercial game engine. New to the Second Edition Information on new topics, including the latest variant of the C++ programming language, C++11, and the architecture of the eighth generation of gaming consoles, the Xbox One and PlayStation 4 New chapter on audio technology covering the fundamentals of the physics, mathematics, and technology that go into creating an</p>	<p>AAA game audio engine Updated sections on multicore programming, pipelined CPU architecture and optimization, localization, pseudovectors and Grassman algebra, dual quaternions, SIMD vector math, memory alignment, and anti-aliasing Insight into the making of Naughty Dog's latest hit, The Last of Us The book presents the theory underlying various subsystems that comprise a commercial</p>
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game engine as well as the data structures, algorithms, and software interfaces that are typically used to implement them. It primarily focuses on the engine itself, including a host of low-level foundation systems, the rendering engine, the collision system, the physics simulation, character animation, and audio. An in-depth discussion on the "gameplay foundation

layer" delves into the game's object model, world editor, event system, and scripting system. The text also touches on some aspects of gameplay programming, including player mechanics, cameras, and AI. An awareness-building tool and a jumping-off point for further learning, *Game Engine Architecture, Second Edition* gives readers a solid understanding of both the

theory and common practices employed within each of the engineering disciplines covered. The book will help readers on their journey through this fascinating and multifaceted field.

*3D Graphics Rendering Cookbook*  
Packt Publishing Ltd  
DVD-ROM includes over 9 hours of video lectures.  
[Introduction to 3D Game Programming with DirectX](#)  
12 Serdar Hakan

<p>DÜZGÖREN Graphics and game developers must learn to program for mobility. This book will teach you how. "This book - written by some of the key technical experts...provi des a comprehensiv e but practical and easily understood introduction for any software engineer seeking to delight the consumer with rich 3D interactive experiences on their phone. Like</p>	<p>the OpenGL ES and M3G standards it covers, this book is destined to become an enduring standard for many years to come." - Lincoln Wallen, CTO, Electronic Arts, Mobile "This book is an escalator, which takes the field to new levels. This is especially true because the text ensures that the topic is easily accessible to everyone with some background in computer science...The</p>	<p>foundations of this book are clear, and the authors are extremely knowledgeabl e about the subject. - Tomas Akenine- Möller, bestselling author and Professor of Computer Science at Lund University "This book is an excellent introduction to M3G. The authors are all experienced M3G users and developers, and they do a great job of conveying that experience, as</p>
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well as plenty of practical advice that has been proven in the field." - Sean Ellis, Consultant Graphics Engineer, ARM Ltd The exploding popularity of mobile computing is undeniable. From cell phones to portable gaming systems, the global demand for multifunctional mobile devices is driving amazing hardware and software developments. 3D graphics

are becoming an integral part of these ubiquitous devices, and as a result, Mobile 3D Graphics is arguably the most rapidly advancing area of the computer graphics discipline. Mobile 3D Graphics is about writing real-time 3D graphics applications for mobile devices. The programming interfaces explained and demonstrated in this must-have reference enable dynamic 3D

media on cell phones, GPS systems, portable gaming consoles and media players. The text begins by providing thorough coverage of background essentials, then presents detailed hands-on examples, including extensive working code in both of the dominant mobile APIs, OpenGL ES and M3G. C/C++ and Java Developers, graphic artists, students, and

enthusiasts would do well to have a programmable mobile phone on hand to try out the techniques described in this book. The authors, industry experts who helped to develop the OpenGL ES and M3G standards, distill their years of accumulated knowledge within these pages, offering their insights into everything from sound mobile design principles and constraints, to efficient

rendering, mixing 2D and 3D, lighting, texture mapping, skinning and morphing. Along the way, readers will benefit from the hundreds of included tips, tricks and caveats. Written by experts at Nokia whose workshops at industry conferences are blockbusters. The programs used in the examples are featured in thousands of professional courses each year. Creating

Visual Effects in Maya  
Mercury Learning and Information  
Maya Python for Games and Film is the first book to focus exclusively on how to implement Python with Maya. Written by trusted authorities in the field, this in-depth guide will help you master Maya Python, whether you're a seasoned technical artist looking to make the transition from MEL to Python or an aspiring artist not

wanting to scramble for information.

**Google SketchUp and SketchUp Pro 7 Bible**

Springer Nature  
The popular Postmortem column in Game Developer magazine features firsthand accounts of how some of the most important and successful games of recent years have been made. This book offers the opportunity to harvest this expertise with

one volume. The editor has organized the articles by theme and added previously unpublished analysis to reveal successful management techniques. Readers learn how superstars of the game industry like Peter Molyneux and Warren Spector have dealt with the development challenges such as managing complexity, software and game design issues, schedule

challenges, and changing staff needs.

**Mastering Android Game Development with Unity**

John Wiley & Sons  
Thoroughly revised, this third edition focuses on modern techniques used to generate synthetic three-dimensional images in a fraction of a second. With the advent of programmable shaders, a wide variety of new algorithms have arisen and evolved

over the past few years. This edition discusses current, practical rendering methods used in games and other applications. It also presents a solid theoretical framework and relevant mathematics for the field of interactive computer graphics, all in an approachable style. The authors have made the figures used in the book available for download for fair use.:Download

Figures. Residential Design Using Autodesk Revit Architecture 2011 CRC Press Using WebGL®, you can create sophisticated interactive 3D graphics inside web browsers, without plug-ins. WebGL makes it possible to build a new generation of 3D web games, user interfaces, and information visualization solutions that will run on any standard web browser, and

on PCs, smartphones, tablets, game consoles, or other devices. WebGL Programming Guide will help you get started quickly with interactive WebGL 3D programming, even if you have no prior knowledge of HTML5, JavaScript, 3D graphics, mathematics, or OpenGL. You'll learn step-by-step, through realistic examples, building your skills as you move from simple to complex

solutions for building visually appealing web pages and 3D applications with WebGL. Media, 3D graphics, and WebGL pioneers Dr. Kouichi Matsuda and Dr. Rodger Lea offer easy-to-understand tutorials on key aspects of WebGL, plus 100 downloadable sample programs, each demonstrating a specific WebGL topic. You'll move from basic techniques such as

rendering, animating, and texturing triangles, all the way to advanced techniques such as fogging, shadowing, shader switching, and displaying 3D models generated by Blender or other authoring tools. This book won't just teach you WebGL best practices, it will give you a library of code to jumpstart your own projects. Coverage includes: • WebGL's origin, core

concepts, features, advantages, and integration with other web standards

- How canvas and basic WebGL functions work together to deliver 3D graphics
- Shader development with OpenGL ES Shading Language (GLSL ES)
- 3D scene drawing: representing user views, controlling space volume, clipping, object creation, and perspective
- Achieving greater

realism through lighting and hierarchical objects • Advanced techniques: object manipulation, heads-up displays, alpha blending, shader switching, and more • Valuable reference appendixes covering key issues ranging from coordinate systems to matrices and shader loading to web browser settings This is the newest text in the OpenGL Technical Library, Addison-Wesley's definitive collection of programming guides an reference manuals for OpenGL and its related technologies. The Library enables programmers to gain a practical understanding of OpenGL and the other Khronos application-programming libraries including OpenGL ES and OpenCL. All of the technologies in the OpenGL Technical Library evolve under the auspices of the Khronos Group, the industry consortium guiding the evolution of modern, open-standards media APIs.

Best Sellers - Books :

- [The Boy, The Mole, The Fox And The Horse By Charlie Mackesy](#)
- [A Court Of Frost And Starlight \(a Court Of Thorns And Roses, 4\) By Sarah J. Maas](#)



- [Jackie: Public, Private, Secret](#)
- [Are You There God? It's Me, Margaret. By Judy Blume](#)
- [Daisy Jones & The Six: A Novel By Taylor Jenkins Reid](#)
- [Tomorrow, And Tomorrow, And Tomorrow: A Novel](#)
- [Dog Man: Twenty Thousand Fleas Under The Sea: A Graphic Novel \(dog Man #11\): From The Creator Of Captain Underpants](#)
- [A Court Of Wings And Ruin \(a Court Of Thorns And Roses, 3\) By Sarah J. Maas](#)
- [Goodnight Moon By Margaret Wise Brown](#)
- [Dark Future: Uncovering The Great Reset's Terrifying Next Phase \(the Great Reset Series\) By Glenn Beck](#)