

Lean Libgdx

Lean Mobile App DevelopmentApply Lean startup methodologies to develop successful iOS and Android appsPackt Publishing Ltd

“ This book is a must read for newcomers and experienced composers wanting to learn more about the art of video game composition. ” —Chuck Doud, Director of Music, Sony Computer Entertainment Worldwide Studios All You Need to Know to Create Great Video Game Music Written by the developer of Berklee School of Music's pioneering game scoring program, this guide covers everything professional composers and music students need to know about composing interactive music for video games, and contains exclusive tools for interactive scoring—tools that were previously available only at Berklee. Drawing on twenty years of professional experience in the game industry, Michael Sweet helps you master the unique language of music storytelling in games. Next, he walks you through the entire music composition process, from initial conceptualization and creative direction through implementation. Inside, you'll find dozens of examples that illustrate adaptive compositional techniques, from small downloadable games to multimillion dollar console titles. In addition, this guide covers the business side of video game composition, sharing crucial advice about contracts, pricing, sales, and marketing. Coverage includes Overcoming the unique challenges of writing for games Composing music that can adapt in real time to player actions Developing thematic ideas Using audio middleware to create advanced interactive scores Working effectively with game development teams Understanding the life of a video game composer Managing contracts, rights, estimating, and negotiation Finding work The companion website contains software tools to help you master interactive music concepts explored in this book, with additional resources and links to learn more about scoring for games. See Appendix A for details.

Although the number of commercial Java games is still small compared to those written in C or C++, the market is expanding rapidly. Recent updates to Java make it faster and easier to create powerful gaming applications-particularly Java 3D-is fueling an explosive growth in Java games. Java games like Puzzle Pirates, Chrome, Star Wars Galaxies, Runescape, Alien Flux, Kingdom of Wars, Law and Order II, Roboforge, Tom Clancy's Politika, and scores of others have earned awards and become bestsellers.Java developers new to graphics and game programming, as well as game developers new to Java 3D, will find Killer Game Programming in Java invaluable. This new book is a practical introduction to the latest Java graphics and game programming technologies and techniques. It is the first book to thoroughly cover Java's 3D capabilities for all types of graphics and game development projects.Killer Game Programming in Java is a comprehensive guide to everything you need to know to program cool, testosterone-drenched Java games. It will give you reusable techniques to create everything from fast, full-screen action games to multiplayer 3D games. In addition to the most thorough coverage of Java 3D available, Killer Game Programming in Java also clearly details the older, better-known 2D APIs, 3D sprites, animated 3D sprites, first-person shooter programming, sound, fractals, and networked games. Killer Game Programming in Java is a must-have for anyone who wants to create adrenaline-fueled games in Java.

Deliver Better Games Faster, On Budget—And Make Game Development Fun Again! Game development is in crisis—facing bloated budgets, impossible schedules, unmanageable complexity, and death march overtime. It ' s no wonder so many development studios are struggling to survive. Fortunately, there is a solution. Scrum and Agile methods are already revolutionizing development outside the game industry. Now, long-time game developer Clinton Keith shows exactly how to successfully apply these methods to the unique challenges of game development. Keith has spent more than fifteen years developing games, seven of them with Scrum and agile methods. Drawing on this unparalleled expertise, he shows how teams can use Scrum to deliver games more efficiently, rapidly, and cost-effectively; craft games that offer more entertainment value; and make life more fulfilling for development teams at the same time. You ' ll learn to form successful agile teams that incorporate programmers, producers, artists, testers, and designers—and promote effective collaboration within and beyond those teams, throughout the entire process. From long-range planning to progress tracking and continuous integration, Keith offers dozens of tips, tricks, and solutions—all based firmly in reality and hard-won experience. Coverage includes Understanding Scrum ' s goals, roles, and practices in the context of game development Communicating and planning your game ' s vision, features, and progress Using iterative techniques to put your game into a playable state every two to four weeks— even daily Helping all team participants succeed in their roles Restoring stability and predictability to the development process Managing ambiguous requirements in a fluid marketplace Scaling Scrum to large, geographically distributed development teams Getting started: overcoming inertia and integrating Scrum into your studio ' s current processes Increasingly, game developers and managers are recognizing that things can ' t go on the way they have in the past. Game development organizations need a far better way to work. Agile Game Development with Scrum gives them that—and brings the profitability, creativity, and fun back to game development.

A Quick-Start Guide

Scene Vision

Java Game Development with LibGDX

Real-World Functional Programming

Learn OpenGL ES

jMonkeyEngine 3.0 Cookbook

ReactJS Blueprints

Gradle is an open source build automation system that introduces a Groovy-based domain-specific language (DSL) to configure projects. Using Gradle makes it easy for Android developers to manage dependencies and set up the entire build process. This book begins by taking you through the basics of Gradle and how it works with Android Studio. Furthermore, you will learn how to add local and remote dependencies to your project. You will work with build variants, such as debug and release, paid and free, and even combinations of these things. The book will also help you set up unit and integration testing with different libraries and will show how Gradle and Android Studio can make running tests easier. Finally, you will be shown a number of tips and tricks on the advanced customization of your application's build process. By the end of this book, you will be able to customize the entire build process, and create your own tasks and plugins for your Gradle builds.

Create powerful applications with ReactJS, the most popular platform for web developers todayAbout This Book- Create web apps with the most popular JavaScript library in the world- Learn how to speed up your development process and save valuable time- Work though step-by-step tutorials that provide easy-to-understand solutions to real-world problemsWho This Book Is ForThis book is for those who want to develop applications with ReactJS. With its wide variety of topics, it caters both to the inexperienced developer as well as to the advanced, and it doesn't require any prior experience with ReactJS.What You Will Learn- Create a development environment that speeds up your development process- Find out about responsive web development and create apps that can be used on any device- Effortlessly connect to public and private APIs- Create efficient components that are easily testable and small enough to completely understand- Understand what data flow means in ReactJS and why you never need to worry about where data changes originate- Create universal apps that run on the browser as well as on the server- Work with modern front-end tooling and level up your skills- Train yourself to think in terms of ReactJSIn DetailThe JavaScript revolution has landed! ReactJS is one of those rare technologies that comes out of nowhere and turns established practices on their head. It provides a different way of thinking about how you should develop your apps, and has already gained a massive adoption among web developers. Join the revolution, build web apps faster, and have more fun developing!Packed with real-world code, this book starts by covering the idea behind ReactJS and the key concepts you must familiarize yourself with. You will learn how to bootstrap your ReactJS projects and you'll also be provided with a handy scaffolding that you can use and reuse over and over.We then go on to cover a wide variety of apps, and will help you to structure and build your own components. Next, you will build a web shop, create a fully responsive and routable app, and also develop a real-time search app. Further on, you will be taught to work with public APIs to create a map-based application. You will also be taken through some advanced concepts such as Redux that are making a huge splash currently in the world of ReactJS. You'll learn how to efficiently seal off your app for guest access, interact with hardware APIs, and create a photo app. You will then master the art of making your apps universal, and find out how to deploy them to the cloud. Finally, we wrap up the book as you are shown how to make a game. What better way to kick off your ReactJS development journey?Style and approachThis is an easy-to-follow guide full of real-world ReactJS applications. Each chapter is self-contained, and every code example is explained in detail.

SFML Game Development is a fast-paced, step-by-step guide, providing you with all the knowledge and tools you need to create your first game using SFML 2.0.SFML Game Development addresses ambitious C++ programmers who want to develop their own game. If you have plenty of ideas for an awesome and unique game, but don't know how to start implementing them, then this book is for you. The book assumes no knowledge about SFML or game development, but a solid understanding of C++ is required.

Multithreading is essential if you want to create an Android app with a great user experience, but how do you know which techniques can help solve your problem? This practical book describes many asynchronous mechanisms available in the Android SDK, and provides guidelines for selecting the ones most appropriate for the app you're building. Author Anders Goransson demonstrates the advantages and disadvantages of each technique, with sample code and detailed explanations for using it efficiently. The first part of the book describes the building blocks of asynchronous processing, and the second part covers Android libraries and constructs for developing fast, responsive, and well-structured apps. Understand multithreading basics in Java and on the Android platform Learn how threads communicate within and between processes Use strategies to reduce the risk of memory leaks Manage the lifecycle of a basic thread Run tasks sequentially in the background with HandlerThread Use Java's Executor Framework to control or cancel threads Handle background task execution with AsyncTask and IntentService Access content providers with AsyncQueryHandler Use loaders to update the UI with new data

Writing Interactive Music for Video Games

Enhancing CAD Drawings with Photoshop

A Composer's Guide

With examples in F# and C#

An Interdisciplinary Approach

Asynchronous Processing Techniques for Android Applications

Making Sense of What We See

Take your React Native application development to the next level with this large collection of recipesAbout This Book* Build rich and engaging user experiences in React Native while maintaining peak application performance* Leverage the best of iOS and Android for React Native development while maximizing code reuse and cohesion* Implement architecture patterns in your React Native application that support efficient data access, routing, and testingWho This Book Is ForThis book is for web developers who are familiar with React.js and know basics of UI development. You may or may not have used React Native before, but it's ideal for you if you want to develop native applications for iOS and Android using React Native. Existing knowledge of JavaScript ES2015 is highly recommended.What You Will Learn* Build simple and complex user interfaces using React Native* Create advanced animations for UI components* Build universal apps that run on phones and tablets* Leverage Redux to manage application flow and data* Expose both custom native UI components and application logic to React Native* Integrate with existing native applications on iOS and Android* Deploy our React Native application to the Google Play and Apple App Store* Add automated testing to our React Native applicationIn DetailReact has taken the web development world by storm. It is only natural that the unique architecture and its ecosystem of third-party support be applied to native application development. This book will take you through the basics of React Native development all the way through some more advanced components.In this book, we will cover topics in React Native ranging from adding basic UI components to successfully deploying for multiple target platforms. The book follows a top-down approach beginning with building rich user interfaces. These UIs will be created with both built-in and custom components that you will create, style and animate.You will then learn about different strategies for working with data, including leveraging the popular Redux library and optimizing the performance of the application. Then you will step further into exposing native device functionality. Finally, we will discuss how to put our application into production and maintain its reliability.

Explore the latest Python tools and techniques to help you tackle the world of data acquisition and analysis. You'll review scientific computing with NumPy, visualization with matplotlib, and machine learning with scikit-learn. This revision is fully updated with new content on social media data analysis, image analysis with OpenCV, and deep learning libraries. Each chapter includes multiple examples demonstrating how to work with each library. At its heart lies the coverage of pandas, for high-performance, easy-to-use data structures and tools for data manipulation Author Fabio Nelli expertly demonstrates using Python for data processing, management, and information retrieval. Later chapters apply what you've learned to handwriting recognition and extending graphical capabilities with the JavaScript D3 library. Whether you are dealing with sales data, investment data, medical data, web page usage, or other data sets, Python Data Analytics, Second Edition is an invaluable reference with its examples of storing, accessing, and analyzing data. What You'll LearnUnderstand the core concepts of data analysis and the Python ecosystem Go in depth with pandas for reading, writing, and processing data Use tools and techniques for data visualization and image analysis Examine popular deep learning libraries Keras, Theano,TensorFlow, and PyTorch Who This Book Is For Experienced Python developers who need to learn about Pythonic tools for data analysis

Learn to design and create video games using the Java programming language and the LibGDX software library. Working through the examples in this book, you will create 12 game prototypes in a variety of popular genres, from collection-based and shoot-em-up arcade games to side-scrolling platformers and sword-fighting adventure games. With the flexibility provided by LibGDX, specialized genres such as card games, rhythm games, and visual novels are also covered in this book. Major updates in this edition include chapters covering advanced topics such as alternative sources of user input, procedural content generation, and advanced graphics. Appendices containing examples for game design documentation and a complete JavaDoc style listing of the extension classes developed in the book have also been added. What You Will Learn Create 12 complete video game projects Master advanced Java programming concepts, including data structures, encapsulation, inheritance, and algorithms, in the context of game development Gain practical experience with game design topics, including user interface design, gameplay balancing, and randomized content Integrate third-party components into projects, such as particle effects, tilemaps, and gamepad controllers Who This Book Is For The target audience has a desire to make video games, and an introductory level knowledge of basic Java programming. In particular, the reader need only be familiar with: variables, conditional statements, loops, and be able to write methods to accomplish simple tasks and classes to store related data.

Design accessible and creative games across genres, platforms, and development realities Key Features Implement the skills and techniques required to work in a professional studio Ace the core principles and processes of level design, world building, and storytelling Design interactive characters that animate the gaming world Book Description If you are looking for an up-to-date and highly applicable guide to game design, then you have come to the right place! Immerse yourself in the fundamentals of game design with this book, written by two highly experienced industry professionals to share their profound insights as well as give valuable advice on creating games across genres and development platforms. Practical Game Design covers the basics of game design one piece at a time. Starting with learning how to conceptualize a game idea and present it to the development team, you will gradually move on to devising a design plan for the whole project and adapting solutions from other games. You will also discover how to produce original game mechanics without relying on existing reference material, and test and eliminate anticipated design risks. You will then design elements that compose the playtime of a game, followed by making game mechanics, content, and interface accessible to all players. You will also find out how to simultaneously ensure that the gameplay mechanics and content are working as intended. As the book reaches its final chapters, you will learn to wrap up a game ahead of its release date, work through the different challenges of designing free-to-play games, and understand how to significantly improve their quality through iteration, polishing and playtesting. What you will learn Define the scope and structure of a game project Conceptualize a game idea and present it to others Design gameplay systems and communicate them clearly and thoroughly Build and validate engaging game mechanics Design successful business models and prepare your games for live operations Master the principles behind level design, worldbuilding and storytelling Improve the quality of a game by playtesting and polishing it Who this book is for Whether you are a student eager to design a game or a junior game designer looking for your first role as a professional, this book will help you with the fundamentals of game design. By focusing on best practices and a pragmatic approach, Practical Game Design provides insights into the arts and crafts from two senior game designers that will interest more seasoned professionals in the game industry.

Introduction to 3D game programming with DirectX 9.0

From Beginner to Professional

Create Cross-Platform Mobile Apps

A step-by-step guide to creating your first game with Unity

Web Development with Blazor

React Design Patterns and Best Practices

Augmented Reality Game Development

Practical Software Architecture Solutions from the Legendary Robert C. Martin (“Uncle Bob”) By applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin (“Uncle Bob”) reveals those rules and helps you apply them. Martin’s Clean Architecture doesn’t merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you’ve come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you’ll face—the ones that will make or break your projects. Learn what software architects need to achieve—and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what’s critically important and what’s merely a “detail” Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager—and for every programmer who must execute someone else’s designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

This book includes the post-conference proceedings of the 23rd RoboCup International Symposium, held in Sydney, NSW, Australia, in July 2019. The 38 full revised papers and 14 invited papers presented in this book were carefully reviewed and selected from 74 submissions. This book highlights the approaches of champion teams from the competitions and documents the proceedings of the 23rd annual RoboCup International Symposium. Due to the complex research challenges set by the RoboCup initiative, the RoboCup International Symposium offers a unique perspective for exploring scientific and engineering principles underlying advanced robotic and AI systems.

Welcome to a book written to challenge you, improve your brainstorming abilities, and sharpen your game design skills! Challenges for Game Designers: Non-Digital Exercises for Video Game Designers is filled with enjoyable, interesting, and challenging exercises to help you become a better video game designer, whether you are a professional or aspire to be. Each chapter covers a different topic important to game designers, and was taken from actual industry experience. After a brief overview of the topic, there are five challenges that each take less than two hours and allow you to apply the material, explore the topic, and expand your knowledge in that area. Each chapter also includes 10 "non-digital shorts" to further hone your skills. None of the challenges in the book require any programming or a computer, but many of the topics feature challenges that can be made into fully functioning games. The book is useful for professional designers, aspiring designers, and instructors who teach game design courses, and the challenges are great for both practice and homework assignments. The book can be worked through chapter by chapter, or you can skip around and do only the challenges that interest you. As with anything else, making great games takes practice and Challenges for Game Designers provides you with a collection of fun, thoughtprovoking, and of course, challenging activities that will help you hone vital skills and become the best game designer you can be.

Beginning Android 4 Games Development offers everything you need to join the ranks of successful Android game developers. You'll start with game design fundamentals and programming basics, and then progress toward creating your own basic game engine and playable game that works on Android 4.0 and earlier devices. This will give you everything you need to branch out and write your own Android games. The potential user base and the wide array of available high-performance devices makes Android an attractive target for aspiring game developers. Do you have an awesome idea for the next break-through mobile gaming title? Beginning Android 4 Games Development will help you kick-start your project. The book will guide you through the process of making several example games for the Android platform, and involves a wide range of topics: The fundamentals of Android game development targeting Android 1.5-4.0+ devices The Android platform basics to apply those fundamentals in the context of making a game The design of 2D and 3D games and their successful implementation on the Android platform

Java Gaming & Graphics Programming

With Pandas, NumPy, and Matplotlib

Beginning Android Games Development

From the Author of the Udemy .com Course an Entire MBA in 1 Course

Game Programming Patterns

Apply Lean startup methodologies to develop successful iOS and Android apps

Recipes for Scaling Up with Hadoop and Spark

Beginning AngularJS is your step-by-step guide to learning the powerful AngularJS JavaScript framework. AngularJS is one of the most respected and innovative frameworks for building properly structured, easy-to-develop web applications. This book will teach you the absolute essentials, from downloading and installing AngularJS, to using modules, controllers, expressions, filters, and directives. Unlike many other books, you don't need experience with AngularJS or deep JavaScript knowledge to get started here. This book will begin by teaching you the JavaScript you need to know, and then you'll get into the basics of AngularJS. You'll learn powerful AngularJS techniques through clear instructions. With what you learn you'll be able to properly structure your code into manageable modules, understand the MVC design patterns, create expressive and adaptive HTML forms, communicate with servers and use other AngularJS services, use the powerful built-in directives, and learn how to create your own. This might all seem unknown now, but with this book you'll understand it all. AngularJS is a powerful framework, and one which may require you to think a little differently. This book will help you avoid the common pitfalls and get you up to speed, and building solid AngularJS applications, quickly and painlessly.

Cutting-edge research on the visual cognition of scenes, covering issues that include spatial vision, context, emotion, attention, memory, and neural mechanisms underlying scene representation. For many years, researchers have studied visual recognition with objects—single, clean, clear, and isolated objects, presented to subjects at the center of the screen. In our real environment, however, objects do not appear so neatly. Our visual world is a stimulating scenery mess; fragments, colors, occlusions, motions, eye movements, context, and distraction all affect perception. In this volume, pioneering researchers address the visual cognition of scenes from neuroimaging, psychology, modeling, electrophysiology, and computer vision perspectives. Building on past research—and accepting the challenge of applying what we have learned from the study of object recognition to the visual cognition of scenes—these leading scholars consider issues of spatial vision, context, rapid perception, emotion, attention, memory, and the neural mechanisms underlying scene representation. Taken together, their contributions offer a snapshot of our current knowledge of how we understand scenes and the visual world around us. Contributors Elissa M. Aminoff, Moshe Bar, Margaret Bradley, Daniel I. Brooks, Marvin M. Chun, Ritendra Datta, Russell A. Epstein, Michèle Fabre-Thorpe, Elena Fedorovskaya, Jack L. Gallant, Helene Intraub, Dhiraj Joshi, Kestutis Kveraga, Peter J. Lang, Jia Li Xin Lu, Jiebo Luo, Quang-Tuan Luong, George L. Malcolm, Shahin Nasr, Soojin Park, Mary C. Potter, Reza Rajimehr, Dean Sabatinelli, Philippe G. Schyns, David L. Sheinberg, Heida Maria Sigurdardottir, Dustin Stansbury, Simon Thorpe, Roger Tootell, James Z. Wang

Build modular applications that are easy to scale using the most powerful components and design patterns that React can offer you right now About This Book Dive into the core patterns and components of React.js in order to master your application's design Improve their debugging skills using the DevTools This book is packed with easy-to-follow examples that can be used to create reusable code and extensible designs Who This Book Is For If you want to increase your understanding of React and apply it to real-life application development, then this book is for you. What You Will Learn Write clean and maintainable code Create reusable components applying consolidated techniques Use React effectively in the browser and node Choose the right styling approach according to the needs of the applications Use server-side rendering to make applications load faster Build high-performing applications by optimizing components In Detail Taking a complete journey through the most valuable design patterns in React, this book demonstrates how to apply design patterns and best practices in real-life situations, whether that's for new or already existing projects. It will help you to make your applications more flexible, perform better, and easier to maintain – giving your workflow a huge boost when it comes to speed without reducing quality. We'll begin by understanding the internals of React before gradually moving on to writing clean and maintainable code.

We'll build components that are reusable across the application, structure applications, and create forms that actually work. Then we'll style React components and optimize them to make applications faster and more responsive. Finally, we'll write tests effectively and you'll learn how to contribute to React and its ecosystem. By the end of the book, you'll be saved from a lot of trial and error and developmental headaches, and you will be on the road to becoming a React expert. Style and approach The design patterns in the book are explained using real-world, step-by-step examples. For each design pattern, there are hints about when to use it and when to look for something more suitable. This book can also be used as a practical guide, showing you how to leverage design patterns.

In the past, not being able to program meant not being able to make video games. Now if you can draw a flow-chart you can use powerful State Machine technology to create your dream game! No-Code Video Game Development using Unity and Playmaker will teach you how to substitute flow-charts for code. As a complete course, it uses a project-based approach. The FPS project comes with over a hundred dollars worth of free #gameDev DLC: Unity Packages, Playmaker Templates, Character Models, Animations, Materials, and more! You'll also learn game design documentation and theory, Mecanim, Particle Systems, and UI. By the time you're done you'll have gained the skills needed to create your own dream game, all without writing any code!

Physically Based Rendering

Building a 3D Game with LibGDX

Lean Mobile App Development

Practical Game Design

Data Algorithms

RoboCup 2019: Robot World Cup XXIII

React Native Cookbook

Develop lean iOS and Android apps using industry standard techniques and lean development practices. About This Book Build ready-to-deploy apps with less iterations and shorter development times Adopt the lean startup methodologies to develop iOS and Android apps that shine in the App Store This hands-on guide puts continuous innovation into practice to develop successful mobile apps Who This Book Is For This book is for developers, CTOs, and architects working for a startup or another kind of lean startup environment, such as start-up within a cooperation. It is ideal for any iOS and Android developer who wants to build successful mobile apps by adopting the lean startup methodology. What You Will Learn Apply the lean startup methodology to real Android and iOS development Define what your hypotheses are by creating an Minimal Viable Product Validate your idea against the Business Model Canvas Gather feedback through statistics and by getting user comments, learn from it, and adapt your app accordingly Develop skills and devise strategies to build versatile and flexible apps that meet changing business requirements Investigate the possibilities when you need to pivot your start-up idea whether in a startup or an established business. Create a successful app and get tips on how to boostconversion and how to optimize the on boardingprocess. In Detail Lean is the ultimate methodology for creating a startup that succeeds.

Sounds great from a theoretical point of view, but what does that mean for you as an a technical co-founder or mobile developer? By applying the Lean Start-up methodology to your mobile App development, it will become so much easier to build apps that take Google Play or the App Store by storm. This book shows you how to bring together smarter business processes with technical know-how. It makes no sense to develop a brilliant app for six months or longer only to find out later that nobody is interested in it. Build a Minimum Viable Product (MVP) first. Validate your hypotheses early and often. Discover effective product development strategies that let you put Facebook's famous axiom "move fast and break things" into practice. A great app without visibility and marketing clout is nothing, so use this book to market your app, making use of effective metrics that help you track and iterate all aspects of project performance. Style and approach This book takes a hands-on approach to developing apps through the Lean Start-up Methodology. Following a 50% business and 50% tech approach, this book is filled with practical examples and real-world experiments.

If you are ready to dive into the MapReduce framework for processing large datasets, this practical book takes you step by step through the algorithms and tools you need to build distributed MapReduce applications with Apache Hadoop or Apache Spark. Each chapter provides a recipe for solving a massive computational problem, such as building a recommendation system. You'll learn how to implement the appropriate MapReduce solution with code that you can use in your projects. Dr. Mahmoud Parsian covers basic design patterns, optimization techniques, and data mining and machine learning solutions for problems in bioinformatics, genomics, statistics, and social network analysis. This book also includes an overview of MapReduce, Hadoop, and Spark. Topics include: Market basket analysis for a large set of transactions Data mining algorithms (K-means, KNN, and Naive Bayes) Using huge genomic data to sequence DNA and RNA Naive Bayes theorem and Markov chains for data and market prediction Recommendation algorithms and pairwise document similarity Linear regression, Cox regression, and Pearson correlation Allelic frequency and mining DNA Social network analysis (recommendation systems, counting triangles, sentiment analysis)

By emphasizing the application of computer programming not only in success stories in the software industry but also in familiar scenarios in physical and biological science, engineering, and applied mathematics, Introduction to Programming in Java takes an interdisciplinary approach to teaching programming with the Java programming language. Interesting applications in these fields foster a foundation of computer science concepts and programming skills that students can use in later courses while demonstrating that computation is an integral part of the modern world.Ten years in development, this book thoroughly covers the field and is ideal for traditional introductory programming courses. It can also be used as a supplement or a main text for courses that integrate programming with mathematics, science, or engineering.

Do you have an awesome idea for the next break-through mobile gaming title? This updated edition will help you kick-start your project as it guides you through the process of creating several example game apps using APIs available in Android. You will learn the basics needed to join the ranks of successful Android game app developers. the book starts with game design fundamentals using Canvas and Android SDK 10 or earlier programming basics. You then will progress toward creating your own basic game engine and playable game apps that work on Android 10 or earlier smartphones and tablets. You take your game through the chapters and topics in the book to learn different tools such as OpenGL ES. And you will learn about publishing and marketing your games to monetize your creation. What You Will Learn Gain knowledge on the fundamentals of game programming in the context of Android Use Android's APIs for graphics, audio, and user input to reflect those fundamentals Develop two 2D games from scratch, based on Canvas API and OpenGL ES Create a full-featured 3D game Publish your games, get crash reports, and support your users Complete your own playable 2D OpenGL games Who This Book Is For Those with basic knowledge of Java who want to write games on the Android platform, and experienced game developers who want to know about the pitfalls and peculiarities of the platform

A Craftsman's Guide to Software Structure and Design

Weird But True!, Level 1

From Theory to Implementation

Killer Game Programming in Java

SFML Game Development

A hands-on guide for .NET developers to build interactive UIs with C#

Want to create sophisticated games and graphics-intensive apps? Learn OpenGL ES gets you started immediately with OpenGL ES. After mastering the basics of OpenGL ES itself, you will quickly find yourself writing and building game apps, without having to learn about object oriented programming techniques. This book demonstrates the use of a powerful open-source modeling tool, Blender. You will be guided, step by step, through the development of Tank Fence, a dynamic, interactive 3D game. Along the way you'll gain skills in building apps with Eclipse and the Android SDK or NDK, rendering graphics using hardware acceleration, and multithreading for performance and responsiveness. iOS developers will also find this book's information invaluable when writing their apps. You'll learn everything you need to know about: Creating simple, efficient game UIs Designing the basic building blocks of an exciting, interactive 3D game Pulling all the elements together with Blender, a powerful open-source tool for modeling, animation, rendering, compositing, video editing, and game creation Taking the next big step using custom and inbuilt functions, texturing, shading, light sources, and more Refining your mobile game app through collision detection, player-room-obstacle classes, and storage classes Doing all this efficiently on mobile devices with limited resources and processing

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.

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

Offers a collection of true facts about animals, food, science, pop culture, outer space, geography, and weather.

Beginning AngularJS

For Mobile Game and Graphics Development

Challenges for Game Designers

Introduction to Programming in Java

Clean Architecture

Will I Ever Be Free of You?

Learn the art of game design through applicable skills and cutting-edge insights

If you are a iMonkey developer or a Java developer who is interested to delve further into the game making process to expand your skillset and create more technical games, then this book is perfect for you.

**** ACCORDING TO BUSINESS INSIDER: "Getting your MBA has never been easier. Haroun is one of the highest rated professors on Udemy, so you can expect to be in good hands through the course of your education." ** This is the book version of the popular Udemy.com course called "An Entire MBA in 1 Course." From the Author of "101 Crucial Lessons They Don't Teach You in Business School," which Forbes magazine calls "1 of 6 books that all entrepreneurs need to read right now." This book will teach you everything you need to know about business...From starting a company to taking it public. Most business books are significantly outdated. This book leverages many online resources and makes the general business, accounting and finance process very easy to understand (and enjoyable too)! There are many incredibly engaging and entertaining video links in the book to YouTube and other sources; 'edutainment' works! Although this book is close to 400 pages, I tried to visualize the content of this book as much as possible as this is a more impactful and enjoyable way to learn (think Pinterest versus the tiny words in the Economist)! The contents of this book are all based on my work experience at several firms, including Goldman Sachs, the consulting industry at Accenture, a few companies I have started, the hedge fund industry where I worked at Citadel and most recently, based on my experience at a prominent San Francisco based venture capital firm. I also included many helpful practical business concepts I learned while I did an MBA at Columbia University and a Bachelor of Commerce degree at McGill University. Think of this book as a "greatest hits" business summary from my MBA, undergraduate business degree, work experience in consulting, equities, hedge funds, venture capital and starting my own companies. As the title of this book suggests, this is an entire MBA in one book; it's also a practical manual to help you accomplish your business career goals. I have minimized "boring theoretical concepts" in this book in order to keep it as close to reality as**

possible. I hope you enjoy it! In addition to teaching at 4 universities in the San Francisco Bay Area, you can find other courses that I teach online at www.udemy.com/user/chris-haroun/.

The first book for the millions of daughters suffering from the emotional abuse of selfish, self-involved mothers, "Will I Ever Be Good Enough?" provides the expert advice readers need to overcome debilitating histories and reclaim their lives.

Develop modern web UIs quickly with server-side Blazor and Blazor WebAssembly Key Features Create and deploy a production-ready Blazor application from start to finish Learn Blazor fundamentals, gain actionable insights, and discover best practices Find out how, when, and why to use server-side Blazor and Blazor WebAssembly Book Description Blazor is an essential tool if you want to build interactive web apps without JS, but it comes with its own learning curve. Web Development with Blazor will help you overcome most common challenges developers face when getting started with Blazor and teach you the best coding practices. You'll start by learning how to leverage the power of Blazor and explore the full capabilities of both Blazor Server and Blazor WebAssembly. Then you'll move on to the practical part, which is centred around a sample project – a blog engine. This is where you'll apply all your newfound knowledge about creating Blazor Server and Blazor WebAssembly projects, the inner working of Razor syntax, and validating forms, as well as creating your own components. You'll learn all the key concepts involved in web development with Blazor, which you'll also be able to put into practice straight away. By showing you how all the components work together practically, this book will help you avoid some of the common roadblocks that novice Blazor developers face and inspire you to start experimenting with Blazor on your other projects. When you reach the end of this Blazor book, you'll have gained the confidence you need to create and deploy production-ready Blazor applications. What you will learn Understand the different technologies that can be used with Blazor, such as Blazor Server and Blazor WebAssembly Find out how to build simple and advanced Blazor components Explore the differences between Blazor Server and Blazor WebAssembly projects Discover how Entity Framework works and build a simple API Get up to speed with components and find out how to create basic and advanced components Explore existing JavaScript libraries in Blazor Use techniques to debug your Blazor Server and Blazor WebAssembly applications Test Blazor components using bUnit Who this book is for If you're a .NET web or software developer who wants to build web UIs using C#, then this book is for you. You'll need intermediate-level web-development skills and basic knowledge of C# before you get started; the book will guide you through the rest.

Python Data Analytics

From Beginner to Pro

Gradle for Android

How to Navigate a High-Conflict Divorce from a Narcissist and Heal Your Family

OpenGL ES 2 for Android

Beginning Android 4 Games Development

Unity From Zero to Proficiency (Foundations)

The biggest challenge facing many game programmers is completing their game. Most game projects fizzle out, overwhelmed by the complexity of their own code. Game Programming Patterns tackles that exact problem. Based on years of experience in shipped AAA titles, this book collects proven patterns to untangle and optimize your game, organized as independent recipes so you can pick just the patterns you need. You will learn how to write a robust game loop, how to organize your entities using components, and take advantage of the CPUs cache to improve your performance. You'll dive deep into how scripting engines encode behavior, how quadtrees and other spatial partitions optimize your engine, and how other classic design patterns can be used in games.

Create iOS and Android apps with Flutter using just one codebase. App development on multiple platforms has historically been difficult and complex. This book breaks down complex concepts and tasks into easily digestible segments with examples, pictures, and hands-on labs with starters and solutions. In doing so, you'll develop a basic understanding of the Dart programming language; the entire Flutter development toolchain; the differences between stateful and stateless widgets; and a working knowledge of the architecture of apps. All the most important parts of app development with Flutter are covered in this book. Work with themes and styles. Develop custom widgets. Teach your app to respond to gestures like taps, swipes, and pinches. Design, create and control the layout of your app. Create tools to handle form data entry from users. And ultimately create killer multiscreen apps with navigation, menus, and tabs. Flutter is Google's new framework for creating mobile apps that run on iOS and Android phones both. You had to be a super-developer to write apps for iOS or Android alone. But writing for both? Forget about it! You had to be familiar with Swift, Java/Kotlin, Xcode, Eclipse, and a bunch of other technologies simultaneously. Beginning App Development with Flutter simplifies the entire process. What You'll Learn Get the most out of great Flutter widgets Create custom widgets, both stateless and stateful Exercise expert control over your Flutter layouts Make your app respond to gestures like swiping, pinching and tapping Initiate async Ajax calls to RESTful APIs — including Google Firebase! Who This Book Is For Developers who have coded in Java, C#, C++, or any similar language. It brings app development within the reach of younger developers, so STEM groups are likely to pick up the technology. Managers, product owners, and business analysts need to understand Flutter's capabilities.

This updated edition describes both the mathematical theory behind a modern photorealistic rendering system as well as its practical implementation. Through the ideas and software in this book, designers will learn to design and employ a full-featured rendering system for creating stunning imagery. Includes a companion site complete with source code for the rendering system described in the book, with support for Windows, OS X, and Linux.

"If you're an architect looking to get the most out of Photoshop, look no further! Enhancing CAD Drawings with Photoshop is a killerbook." —George Omura, Author, Mastering AutoCAD 2005 and AutoCAD LT 2005 Bring Your CAD Drawings to Life Using Artistic Photoshop Techniques Most architects find that traditional CAD drawings are not the ideal medium for sharing their visions with clients. For an untrained eye, it's difficult to imagine a complex design by simply viewing a line drawing. Fortunately, you can use Adobe Photoshop to enhance CAD drawings and improve graphical communications. Enhancing CAD Drawings with Photoshop is the first book to demonstrate how you can use Photoshop to transform CAD drawings into dynamic, attractive presentation pieces that speak to everyone. First, you'll master the basic Photoshop concepts and tools. Then you delve into sophisticated illustrating and compositing techniques. Practical tutorials lead you step-by-step through each process, and a full-color insert featuring before-and-after images is certain to inspire you with ideas and solutions. While appealing to the artist in you, this unique book will empower you to win bids and wow clients. Inside, you'll learn how to: Plan your work flow to ensure consistent color printing Work in the digital darkroom and hone your retouching skills Extract entourage objects from photographs and use them in architectural illustrations, renderings, plans, and elevations Enhance your line drawings with color, pattern, gradient, transparency, and shadows Dress up basic elevations using Photoshop's layer style effects, reflection and refraction, and entourage Transfer 3D objects from Autodesk VIZ into image layers in Photoshop Make objects look realistic using layers and clipping groups Transform 3D models into pencil sketches, watercolors, and paintings Share your digital work with your clients via prints, e-mail, the Web, and slideshows Protect and catalog your intellectual property Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Efficient Android Threading

An Introduction

No-Code Video Game Development Using Unity and Playmaker

An Entire MBA in 1 Course

Beginning App Development with Flutter

Analogue Forestry

Agile Game Development with Scrum (Adobe Reader)

Newly Edited and Updated Version (Fourth Edition) for Unity 2019. Get started with Unity and game programming fast without the headaches Unity is a great software to create video games; however, it includes so many options and features that getting started can feel overwhelming. Without my book, most people spend too long trying to learn how to use Unity the hard way. This book is the only one that will get you to learn Unity fast without wasting so much time. This book is the first book in the series "Unity from Zero to Proficiency" where you will learn to code fast and be able to create your own video games with Unity in no time. What you will learn - After completing this book, you will be able to: - Know and master the features that you need to create 2D and 3D environments for your games. - Quickly create (and navigate through) realistic 3D indoors and outdoors environments. - Create a 3D Maze with lights, walls, and textures. - Use ProBuilder to create a house. - Create an island with trees, sandy beaches, mountains, and water. - Include and control a car and a plane. - Create a 2D platform game (with no scripting needed). - Export your games to the web. Who this book is for This book is for: - Hobbyists who need a book that gets them started with Unity and game development easily. - Parents looking for a book that introduces their children to game programming painlessly. - Teachers looking for a complete and clear resource on programming through the creation of games. - Aspiring indie game developers. How this book is different This is the only book that you need to get started with Unity fast and to enjoy the journey without the frustration. This book includes six chapters that painlessly guide you through the necessary skills to master Unity's interface, use its core features, and create and navigate through realistic 2D and 3D environments. It assumes no prior knowledge on your part and ensures that you have all the information and explanations that you need every step of the way. What this book offers This book includes all the features that you need to get started with Unity and game development: Learn without the headaches: This book assumes that you can't be expected to learn everything at once; this is why you will build all your skills incrementally. In addition, if you are more of a visual learner, you will gain access to a FREE video training that covers all the topics and features introduced in the book so that you can see how it is done. Make your dream of creating your own games come true: This book ensures that you stay motivated by giving you the right amount of information and challenge in each chapter; we all know that it's hard to keep motivated when learning a new skill, so this book always contextualizes the knowledge with an example (so that you feel it's relevant), and also makes sure that you get to challenge yourself, if you need to, with optional challenges present at the end of each chapter. Progress and feel confident in your skills: You will have the opportunity to learn and to use Unity at your own pace and to become comfortable with its interface. This is because every single new concept introduced will be explained in great detail so that you never feel lost. All the concepts are introduced progressively so that you don't feel overwhelmed. Create your own games and feel awesome: With this book, you will build your own 2D and 3D environments and you will spend more time creating than reading, to ensure that you can apply the concepts covered in each section. All chapters include step-by-step instructions with examples that you can use straight-away. If you want to get started with Unity today, then buy this book now.

Learn how to build an exciting 3D game with LibGDX from scratch About This Book Implement an exhaustive list of features that LibGDX unleashes to build your 3D game. Write, test, and debug your application on your desktop and deploy them on multiple platforms. Gain a clear understanding of the physics behind LibGDX and libraries like OpenGL and WebGL that make up LibGDX. Who This Book Is For If you are a game developer or enthusiasts who want to build 3D games with LibGDX, then this book is for you. A basic knowledge of LibGDX and Java programming is appreciated. What You Will Learn Learn the potential of LibGDX in game development Understand the LibGDX architecture and explore platform limitation and variations Explore the various approaches for game development using LibGDX Learn about the common mistakes and possible solutions of development Discover the 3D workflow with Blender and how it works with LibGDX Implement 3D models along with textures and animations into your games Familiarize yourself with Scene2D and its potential to boost your game's design In Detail LibGDX is a hugely popular open source, cross-platform, Java-based game development framework built for the demands of cross-platform game development. This book will teach readers how the LibGDX framework uses its 3D rendering API with the OpenGL wrapper, in combination with Bullet Physics, 3D Particles, and Shaders to develop and deploy a game application to different platforms You will start off with the basic IntelliJ environment, workflow and set up a LibGDX project with necessary APIs for 3D development. You will then go through LibGDX's 3D rendering API main features and talk about the camera used for 3D. Our next step is to put everything together to build a basic 3D game with Shapes, including basic gameplay mechanics and basic UI. Next you will go through modeling, rigging, and animation in Blender. We will then talk about refining mechanics, new input implementations, implementing enemy 3D models, mechanics, and gameplay balancing. The later part of this title will help you to manage secondary resources like audio, music and add 3D particles in the game to make the game more realistic. You will finally test and deploy the app on a multitude of different platforms, ready to start developing your own titles how you want! Style and approach A step by step guide on building a 3D game with LibGDX and implementing an exhaustive list of features that you would wish to incorporate into your 3D game

"Analogue forestry is a reponse that seeks to address both the genetic and the cultural issues of biological loss. This paper explores the major ecological process that underlie Analogur Forestry" -- p.vii.

Functional programming languages like F#, Erlang, and Scala are attracting attention as an efficient way to handle the new requirements for programming multi-processor and high-availability applications. Microsoft's new F# is a true functional language and C# uses functional language features for LINQ and other recent advances. Real-World Functional Programming is a unique tutorial that explores the functional programming model through the F# and C# languages. The clearly presented ideas and examples teach readers how functional programming differs from other approaches. It explains how ideas look in F#-a functional language-as well as how they can be successfully used to solve programming problems in C#. Readers build on what they know about .NET and learn where a functional approach makes the most sense and how to apply it effectively in those cases. The reader should have a good working knowledge of C#. No prior exposure to F# or functional programming is required. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.