

Unity Animation Essentials Book Library

Create interactive Papervision 3D applications with stunning effects and powerful animations.

In just 24 sessions of one hour or less, Sams Teach Yourself Unity Game Development in 24 Hours will help you master the Unity 4 game engine at the heart of Temple Run and many other sizzling-hot mobile games! You'll learn everything from the absolute basics through sophisticated game physics, animation, and mobile device deployment techniques. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Unity 4 game development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes present interesting information related to the discussion. Tips offer advice or show you easier ways to perform tasks. Cautions alert you to possible problems and give you advice on how to avoid them. Learn how to... Create and work with game objects, Unity's fundamental building blocks Work efficiently with Unity's graphical asset pipeline Apply shaders and textures to any 3D object Sculpt stunning game worlds with Unity's terrain and environmental toolsets Script tasks ranging from capturing input to building complex behaviors Quickly create repeatable, reusable game objects with prefabs Implement easy, intuitive game user interfaces Create amazing effects with Unity's new Shuriken particle system Leverage the full power of Unity's new Mecanim animation system Integrate ambient 2D/3D audio into your games Use mobile device accelerometers and multi-touch displays Modify a desktop game for mobile platforms Apply the "finishing touches" and deploy your game

In Pro Unity Game Development with C#, Alan Thorn, author of Learn Unity for 2D Game Development and experienced game developer, takes you through the complete C# workflow for developing a cross-platform first person shooter in Unity. C# is the most popular programming language for experienced Unity developers, helping them get the most out of what Unity offers. If you're already using C# with Unity and you want to take the next step in becoming an experienced, professional-level game developer, this is the book you need. Whether you are a student, an indie developer, or a seasoned game dev professional, you'll find helpful C# examples of how to build intelligent enemies, create event systems and GUIs, develop save-game states, and lots more. You'll understand and apply powerful programming concepts such as singleton classes, component based design, resolution independence, delegates, and event driven programming. By the end of the book, you will have a complete first person shooter game up and running with Unity. Plus you'll be equipped with the know-how and techniques needed to deploy your own professional-grade C# games. If you already know a bit of C# and you want to improve your Unity skills, this is just the right book for you.

This tutorial-based book allows readers to create a first-person game from start to finish using industry-standard (and free to student) tools of Unity, Substance Painter, and Maya. The first half of the book lays out the basics of using Maya and Substance Painter to create game-ready assets. This includes polygonal modeling, UV layout, and custom texture painting. The book then covers rigging and animation solutions to create assets to be placed in the game, including animated first-person assets and motion-captured NPC animations. Finally, readers can put it all together and build interactivity that allows the player to create a finished game using the assets built and animated earlier in the book. - Written by industry professionals with real-world experience in building assets and games - Build a complete game from start to finish - Learn what the pros use: construct all assets using the tools used at game studios across the world - All software used are free to students - When complete, students will have a playable version of an FPS game Jingtian Li is a graduate of China's Central Academy of Fine Arts and New York's School of Visual Arts, where he earned an MFA in Computer Art. He currently is an Assistant Professor of 3D Animation & Game Design at the University of the Incarnate Word in San Antonio, Texas. Adam Watkins is a 20-year veteran of 3D education. He holds an MFA in 3D Animation and a BFA in Theatre Arts from Utah State University. He currently is the Coordinator and Professor of the 3D Animation & Game Department at the University of the Incarnate Word in San Antonio, Texas. Cassandra Arevalo is an instructor of 3D Animation & Game Design at the University of the Incarnate Word in San Antonio, Texas. She previously worked as an animator at Immersed Games. Matt Tovar is an industry veteran animator. He has worked at Naughty Dog, Infinity Ward, and Sony Interactive on such games as The Last of Us, Call of Duty: Modern Warfare, and most recently Marvel's Avengers with Crystal Dynamics. He is an Assistant Professor of 3D Animation at the University of the Incarnate Word in San Antonio, Texas.

9th EAI International Conference, ArtsIT 2020, Aalborg, Denmark, December 10 – 11, 2020, Proceedings

A Beginner's Guide

Augmented Reality Game Development

How to Develop Fun and Marketable 3D Games

From Concept to Playable Game-with Unity® and C#

The Essential Works of Georg Wilhelm Friedrich Hegel

All-in-one, multi-platform game development

A complete guide to creating usable, realistic game characters with two powerful tools Creating viable game characters requires a combination of skills. This book teaches game creators how to create usable, realistic game assets using the power of an open-source 3D application and a free game engine. It presents a step-by-step approach to modeling, texturing, and animating a character using the popular Blender software, with emphasis on low polygon modeling and an eye for using sculpting and textures, and demonstrates how to bring the character into the Unity game engine. Game creation is a popular and productive pursuit for both hobbyists and serious developers; this guide brings together two effective tools to simplify and enhance the process Artists who are familiar with Blender or other 3D software but who lack experience with game development workflow will find this book fills important gaps in their knowledge Provides a complete tutorial on developing a game character, including modeling, UV unwrapping, sculpting, baking displacements, texturing, rigging, animation, and export Emphasizes low polygon modeling for game engines and shows how to bring the finished character into the Unity game engine Whether you're interested in a new hobby or eager to enter the field of professional game development, this book offers valuable guidance to increase your skills.

Unity brings you ever closer to the "author once, deploy anywhere" dream. With its multiplatform capabilities, you can target desktop, web, mobile devices, and consoles using a single development engine. Little wonder that Unity has quickly become the #1 game engine out there. Mastering Unity is absolutely essential in an increasingly competitive games market where agility is expected, yet until now practical tutorials were nearly impossible to find. Creating Games with Unity and Maya gives you with an end-to-end solution for Unity game development with Maya. Written by a twelve-year veteran of the 3D animation and games industry and professor of 3D animation, this book takes you step-by-step through the process of developing an entire game from scratch-including coding, art, production, and deployment. This accessible guide provides a "non-programmer" entry point to the world of game creation. Aspiring developers with little or no coding experience will learn character development in Maya, scripts, GUI interface, and first- and third-person interactions.

A complete beginner's guide to game development with the powerful Unity game engine. CS Instructor and game designer, Mike Geig, offers a do-it-yourself approach to game development - with all of the main essentials covered. In just 24 hours, learn how to get started developing games with Unity with a hands-on and modular approach. Each chapter covers an essential component of the game development process, illustrated with sample projects, and including full source code, all 3rd party art assets (textures, fonts, models), and all 3rd party sound assets.

The Essential Husserl, the first anthology in English of Edmund Husserl's major writings, provides access to the scope of his philosophical studies, including selections from his key works: Logical Investigations, Ideas I and II, Formal and Transcendental Logic, Experience and Judgment, Cartesian Meditations, The Crisis of European Sciences and Transcendental Phenomenology, and On the Phenomenology of the Consciousness of Internal Time. The collection is an indispensable resource for anyone interested in twentieth-century philosophy.

Basic Writings in Transcendental Phenomenology

Phenomenology of Mind, Philosophy of Mind, Aesthetics, The Criticism of Hegle's Work and Hegelianism by Schopenhauer & Nietzsche, Biography

Creating 3D Game Art for the iPhone with Unity

Models, Textures, Animation, & Code

Papervision3d Essentials

Unity 2020 Virtual Reality Projects

Creating Games with Unity and Maya

This book constitutes the refereed post-conference proceedings of the 9th International Conference on Interactivity and Game Creation, ArtsIT 2020, held in Aalborg, Denmark, in December 2020. Due to COVID-19 pandemic the conference was held virtually. The 28 revised full papers presented were carefully selected from 60 submissions. The papers represent a forum for the dissemination of cutting-edge research results in the area of arts, design and technology, including open related topics like interactivity and game creation. They are grouped in terms of content on art, installation and performance; games; design; intelligence and creativity in healthcare; wellbeing and aging.

This is a practical and light-hearted guide to get to grips with creating your first games, with easy-to-follow, step-by-step tutorials using the award winning Unity engine. If you've ever wanted to enter the world of independent game development but have no prior knowledge of programming or game development, then this is the book for you. Game developers transitioning from other tools like GameMaker and Flash will find this a useful tool to get them up to speed on the Unity engine, as will anyone who has never handled the Unity engine before.

With iPhone and Unity, game developers are empowered to create compelling games but they must be careful to specifically address the unique challenges of the iPhone hardware cpu and gpu requirements. This book teaches artists how to circumvent the potential pitfalls.

Beginning 3D Game Development with Unity is perfect for those who would like to come to grips with programming Unity. You may be an artist who has learned 3D tools such as 3ds Max, Maya, or Cinema 4D, or you may come from 2D tools such as Photoshop and Illustrator. On the other hand, you may just want to familiarize yourself with programming games and the latest ideas in game production. This book introduces key game production concepts in an artist-friendly way, and rapidly teaches the basic scripting skills you'll need with Unity. It goes on to show how you, as an independent game artist, can create casual interactive adventure games in the style of Telltale's Tales of Monkey Island, while also giving you a firm foundation in game logic and design. The first part of the book explains the logic involved in game interaction, and soon has you creating game assets through simple examples that you can build upon and gradually expand. In the second part, you'll build the foundations of a point-and-click style first-person adventure game—including reusable state management scripts, load/save functionality, a robust inventory system, and a bonus feature: a dynamically configured maze and mini-map. With the help of the provided 2D and 3D content, you'll learn to evaluate and deal with challenges in bite-sized pieces as the project progresses, gaining valuable problem-solving skills in interactive design. By the end of the book, you will be able to actively use the Unity 3D game engine, having learned the necessary workflows to utilize your own assets. You will also have an assortment of reusable scripts and art assets with which to build future games.

Game Development Tool Essentials

Pro Unity Game Development with C#

Introduction to Game Design, Prototyping, and Development

Learn VR development by building immersive applications and games with Unity 2019.4 and later versions, 3rd Edition

Animate and Control Your 3D Characters in Unity in Less Than 60 Minutes.

Getting Started with 3D Animation in Unity

Unity 3.x Game Development Essentials

Game Development Tool Essentials provides must-have tips and tricks from industry professionals for strengthening and streamlining your game tools pipeline. Everyone knows the game tools pipeline is important, but in the current environment of shrinking budgets and increased time pressure, developers often have to settle for inefficient, ad hoc, messy pipelines. This unique book will break you out of that cycle. The practical, expert insights contained within will enable you to work faster and more efficiently, so you can spend more time making cool things. Game Development Tool Essentials pools the knowledge and experience of working developers over four critical aspects of the game tools pipeline: asset and data management, geometry and models, Web tools, and programming. Within those sections, you will learn cutting-edge techniques on essential subjects such as COLLADA rendering, exporting and workflow; asset management and compiler architecture; and moving tools to the cloud. If you're a game developer, you need Game Development Tool Essentials. Covers readily available tools and tools developers can build themselves. Presents 96 code samples, 81 illustrations, and end-of-chapter references. Special chapter on moving tools to the cloud.

Unity is a feature-rich, fully-integrated development engine that provides out-of-the-box functionality for the creation of interactive 3D content. It is an exciting engine that has a rich and sophisticated animation system called Mecanim. Unity Animation Essentials offers a comprehensive introduction to powerful animation tools and principles in Unity, which can be used to make great games. This book starts by exploring core animation concepts and then dives deeper to demonstrate their practical application in real-time games. This book shares extensive and useful insights to create animations using a professional grade workflow, and to create responses and interactive scenes. Each chapter focuses on a specific range of topics, from timing and events to character animation and particle systems. By the end of the book, you should be able to fully utilize the powers of Mecanim and Unity.

Solve your programming woes in Unity with practical design propositions
Key Features
Gain a comprehensive overview of Unity engine architecture and coding model
Build a complete racing game using software design patterns and understand how to implement them in Unity
Download the source code of the complete prototype demonstrating each of the software patterns used
Book Description
This book is written for every game developer ready to tackle the bigger picture and start working with advanced programming techniques and design patterns in Unity. Game Development Patterns with Unity 2021 is an introduction to the core principles of reusable software patterns and how to employ them to build components efficiently. In this second edition, you'll tackle design patterns with the help of a practical example; a playable racing game prototype where you'll get to apply all your newfound knowledge. Notable updates also include a game design document (GDD), a Unity programming primer, and the downloadable source code of a complete prototype. Your journey will start by learning about overall design of the core game mechanics and systems. You'll discover tried-and-tested software patterns to code essential components of a game in a structured manner, and start using classic design patterns to utilize Unity's unique API features. As you progress, you'll also identify the negative impacts of bad architectural decisions and understand how to overcome them with simple but effective practices. By the end of this Unity book, the way you develop Unity games will change – you'll adapt a more structured, scalable, and optimized process that will help you take the next step in your career. What you will learn
Structure professional Unity code using industry-standard development patterns
Identify the right patterns for implementing specific game mechanics or features
Develop configurable core game mechanics and ingredients that can be modified without writing a single line of code
Review practical object-oriented programming (OOP) techniques and learn how they're used in the context of a Unity project
Build unique game development systems such as a level editor
Explore ways to adapt traditional design patterns for use with the Unity API
Who this book is for
This book is for Unity game developers who want to learn industry standards for building Unity games. Knowledge of the Unity game engine and programming in the C# language is a must, so if you're a beginner, try our Learning C# by Developing Games with Unity 2021 handbook instead.

The art of programming mechanics -- Real world mechanics -- Animation mechanics -- Game rules and mechanics -- Character mechanics -- Player mechanics -- Environmental mechanics -- Mechanics for external forces.

Mastering Unity

The Essential Husserl

3ds Max Basics for Modeling Video Game Assets

Mastering Unity Scripting

Game Development Patterns with Unity 2021

Unity 3D Game Development

Unity Game Development in 24 Hours, Sams Teach Yourself

Create amazing games with solid gameplay features, using a professional-grade workflow inside the Unity engine! About This Book
Become a Unity master by creating a practical, in-depth game-development project with Unity
Use advanced C# scripting to unlock the complete potential of Unity 5
Use Version Control to Effectively Manage and Scale your workflow
Who This Book Is For
If you are a Unity developer who now wants to develop and deploy interesting games by leveraging the new features of Unity 5.x, then this is the book for you. Basic knowledge of C# programming is assumed. What You Will Learn
Explore hands-on tasks and real-world scenarios to make a Unity horror adventure game
Create enemy characters that act intelligently and make reasoned decisions
Use data files to save and restore game data in a way that is platform-agnostic
Get started with VR development
Use Navigation Meshes, Occlusion Culling, and the Profiler tools
Work confidently with GameObjects, Rotations, and Transformations
Understand specific gameplay features such as AI enemies, inventory systems, and level design
In Detail
Do you want to take the leap from being an everyday Unity developer to being a pro game developer? Then look no further! This book is your one stop solution to creating mesmerizing games with lifelike features and amazing gameplay. This book takes an in-depth focus on a practical project with Unity, building a first-person game with many features. You'll dive deep into the architecture of a Unity game, creating expansive worlds, interesting render effects, and other features to make your games special. You will create individual game components, use efficient animation techniques, and implement collision and physics effectively. Specifically, we'll explore optimal techniques for importing game assets, such as

meshes and textures; tips and tricks for effective level design; how to animate and script NPCs; how to configure and deploy to mobile devices; how to prepare for VR development; and how to work with version control, and more. By the end of this book, you'll have developed sufficient competency in Unity development to produce fun games with confidence. Style and approach This book takes a step-by-step, practical tutorial approach. You will create an advanced level Unity game with an emphasis on leveraging the advanced Unity 5 features. You will make the most of the Unity 5 advanced features while you develop the game in its entirety.

Create ready-to-play 3D games with reactive environments, sound, dynamic effects, and more! Key Features Build a solid foundation for game design and game development Understand the fundamentals of 3D such as coordinates, spaces, vectors, and cameras Get to grips with essential Unity concepts including characters, scenes, terrains, objects and more Book Description This book, written by a team of experts at Unity Technologies, follows an informal, demystifying approach to the world of game development. You'll learn the 3D and C# fundamentals before starting to build one short segment of the full game — a vertical slice. With every progressing chapter, you'll learn to improve this game (alongside building your own) to make it ready to pitch to studios. Within Unity 3D Game Development, you will learn to: Design and build 3D characters, and the game environment Think about the users' interactions with your game Develop the interface and apply visual effects to add an emotional connection to your world Grasp a solid foundation of sound design, animations, and lightning to your creations Build, test, and add final touches The book is split between expert insights that you'll read before you look into the project on GitHub to understand all the underpinnings. This way, you get to see the end result, and you're allowed to be creative and give your own thoughts to design, as well as work through the process with the new tools we introduce. Join the book community on Discord: Read this book with Unity game developers, and the team of authors. Ask questions, build teams, chat with the authors, participate in events and much more. The link to join is included in the book. What you will learn Learn fundamentals of designing a 3D game and C# scripting Design your game character and work through their mechanics and movements Create an environment with Unity Terrain and ProBuilder Explore instantiation and rigid bodies through physics theory and code Implement sound, lighting effects, trail rendering, and other dynamic effects Create a short, fully functional segment of your game in a vertical slice Polish your game with performance tweaks JOIN the 'book-club' to read alongside other users, Unity experts, and ask the authors when stuck Who this book is for Our goal with this book is to enable every reader to build the right mindset to think about 3D games, and then show them all the steps we took to create ours. The main target audience for this book is those with some prior knowledge in game development, though regardless of your experience, we hope to create an enjoyable learning journey for you.

Create your own augmented reality games from scratch with Unity 5 About This Book Create your own augmented reality game from scratch and join the virtual reality gaming revolution Use the latest Unity 5 VR SDK to create pro-level AR games like Pokemon Go Innovate and explore the latest and most promising trend of AR gaming in the mobile gaming industry Who This Book Is For This book is for those who have a basic knowledge of game development techniques, but no previous knowledge of Unity is required. Some basic programming knowledge would be desirable, but the book is an introduction to the topic. The book is also suitable for experienced developers new to GIS or GPS development. What You Will Learn Build a location-based augmented reality game called Foodie Go Animate a player's avatar on a map Use the mobile device's camera as a game background Implement database persistence with SQLite4Unity3D to carry inventory items across game sessions Create basic UI elements for the game, inventory, menu, and settings Perform location and content searches against the Google Places API Enhance the game's mood by adding visual shader effects Extend the game by adding multiplayer networking and other enhancements In Detail The heyday of location-based augmented reality games is upon us. They have been around for a few years, but the release of Pokemon Go was a gamechanger that catalyzed the market and led to a massive surge in demand. Now is the time for novice and experienced developers alike to turn their good ideas into augmented reality (AR) mobile games and meet this demand! If you are keen to develop virtual reality games with the latest Unity 5 toolkit, then this is the book for you. The genre of location-based AR games introduces a new platform and technical challenges, but this book will help simplify those challenges and show how to maximize your game audience. This book will take you on a journey through building a location-based AR game that addresses the core technical concepts: GIS fundamentals, mobile device GPS, mapping, map textures in Unity, mobile device camera, camera textures in Unity, accessing location-based services, and other useful Unity tips. The technical material also discusses what is necessary for further development to create a multiplayer version of the game. At the end, you will be presented with troubleshooting techniques in case you get into trouble and need a little help. Style and approach This book shows you how to create every step of the game and gives practical examples.

The Key to Fully Understanding the Basics of a 3D World Prominently used in games, movies, and on television, 3D graphics are tools of creation used to enhance how material and light come together to manipulate objects in 3D space. A game-changer written for the non-technical mind, Essential Skills for 3D Modeling, Rendering, and Animation examines the complexities of 3D computer-generated art, and outlines the basics of how things work and are used in 3D. This text describes the three cornerstones of 3D—modeling, rendering, and animation; focuses on common elements; and provides a full understanding of the foundational concepts involved. Detailing the skills and knowledge needed to become an accomplished 3D artist, it includes step-by-step instruction with ample examples, and allows absolute beginners to move at their own pace. Master Anything You Are Tasked to Model The author incorporates historical information—presenting a contextual understanding of the various techniques and methodologies in their historical place. Each chapter builds on the fundamentals of 3D computer graphics and augments skills based on the concepts, enabling the student to learn both theory and application simultaneously. The book highlights two basic geometry types, polygons and NURBS surfaces, showing the student basic modeling techniques with both. While more techniques are available, an artist can cover any model by grasping these basic techniques. Supplies examples that are specifically taken from Autodesk Maya Contains exercises that are meant to be used in conjunction with the training videos on the website Includes a documented history of computer graphics Essential Skills for 3D Modeling, Rendering, and Animation offers a fundamental understanding of the mechanics of 3D graphics to modelers, animators, texture artists, render artists, game developers, and production artists, as well as educators teaching an undergrad or tech course in 3D animation.

Unity 3D and PlayMaker Essentials

Creating Games with Unity, Substance Painter, & Maya

Create professional games with solid gameplay features and professional-grade workflow

Game Development from Concept to Publishing

Unity Animation Essentials

Beginning 3D Game Development with Unity

Create Interactive Papervision3D Applications with Stunning Effects and Powerful Animals

Learn How to Create Great Games With Unity! Unity is the most popular game engine to date and is loved by beginners and experts alike. It's the easiest way to create cross-platform games with an intuitive - but very powerful - editor that brings your game ideas to life while allowing you to focus on the gameplay. This book will guide you through how to use Unity. While building three playable games, you'll learn all about GameObjects and Prefabs, how to handle input, build user interfaces, light your scenes, use pathfinding and AI, control cameras, animate your characters and scenes and write C# scripts to control the action. Along the way, the book will also introduce you to some neat techniques to ensure your games perform in the most efficient way. Who this book is for This book is for complete beginners to Unity. No prior programming experience with C# is required. Topics covered in Unity Apprentice

Installing and Using Unity: Learn about the Unity Hub and Editor. Creating GameObjects and Prefabs: The building blocks for any Unity game. Controlling Your Game with Scripts: Unity uses the C# programming language. This book will teach you the basics of how to add logic to your characters and scenes. User Input and Collisions: Learn how to let players control your game. And, find out how to detect collisions to trigger events. User Interfaces: Every game needs a user interface to communicate your game's state. Learn how to create and organize these for your games. Basic AI and Navigation: Learn how you can make your characters react to events and exhibit their own behaviors and movement. Cinemachine: Control your camera angles to add professional views and to make sure your players don't miss important events. Object Pooling: Make the most of the resources available to you by organizing your GameObjects effectively. Advanced Animation: Move your GameObjects using the most appropriate animation technique for the job. After reading this book and completing your Unity apprenticeship by working through the included exercises and challenges, you'll be able to create your own cross-platform games with Unity.

Go through 3D game development techniques using Unity Key Features Kick-start your game development career and build ready-to-play 2D and 3D games with ease Understand the key concepts in game design including scripting, physics, instantiation, particle effects, and more Build games that run on desktop, mobile, and the web Book Description Unity is the most popular game engine among Indie developers, start-ups, and medium to large independent game development companies. This book is a complete exercise in game development covering environments, physics, sound, particles, and much more--to get you up and running with Unity rapidly. In this informal guide, you'll get to grips with the basics of game development, starting off with using C# for scripting. You'll get the hang of Unity's development environment and will be able to set up the required assets for your first 2D game. You'll work on animating your player and getting it to move in the 2D environment. Next, you'll see how to build the game in 3D, making use of Unity's new 3D animation system. After building a beautiful 3D environment for the game, you'll work with the latest physics system that Unity has to offer and will make your assets interactive. You'll induce artificial intelligence into the enemies and develop a mechanism to hit them with rocks and punches. Once you've made things pretty with the particle system, you'll move on to optimize the game, adding a cross-platform ready UI, and publishing your game across multiple platforms. You'll walk away with a cool 2D parallax side parallax game and an even cooler third-person 3D adventure game, but most importantly, with the confidence to build your own games. What you will learn

Script games using C# Build your very first 2D and 3D games Work through the key concepts in game development such as animations, physics, and scripting Test and optimize your games to attain great performance Create fully functional menus, HUDs, and UI Create player character interactions with AI and NPC Who this book is for Who this book is written for: If you're a designer or animator who wishes to take their first steps into game development or prototyping, or if you've simply spent many hours sitting in front of video games with ideas bubbling away in the back of your mind, Unity and this book should be your starting point.

As a textbook for learning the fundamentals of modeling, rigging and animating 3D-modeled characters for use in video games, this step-by-step lesson book builds on the reader's modeling skills acquired from reading Volume I. The reader will model characters for the Castle Environment created in Volume I, which will be rigged using the Character Animation Toolkit (CAT) in 3ds Max and animated with game moves. The Skin Modifier is used for associating the meshes to the rigs and the characters are then exported to the Unity game engine and integrated into the Castle Scene with a Third Person Character camera. As the text introduces new modeling skills, it additionally calls on the reader to perform repetitive tasks, reinforcing skills learned in the process. The content is presented as if the reader is in a working video game studio, being responsible for researching asset design and providing the team with placeholder assets and final model assets that are unwrapped and custom textured using both box mapping and the 3ds Max Quick Peel tool. Although the text uses Autodesk 3ds Max for the modeling program, the principles are transferable to other major modeling programs. Key Features: The goal of this book is to teach the fundamentals of 3D modeling video game characters in a simplified, logical progression optimized for learning at a beginner level. Rigging principles (Linking, Inverse Kinematics [IK], Forward Kinematics [FK], Skin Deformation, Weighting Vertices and more) are introduced in a gradual progression to allow maximum comprehension and retention. This series of modeling exercises is the result of having successfully taught over 1000 video game students the fundamentals of 3D modeling. This complete, clearly written and concise text is written for self-paced learning, helping those instructors who might not be fully trained in 3D modeling and those interested in self-teaching. Includes instructions and project files for exporting the finished project environment into the 3D game engine, Unity. A companion site (www.3dsMaxBasics.com) includes working 3ds Max project files for chapters, notes and corrections, a 3ds Max user interface, 3ds Max shortcut keys and more.

Getting Started with 3D Animation in Unity can sometimes be tedious and difficult if you don't have an approach that is both simple and detailed.

Essentials for Every Game

Unity Game Development Cookbook

Learn the Essential Skills to Start Making 3D(icious) Games

Unity UI Cookbook

Unity Apprentice (First Edition)

Unity 4.x Game Development by Example Beginner's Guide

Game Character Creation with Blender and Unity

Mastering Unity: A Beginner's Guide introduces developers of all ages to the beautiful and valuable world of Unity. Unity is a popular cross-platform game engine. It was initially unveiled and distributed as a Mac OS X-exclusive game engine in June 2005 at Apple Inc.'s Worldwide Developers Conference. Unity is used to produce nearly 50% of all games in the world. Its real-time platform, driven by tools and services, provides fantastic opportunities for game developers and innovators across sectors and applications. Mastering Unity covers the creation of both three-dimensional (3D) and two-dimensional (2D) games as well as interactive simulations and other experiences. Since Unity is an engine used in sectors other than video games, including film, automotive, architectural, engineering, manufacturing, and is even used by the armed forces, Mastering Unity focuses on a broader usage for Unity. This book starts with the setup and installation of Unity, which is followed by additional info related to its usage. Mastering Unity covers such topics as scene management, debugging, 2D and 3D physics, and Unity Hub setup. Considering that C# is often the primary programming language used in Unity, this book covers object-oriented principles as well as C# coding at great length. That said, you can use any other language in Unity, including JavaScript, Rust, or Mono. For the most part, Mastering Unity strives to be programming language-neutral to help you fully understand the Unity concepts. If you are an absolute beginner, Mastering Unity will help you understand the basics about Unity, its features, technical requirements, architecture, and the scripting language used in Unity. This book also focuses on setting up Unity, which encompasses installation, project creation, and launches of a project scene. Mastering Unity also addresses dealing with scenes and game objects, prefabs, storing scenes, animations in Unity, and performance optimization. Mastering Unity will also help you learn how to test and release a game in Unity to various platforms. Learn more about our other Mastering titles at: <https://www.routledge.com/Mastering-Computer-Science/book-series/MCS>

This book is aimed at developers who know the basics of game development with Unity and want to learn how to add AI to their games. You do not need any previous AI knowledge; this book will explain all the essential AI concepts and show you how to add and use them in your games.

This book follows an informal, demystifying approach to the world of game development with the Unity game engine. With no prior knowledge of game development or 3D required, you will learn from scratch, taking each concept at a time working up to a full 3D mini-game. You'll learn scripting with C# or JavaScript and master the Unity development environment with easy-to-follow stepwise tasks. If you're a designer or animator who wishes to take their first steps into game development or prototyping, or if you've simply spent many hours sitting in front of video games, with ideas bubbling away in the back of your mind, Unity and this book should be your starting point. No prior knowledge of game production is required, inviting you to simply bring with you a passion for making great games.

Explore the latest features of Unity and build VR experiences including first-person interactions, audio fireball games, 360-degree media, art gallery tours, and VR storytelling
Key Features
Discover step-by-step instructions and best practices to begin your VR development journey
Explore Unity features such as URP rendering, XR Interaction Toolkit, and ProBuilder
Build impressive VR-based apps and games that can be experienced using modern devices like Oculus Rift and Oculus Quest
Book Description
This third edition of the Unity Virtual Reality (VR) development guide is updated to cover the latest features of Unity 2019.4 or later versions - the leading platform for building VR games, applications, and immersive experiences for contemporary VR devices. Enhanced with more focus on growing components, such as Universal Render Pipeline (URP), extended reality (XR) plugins, the XR Interaction Toolkit package, and the latest VR devices, this edition will help you to get up to date with the current state of VR. With its practical and project-based approach, this book covers the specifics of virtual reality development in Unity. You'll learn how to build VR apps that can be experienced with modern devices from Oculus, VIVE, and others. This virtual reality book presents lighting and rendering strategies to help you build cutting-edge graphics, and explains URP and rendering concepts that will enable you to achieve realism for your apps. You'll build real-world VR experiences using world space user interface canvases, locomotion and teleportation, 360-degree media, and timeline animation, as well as learn about important VR development concepts, best practices, and performance optimization and user experience strategies. By the end of this Unity book, you'll be fully equipped to use Unity to develop rich, interactive virtual reality experiences. What you will learn
Understand the current state of virtual reality and VR consumer products
Get started with Unity by building a simple diorama scene using Unity Editor and imported assets
Configure your Unity VR projects to run on VR platforms such as Oculus, SteamVR, and Windows immersive MR
Design and build a VR storytelling animation with a soundtrack and timelines
Implement an audio fireball game using game physics and particle systems
Use various software patterns to design Unity events and interactable components
Discover best practices for lighting, rendering, and post-processing
Who this book is for
Whether you're a non-programmer unfamiliar with 3D computer graphics or experienced in both but new to virtual reality, if you're interested in building your own VR games or applications, this Unity book is for you. Any experience in Unity will be useful but is not necessary.

Mastering Unity 5.x

Interactivity and Game Creation

Unity Character Animation with Mecanim

Explore practical game development using software design patterns and best practices in Unity and C#

3D Animation Essentials

An All-in-one Guide to Implementing Game Mechanics, Art, Design, and Programming

Sams Teach Yourself Unity Game Development in 24 Hours

This hands-on guide covers both game development and design, and both Unity and C#. This guide illuminates the basic tenets of game design and presents a detailed, project-based introduction to game prototyping and development, using both paper and the Unity game engine.

Master realistic animations and graphics, particle systems, game AI and physics, sprites and VR development with Unity 2017
About This Book
Create professional grade games with realistic animation and graphics, particle systems and game physics with Unity 2017
Unleash the power of C# scripting to create intelligent game AI and professional grade game workflows. Create immersive VR games using the latest Unity 2017 VR SDK.
Who This Book Is For
If you are a Unity developer who now wants to develop and deploy interesting games by leveraging the new features of Unity 2017, then this is the book for you. Basic knowledge of C# programming is assumed.
What You Will Learn
Explore hands-on tasks and real-world scenarios to make a Unity horror adventure game
Create enemy characters that act intelligently and make reasoned decisions
Use data files to save and restore game data in a way that is platform-agnostic
Get started with VR development
Use navigation meshes, occlusion culling, and Profiler tools
Work confidently with GameObjects, rotations, and transformations
Understand specific gameplay features such as AI enemies, inventory systems, and level design
In Detail
Do you want to make the leap from being an everyday Unity developer to being a pro game developer? Then look no further! This book is your one-stop solution to creating mesmerizing games with lifelike features and amazing gameplay. This book focuses in some detail on a practical project with Unity, building a first-person game with many features. You'll delve into the architecture of a Unity game, creating expansive worlds, interesting render effects, and other features to make your games special. You will create individual game components, use efficient animation techniques, and

implement collision and physics effectively. Specifically, we'll explore optimal techniques for importing game assets, such as meshes and textures; tips and tricks for effective level design; how to animate and script NPCs; how to configure and deploy to mobile devices; how to prepare for VR development; how to work with version control; and more. By the end of this book, you'll have developed sufficient competency in Unity development to produce fun games with confidence. Style and approach This book takes an easy-to-follow, step-by-step tutorial approach. You will create an advanced level Unity game with an emphasis on leveraging advanced Unity 2017 features while developing the game in its entirety.

Build fully functional, professional 3D games with realistic environments, sound, dynamic effects, and more!

If you have a good understanding of Unity's core functionality and a decent grasp of C# scripting in Unity (although not essential if you are just using the Editor with the new UI), you'll be well placed to take advantage of the new UI feature set.

Essential Skills for 3D Modeling, Rendering, and Animation

Unity 3D UI Essentials

Unity 5.x Animation Cookbook

Unity AI Programming Essentials

Featuring Modo and Blender Pipelines

Holistic Game Development with Unity

Unity Game Development Essentials

The essential fundamentals of 3D animation for aspiring 3D artists 3D is everywhere--video games, movie and television special effects, mobile devices, etc. Many aspiring artists and animators have grown up with 3D and computers, and naturally gravitate to this field as their area of interest. Bringing a blend of studio and classroom experience to offer you thorough coverage of the 3D animation industry, this must-have book shows you what it takes to create compelling and realistic 3D imagery. Serves as the first step to understanding the language of 3D and computer graphics (CG) Covers 3D animation basics: pre-production, modeling, animation, rendering, and post-production Dissects core 3D concepts including design, film, video, and games Examines what artistic and technical skills are needed to succeed in the industry Offers helpful real-world scenarios and informative interviews with key educators and studio and industry professionals Whether you're considering a career in as a 3D artist or simply wish to expand your understanding of general CG principles, this book will give you a great overview and knowledge of core 3D Animation concepts and the industry.

Musaicum Books presents to you a meticulously edited Hegel collection. This ebook has been designed and formatted to the highest digital standards and adjusted for readability on all devices. Content: Introduction: The Life and Work of Georg Wilhelm Friedrich Hegel Books: The Phenomenology of Mind The Science of Logic The Philosophy of Mind The Philosophy of Right The Philosophy of Law The Philosophy of Fine Art Lectures on the Philosophy of History Lectures on the History of Philosophy Lectures on the Proofs of the Existence of God The Criticism of Hegel's Work and Hegelianism: The Basis of Morality by Arthur Schopenhauer Beyond Good and Evil by Friedrich Nietzsche Key to Understanding Hegel by William Wallace

In introducing new students to video game development, there are two crucial components to consider: design and implementation. Unity 3D and PlayMaker Essentials: Game Development from Concept to Publishing provides theoretical background on topics such as characters, stories, level design, interface design, audio, game mechanics, and tools and skills needed. Each chapter focuses on a specific topic, with topics building upon each other so that by the end of the book you will have looked into all the subjects relevant to creating your own game. The book transitions from discussion to demonstrations of how to implement techniques and concepts into practice by using Unity3D and PlayMaker. Download boxes are included throughout the book where you can get the version of the game project under discussion or other content to add to the project, as well as any supplementary video tutorials that have been developed. Addressing both theoretical and practical aspects, Unity 3D and PlayMaker Essentials enables you to understand how to create a game by having you make a game. By gradually completing your own design document through the course of the book, you will become familiar with core design principles while learning the practical skills needed to bring your unique game to life.

A detailed guide to the complex new animation tools in Unity, packed with clear instructions and illustrated with original content in the context of a next generation zombie apocalypse adventure game About This Book Create and export models and animation sequences to Unity from 3ds max and Maya Prepare character models and animation for games using Mecanim's rigging tools Retarget, adjust, and mix and match motion capture and other animation data Write and edit scripts compatible with Mecanim Animation Controllers Who This Book Is For If you are a Unity developer looking to get to grips with the character animation specific tools, a 3D software user who is new to Unity, or a beginner game developer who is interested in character animation and interaction, this book is ideal for you. Some experience with either the Unity interface or basic 3D coordinates is recommended, but not required. What You Will Learn Learn how to prepare a rigged character model to receive animation within Unity Acquire efficient techniques to refine and optimize motion capture data Retarget animation sequences between different character rigs Discover how to rig a humanoid character and export for use in Unity Script character interaction for a First Person character model Create dynamic animation sequences from scratch using keyframe techniques, in a variety of 3D software packages Learn Project Management in Unity Understand how to set up a complex facial rig for speech Set up Animation Controllers with masked states and blend trees to create seamless and additive animation transitions Construct a ragdoll game object and instantiate it in a game Devise Mecanim animation integration for the player and AI driven animation for enemy characters In Detail Game animation for independent developers has taken a giant leap forward with Unity 5's Mecanim toolset, which streamlines the import/export, retargeting, and many other aspects of the character animation workflow. Unity Character Animation with Mecanim is a great primer for getting to know the nuts and bolts of Mecanim and other character animation related tools in Unity 5. It offers you step-by-step instructions for preparing and exporting rigged models and animation sequences from commonly used 3D packages, such as Maya, 3ds Max and Blender. This book explores the new set of animation tools introduced with Mecanim in Unity 5. Approaching its subject matter through a typical genre—a zombie action game, character animation techniques are explored using real examples of player input and interaction, enemy behavior, and other aspects of game dynamics. As the book progresses, the reader will understand how these elements fit together in a small game development workflow. We will begin with a demonstration of the process of getting a rigged character into Unity 5 and setting it up to use provided animation sequences. We will also consider a few industry standard 3D packages and how these can be used to rig a humanoid character for use in Unity 5. We will demonstrate the retargeting capabilities of Mecanim's Humanoid Animation type by adjusting motion sequences to fit disparate character types in our game. After this, we will look at Ragdoll physics and the implementation of this commonly used technique in a Mecanim workflow. The book culminates with a thorough dissection of the enemy character AI script incorporating the Mecanim elements detailed in the previous chapters. Unity Character Animation with Mecanim will provide you with a detailed exploration of the interaction between game development and character animation, and will broaden your understanding of the rich animation toolset within Unity 5. Style and approach A comprehensive guide, featuring step-by-step practical tutorials using sample assets, showing you how to build fully controllable characters and non-player characters/enemies.

Unity 2017 Game Development Essentials, Third Edition

Volume 2: Model, Rig and Animate Characters for Export to Unity or Other Game Engines

Build Fully Functional 2D and 3D Games with Realistic Environments, Sounds, Physics, Special Effects, and More!

Designed for passionate game developers—Engineered to build professional games

Mastering Unity 2017 Game Development with C#

Over 60 recipes to help you create professional and exquisite UIs to make your games more immersive About This Book Design and develop interactive and professional user interfaces (UIs) for games in Unity Discover how to implement and deal with various in-game UI elements that will impress your players This practical recipe guide will help you to efficiently create powerful and remarkable UIs using C# code Who This Book Is For If you are a game developer with some experience in Unity and C# and want to create the best interactive experience fast and intuitively, then this book is for you. If you are an intermediate game developer or an expert, these recipes will help you bring out the power of the new UI Unity system. What You Will Learn Implement different kinds of counters and healthbars Deal with timers and find out how to format them Animate and vivify UI elements Handle runtime customizations Add complex Head-up displays (HUDs) Design and implement 3D UIs Integrate minimaps in the UI In Detail With the increasing interest in game development, it's essential to design and implement a UI that reflects the game settings and shows the right information to the player. The Unity system is used to create complex and aesthetically pleasing user interfaces in order to give a professional look and feel to a game. Although the new Unity UI system is powerful and quite easy to use, by integrating it with C# scripts, it's possible to realize the potential of this system and bring an impressive UI to games. This guide is an invaluable collection of recipes if you are planning to use Unity to develop a game. Starting with the basic concepts of the UI components, we'll take you all the way through to creating complex interfaces by including animations and dynamics elements. Based on real-world problems, these recipes will start by showing you how to make common UI elements such as counters and healthbars. You will then get a walkthrough of how to manage time using timers, and will learn how to format them. You will move on to decorating and animating the UI elements to vivify them and give them a professional touch. Furthermore, you will be guided into the 3D UI world and into HUD scripting. Finally, you will discover how to implement complex minimaps in the interface. Style and approach Interactive, easy-to-follow recipes will help you create and implement UIs that make gaming an exhilarating experience.

Mastering Unity Scripting is an advanced book intended for students, educators, and professionals familiar with the Unity basics as well as the basics of scripting. Whether you've been using Unity for a short time or are an experienced user, this book has something important and valuable to offer to help you improve your game development workflow.

A recipe-based guide to give you practical information on Unity 5.x animation techniques and tools About This Book A straightforward and easy-to-follow format. A selection of the most important tasks and problems. Carefully organized instructions to solve problems efficiently. Clear explanations of what you did. Solutions that can be applied to solve real-world problems. Who This Book Is For This book is for Unity developers who have some exposure to Unity game development who want to learn the nuances of animation in Unity. Previous knowledge of animation techniques and mecanim is not necessary. What You Will Learn Importing animations to Unity Work with different animation assets and components Create, visualize, and edit animated creatures Animating game cut scenes Design character actions and expressions Create gameplay by animating characters and environments Use animations to drive in-game logic In Detail This recipe-based practical guide will show you how to unleash the power of animation in Unity 5.x and make your games visually impeccable. Our primary focus is on showing you tools and techniques to animate not only humanoid biped characters, but also other elements. This includes non-humanoid character animation, game world creation, UI element animation, and other key features such as opening doors, changing lights, transitioning to different scenes, using physics, setting up ragdolls, creating destructible objects and more. While discussing these topics, the book will focus on mecanim, the Unity 3D animation tool, and how you can use it to perform all these tasks efficiently and quickly. It contains a downloadable Unity project with interactive examples for all the recipes. By the end of this book, you will be confident and self-sufficient in animating your Unity 3D games efficiently. Style and approach This practical no-nonsense guide is recipe-based with real-world examples of almost all the techniques mentioned.

Find out how to use the Unity Game Engine to its fullest for both 3D and 2D game development—from the basics to the hottest new tricks in virtual reality. With this unique cookbook, you'll get started in two ways: First, you'll learn about the Unity game engine by following very brief exercises that teach specific features of the software Second, this tutorial-oriented guide provides a collection of snippets that solve common gameplay problems, like determining if a player has completed a lap in a race Using our cookbook format, we pinpoint the problem, set out the solution, and discuss how to solve your problem in the best and most straightforward way possible so you can move onto the next step in the project. Unity Game Development Cookbook is ideal for beginning to intermediate Unity developers. Beginners will get a broad immersion into the Unity development environment, while intermediate developers will learn how to apply the foundational Unity skills they have to solve real game development problems.