

Start Here Learn The Kinect Api

Start Here! Learn the Kinect API Pearson Education

This book is a mini tutorial with plenty of code examples and strategies to give you many options when building your own applications. This book is meant for readers who are familiar with C/C++ programming and want to write simple programs with Kinect. The standard template library can also be used as it is simple enough to understand.

Human Computer Interaction (HCI) is easy to define yet difficult to predict. Encompassing the management, study, planning, and design of the ways in which users interact with computers, this field has evolved from using punch cards to force touch in a matter of decades. What was once considered science fiction is now ubiquitous. The future of HCI is mercurial, yet predictions point to the effortless use of high-functioning services. The Handbook of Research on Human-Computer Interfaces, Developments, and Applications is primarily concerned with emerging research regarding gesture interaction, augmented reality, and assistive technologies and their place within HCI. From gaming to rehabilitation systems, these new technologies share the need to interface with humans, and as computers become thoroughly integrated into everyday life, so does the necessity of HCI research. This handbook of research benefits the research needs of programmers, developers, students and educators in computer science, and researchers.

"Programming the accelerometer, gyroscope, camera, and magnetometer"--Cover.

Your one-stop guide to the Robot Operating System About This Book Model your robot on a virtual world and learn how to simulate it Create, visualize, and process Point Cloud information Easy-to-follow, practical tutorials to program your own robots Who This Book Is For If you are a robotic enthusiast who wants to learn how to build and program your own robots in an easy-to-develop, maintainable, and shareable way, this book is for you. In order to make the most of the book, you should have a C++ programming background, knowledge of GNU/Linux systems, and general skill in computer science. No previous background on ROS is required, as this book takes you from the ground up. It is also advisable to have some knowledge of version control systems, such as svn or git, which are often used by the community to share code. What You Will Learn Install a complete ROS Hydro system Create ROS packages and metapackages, using and debugging them in real time Build, handle, and debug ROS nodes Design your 3D robot model and simulate it in a virtual environment within Gazebo Give your robots the power of sight using cameras and calibrate and perform computer vision tasks with them Generate and adapt the navigation stack to work with your robot Integrate different sensors like Range Laser, Arduino, and Kinect with your robot Visualize and process Point Cloud information from different sensors Control and plan motion of robotic arms with multiple joints using MoveIt! In Detail If you have ever tried building a robot, then you know how cumbersome programming everything from scratch can be. This is where ROS comes into the picture. It is a collection of tools, libraries, and conventions that simplifies the robot building process. What's more, ROS encourages collaborative robotics software development, allowing you to connect with experts in various fields to collaborate and build upon each other's work. Packed full of examples, this book will help you understand the ROS framework to help you build your own robot applications in a simulated environment and share your knowledge with the large community supporting ROS. Starting at an introductory level, this book is a comprehensive guide to the fascinating world of robotics, covering sensor integration, modeling, simulation, computer vision, navigation algorithms, and more. You will then go on to explore concepts like topics, messages, and nodes. Next, you will learn how to make your robot see with HD cameras, or navigate obstacles with range sensors. Furthermore, thanks to the contributions of the vast ROS community, your robot will be able to navigate autonomously, and even recognize and interact with you in a matter of minutes. What's new in this updated edition? First and foremost, we are going to work with ROS Hydro this time around. You will learn how to create, visualize, and process Point Cloud information from different sensors. This edition will also show you how to control and plan motion of robotic arms with multiple joints using MoveIt! By the end of this book, you will have all the background you need to build your own robot and get started with ROS. Style and approach This book is an easy-to-follow guide that will help you find your way through the ROS framework. This book is packed with hands-on examples that will help you program your robot and give you complete solutions using ROS open source libraries and tools.

A guide to creating computer applications using Microsoft Kinect features instructions on using the device with different operating systems, using 3D scanning technology, and building robot arms, all using open source programming language.

Develop applications in Microsoft Kinect 2 using gesture and speech recognition, scanning of objects in 3D, and body tracking. Create motion-sensing applications for entertainment and practical uses, including for commercial products and industrial applications. Beginning Microsoft Kinect for Windows SDK 2.0 is dense with code and examples to ensure that you understand how to build Kinect applications that can be used in the real world. Techniques and ideas are presented to facilitate incorporation of the Kinect with other technologies. What You Will Learn Set up Kinect 2 and a workspace for Kinect application development Access audio, color, infrared, and skeletal data streams from Kinect Use gesture and speech recognition Perform computer vision manipulations on image data streams Develop Windows Store apps and Unity3D applications with Kinect 2 Take advantage of Kinect Fusion (3D object mapping technology) and Kinect Ripple (Kinect projector infotainment system) Who This Book Is For Developers who want to include the simple but powerful Kinect technology into their projects, including amateurs and hobbyists, and professional developers

How do you develop products that people will actually use and buy? This practical guide shows you how to validate product and company ideas through customer development research—before you waste months and millions on a product or service that no one needs or wants. With a combination of open-ended interviewing and fast and flexible research techniques, you'll learn how your prospective customers behave, the problems they need to solve, and what frustrates and delights them. These insights may shake your assumptions, but they'll help you reach the "ah-ha!" moments that inspire truly great products. Validate or invalidate your hypothesis by talking to the right people Learn how to conduct successful customer interviews play-by-play Detect a customer's behaviors, pain points, and constraints Turn interview insights into Minimum Viable Products to validate what customers will use and buy Adapt customer development strategies for large companies, conservative industries, and existing products

How would you like to build an Xbox game, use your Nintendo Wiimote to create an electronic whiteboard, or build your own peer-to-peer application? Coding4Fun helps you tackle some cool software and hardware projects using a range of languages and free Microsoft software. Now you can code for fun with C#, VB, ASP.NET, WPF, XNA Game Studio, Popfly, as well as the Lua programming language. If you love to tinker, but don't have time to figure it all out, this book gives you clear, step-by-step instructions for building ten creative projects, including: Alien Attack: Create a 2D clone of Space Invaders with XNA for the PC, Xbox 360, and Zune LEGO Soldier: Create an action game using Popfly with a custom-built virtual LEGO character World of Warcraft RSS Feed Reader: Use WoW's customizable interface to have feeds pop up while you're gaming InnerTube: Download YouTube videos automatically and convert them to a file format for off-line viewing PeerCast: Stream video files from any PC TwitterVote: Create custom online polls on Twitter WHSMail: Build a website with ASP.NET for Windows Home Server that lets you view the messages stored on a computer with Outlook "Wiimote" Controlled Car: Steer your remote-controlled car by tilting the Wii Remote controller left and right Wiimote Whiteboard: Create an interactive whiteboard using a Wii Remote Holiday Lights: Synchronize your holiday light display with music to create your own light show The perfect gift for any developer, Coding4Fun shows you how to use your programming skills in new and fun ways. "This book is amazing! The scope is so wonderfully broad that anyone who has an interest in designing games at any level should read this book." -- Alex Albrecht, Creator of DiggNation / Totally Rad Show / Project Lore If you've done some Arduino tinkering and wondered how you could incorporate the Kinect—or the other way around—then this

book is for you. The authors of Arduino and Kinect Projects will show you how to create 10 amazing, creative projects, from simple to complex. You'll also find out how to incorporate Processing in your project design—a language very similar to the Arduino language. The ten projects are carefully designed to build on your skills at every step. Starting with the Arduino and Kinect equivalent of "Hello, World," the authors will take you through a diverse range of projects that showcase the huge range of possibilities that open up when Kinect and Arduino are combined. Gesture-based Remote Control. Control devices and home appliances with hand gestures. Kinect-networked Puppet. Play with a physical puppet remotely using your whole body. Mood Lamps. Build your own set of responsive, gesture controllable LED lamps. Drawing Robot. Control a drawing robot using a Kinect-based tangible table. Remote-controlled Vehicle. Use your body gestures to control a smart vehicle. Biometric Station. Use the Kinect for biometric recognition and checking Body Mass Indexes. 3D Modeling Interface. Learn how to use the Arduino LilyPad to build a wearable 3D modelling interface. 360o Scanner. Build a turntable scanner and scan any object 360o using only one Kinect. Delta Robot. Build and control your own fast and accurate parallel robot.

Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. Summary You can be incredibly productive with Azure without mastering every feature, function, and service. Learn Azure in a Month of Lunches, Second Edition gets you up and running quickly, teaching you the most important concepts and tasks in 21 practical bite-sized lessons. As you explore the examples, exercises, and labs, you'll pick up valuable skills immediately and take your first steps to Azure mastery! This fully revised new edition covers core changes to the Azure UI, new Azure features, Azure containers, and the upgraded Azure Kubernetes Service. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microsoft Azure is vast and powerful, offering virtual servers, application templates, and prebuilt services for everything from data storage to AI. To navigate it all, you need a trustworthy guide. In this book, Microsoft engineer and Azure trainer Iain Foulds focuses on core skills for creating cloud-based applications. About the book Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. What's inside Understanding Azure beyond point-and-click Securing applications and data Automating your environment Azure services for machine learning, containers, and more About the reader This book is for readers who can write and deploy simple web or client/server applications. About the author Iain Foulds is an engineer and senior content developer with Microsoft. Table of Contents PART 1 - AZURE CORE SERVICES 1 Before you begin 2 Creating a virtual machine 3 Azure Web Apps 4 Introduction to Azure Storage 5 Azure Networking basics PART 2 - HIGH AVAILABILITY AND SCALE 6 Azure Resource Manager 7 High availability and redundancy 8 Load-balancing applications 9 Applications that scale 10 Global databases with Cosmos DB 11 Managing network traffic and routing 12 Monitoring and troubleshooting PART 3 - SECURE BY DEFAULT 13 Backup, recovery, and replication 14 Data encryption 15 Securing information with Azure Key Vault 16 Azure Security Center and updates PART 4 - THE COOL STUFF 17 Machine learning and artificial intelligence 18 Azure Automation 19 Azure containers 20 Azure and the Internet of Things 21 Serverless computing Learn C# from first principles the Rob Miles way. With jokes, puns, and a rigorous problem solving based approach. You can download all the code samples used in the book from here: <http://www.robmiles.com/s/Yellow-Book-Code-Samples-64.z>

Ready to learn JavaScript? Start Here! Learn the fundamentals of modern programming with JavaScript—and begin building your first apps for the web. If you have no previous experience with JavaScript, no problem—simply start here! This book introduces must-know concepts and techniques through easy-to-follow explanations, examples, and exercises. Here's where you start learning JavaScript Learn the basics of JavaScript programming Find out how to access browser content from JavaScript Manage images and validate form entries Retrieve data using the JavaScript Object Notation (JSON) Use JavaScript and HTML5 in Windows 8 applications Put it all together by creating your first programs

This book gives clear and effective instructions, stuffed with practical examples, to build your own fun, stunning and highly-interactive openFrameworks applications. Each chapter is focused differently and has a new theme to it, This book targets visual artists, designers, programmers and those interested in creative coding by getting started with openFrameworks. This book will help you understand the capabilities of openFrameworks to help you create visually stunning and fully interactive applications. You should have a basic knowledge of object oriented programming, such as C++, Java, Python, ActionScript 3, etc.

Create your own innovative applications in computer vision, game design, music, robotics, and other areas by taking full advantage of Kinect's extensive interactive, multi-media platform. With this book, you get a step-by-step walkthrough of the best techniques and tools to come out of the OpenKinect project, the largest and most active Kinect hacking community. Learn dozens of hacks for building interfaces that respond to body movements, gestures, and voice, using open source toolkits such as openFrameworks, the Processing IDE, and OpenKinect driver library. Whether you're an artist, designer, researcher, or hobbyist, this book will give you a running start with Kinect. Set up a development environment in Windows 7, Mac OSX, or Ubuntu Build special effects apps with tools such as Synapse and Cinder Create gestural interfaces to integrate and control digital music components Capture the realistic motions of a 3D model with NI mate, Blender, and Animata Design gesture-based games with the ZigFu SDK Recreate the dimensions of any room in realtime, using RGBDemo Use gestures to navigate robots and control PC interfaces

My Xbox One Step-by-step instructions with callouts to colorful Xbox One images that show you exactly what to do Help when you run into problems with Xbox One, Kinect™, Xbox Live®, or SmartGlass Tips and Notes to help you get the most from your Xbox One system Full-color, step-by-step tasks show how to have maximum fun with your new Xbox One! Learn how to • Set up Xbox One, Kinect, and Xbox Live quickly—and start having fun now! • Personalize settings, gamertags, avatars, gamerpics... your whole Xbox One experience • Start your party, add chat, use built-in Skype, even make group video calls • Capture video of your best gameplay moments with Game DVR • Watch great video from practically anywhere: cable or satellite, DVD, Blu-ray, Netflix, Hulu Plus, Amazon Prime, and more • Play or stream all the music you love • Web surf with Xbox One's supercharged version of Internet Explorer • Use SmartGlass to transform your iPhone, iPad, Android, or Windows 8 device into a second Xbox screen or remote control CATEGORY: Consumer Electronics COVERS: Xbox One USER LEVEL: Beginning-Intermediate

Ready to learn Kinect programming? Start Here! Learn the fundamentals of programming with the Kinect API - and begin building apps that use motion tracking, voice recognition, and more. If you have experience programming with C# - simply start here! This book introduces must-know concepts and techniques through easy-to-follow explanations, examples, and exercises. Here's where

you start learning Kinect Build an application to display Kinect video on your PC Have Kinect take photographs when it detects movement Draw on a computer screen by moving your finger in the air Track your body gestures and use them to control a program Make a program that understands your speech and talks back to you Play a part in your own augmented reality game Create an "air piano" using Kinect with a MIDI device.

Hacking the Kinect is the technogeek's guide to developing software and creating projects involving the groundbreaking volumetric sensor known as the Microsoft Kinect. Microsoft's release of the Kinect in the fall of 2010 startled the technology world by providing a low-cost sensor that can detect and track body movement in three-dimensional space. The Kinect set new records for the fastest-selling gadget of all time. It has been adopted worldwide by hobbyists, robotics enthusiasts, artists, and even some entrepreneurs hoping to build business around the technology. Hacking the Kinect introduces you to programming for the Kinect. You'll learn to set up a software environment, stream data from the Kinect, and write code to interpret that data. The progression of hands-on projects in the book leads you even deeper into an understanding of how the device functions and how you can apply it to create fun and educational projects. Who knows? You might even come up with a business idea. Provides an excellent source of fun and educational projects for a tech-savvy parent to pursue with a son or daughter Leads you progressively from making your very first connection to the Kinect through mastery of its full feature set Shows how to interpret the Kinect data stream in order to drive your own software and hardware applications, including robotics applications

Ongoing advancements in modern technology have led to significant developments with smart technologies. With the numerous applications available, it becomes imperative to conduct research and make further progress in this field. Smart Technologies: Breakthroughs in Research and Practice provides comprehensive and interdisciplinary research on the most emerging areas of information science and technology. Including innovative studies on image and speech recognition, human-computer interface, and wireless technologies, this multi-volume book is an ideal source for researchers, academicians, practitioners, and students interested in advanced technological applications and developments.

Ready to learn Microsoft Visual Basic? Start Here! Learn the fundamentals of modern programming with Visual Basic 2012—and begin building your first Windows 8 apps for the desktop. If you have absolutely no previous experience with Visual Basic, no problem—simply start here! This book introduces must-know concepts and techniques through easy-to-follow explanations, examples, and exercises. Here's where you start learning Visual Basic Learn the fundamentals of programming with Visual Basic Discover how to to bind controls to data Design and interact with user interfaces built with XAML Build and debug complete applications Learn the basics of Windows 8 application design Find out how to deliver your applications to the Windows Store

In the race to compete in today's fast-moving markets, large enterprises are busy adopting new technologies for creating new products, processes, and business models. But one obstacle on the road to digital transformation is placing too much emphasis on technology, and not enough on the types of processes technology enables. What if different lines of business could build their own services and applications—and decision-making was distributed rather than centralized? This report explores the concept of a digital business platform as a way of empowering individual business sectors to act on data in real time. Much innovation in a digital enterprise will increasingly happen at the edge, whether it involves business users (from marketers to data scientists) or IoT devices. To facilitate the process, your core IT team can provide these sectors with the digital tools they need to innovate quickly. This report explores: Key cultural and organizational changes for developing business capabilities through cross-functional product teams A platform for integrating applications, data sources, business partners, clients, mobile apps, social networks, and IoT devices Creating internal API programs for building innovative edge services in low-code or no-code environments Tools including Integration Platform as a Service, Application Platform as a Service, and Integration Software as a Service The challenge of integrating microservices and serverless architectures Event-driven architectures for processing and reacting to events in real time You'll also learn about a complete pervasive integration solution as a core component of a digital business platform to serve every audience in your organization.

Create rich experiences for users of Windows 7 and Windows 8 Developer Preview with this pragmatic guide to the Kinect for Windows Software Development Kit (SDK). The author, a developer evangelist for Microsoft, walks you through Kinect sensor technology and the SDK—providing hands-on insights for how to add gesture and posture recognition to your apps. If you're skilled in C# and Windows Presentation Foundation, you'll learn how to integrate Kinect in your applications and begin writing Uis and controls that can handle Kinect interaction. This book introduces the Kinect for Windows Software Development Kit to developers looking to enrich applications they build for Windows 7 and later with human motion tracking Teaches developers with core C# and WPF skills how to program gesture and posture recognition in Kinect Describes how to integrate 3D representation on top of a real scene Provides expert insights and code samples to get you up and running

Step-by-step instructions with callouts to PlayStation Vita images that show you exactly what to do. Help when you run into problems with your PlayStation Vita. Tips and Notes to help you get the most from your PlayStation Vita. Full-Color, Step-by-Step Tasks Show You How to Have Maximum Fun with Your PlayStation Vita! Unbox your PS Vita™, get connected, and start having fun, fast Master PS Vita's built-in and downloadable apps, from games to social media Discover hot new PS Vita games—and play PlayStation classics, too Chat with groups of friends in real time—even if they're playing different games Leave gifts for nearby gamers to find and play with or launch neighborhood competitions Post on Facebook and Twitter right from your PS Vita Use "augmented reality" cameras to embed yourself into the game Make the most of PS Vita's advanced HTML5 web browser Take great photos and videos with PS Vita's built-in cameras Control your PS3 from your PS Vita—even if you're thousands of miles away Transform your PS Vita into a world-class music player Get instant walking or driving directions from Google Maps Set parental controls to protect your kids Create Privacy Zones so other gamers don't know what you're doing Buy or rent videos from the PlayStation Store

Safely back up your PS Vita on your PC, Mac, or PS3 Solve PS Vita and connectivity problems fast and get back to having fun

Kubernetes radically changes the way applications are built and deployed in the cloud. Since its introduction in 2014, this container orchestrator has become one of the largest and most popular open source projects in the world. The updated edition of this practical book shows developers and ops personnel how Kubernetes and container technology can help you achieve new levels of velocity, agility, reliability, and efficiency. Kelsey Hightower, Brendan Burns, and Joe Beda—who've worked on Kubernetes at Google and beyond—explain how this system fits into the lifecycle of a distributed application. You'll learn how to use tools and APIs to automate scalable distributed systems, whether it's for online services, machine learning applications, or a cluster of Raspberry Pi computers. Create a simple cluster to learn how Kubernetes works Dive into the details of deploying an application using Kubernetes Learn specialized objects in Kubernetes, such as DaemonSets, jobs, ConfigMaps, and secrets Explore deployments that tie together the lifecycle of a complete application Get practical examples of how to develop and deploy real-world applications in Kubernetes Ready to learn Kinect programming? Start Here! Learn the fundamentals of programming with the Kinect API—and begin building apps that use motion tracking, voice recognition, and more. If you have experience programming with C#—simply start here! This book introduces must-know concepts and techniques through easy-to-follow explanations, examples, and exercises. Here's where you start learning Kinect Build an application to display Kinect video on your PC Have Kinect take photographs when it detects movement Draw on a computer screen by moving your finger in the air Track your body gestures and use them to control a program Make a program that understands your speech and talks back to you Play a part in your own augmented reality game Create an "air piano" using Kinect with a MIDI device

Introduces the basics of using the Kinect API to build applications that use voice recognition and motion tracking, covering such topics as writing software, using the depth and sound sensors, body tracking, and augmented reality.

Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. This third ebook in the series introduces Microsoft Azure Machine Learning, a service that a developer can use to build predictive analytics models (using training datasets from a variety of data sources) and then easily deploy those models for consumption as cloud web services. The ebook presents an overview of modern data science theory and principles, the associated workflow, and then covers some of the more common machine learning algorithms in use today. It builds a variety of predictive analytics models using real world data, evaluates several different machine learning algorithms and modeling strategies, and then deploys the finished models as machine learning web services on Azure within a matter of minutes. The ebook also expands on a working Azure Machine Learning predictive model example to explore the types of client and server applications you can create to consume Azure Machine Learning web services. Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the Microsoft Azure Essentials series.

Nine revolutionary algorithms that power our computers and smartphones Every day, we use our computers to perform remarkable feats. A simple web search picks out a handful of relevant needles from the world's biggest haystack. Uploading a photo to Facebook transmits millions of pieces of information over numerous error-prone network links, yet somehow a perfect copy of the photo arrives intact. Without even knowing it, we use public-key cryptography to transmit secret information like credit card numbers, and we use digital signatures to verify the identity of the websites we visit. How do our computers perform these tasks with such ease? John MacCormick answers this question in language anyone can understand, using vivid examples to explain the fundamental tricks behind nine computer algorithms that power our PCs, tablets, and smartphones.

The book focuses on both theory and applications in the broad areas of communication technology, computer science and information security. This two volume book contains the Proceedings of 4th International Conference on Advanced Computing, Networking and Informatics. This book brings together academic scientists, professors, research scholars and students to share and disseminate information on knowledge and scientific research works related to computing, networking, and informatics to discuss the practical challenges encountered and the solutions adopted. The book also promotes translation of basic research into applied investigation and convert applied investigation into practice.

Find out everything you need to know to build powerful robots with the most up-to-date ROS About This Book This comprehensive, yet easy-to-follow guide will help you find your way through the ROS framework Successfully design and simulate your 3D robot model and use powerful robotics algorithms and tools to program and set up your robots with an unparalleled experience by using the exciting new features from Robot Kinetic Use the latest version of gazebo simulator, OpenCV 3.0, and C++11 standard for your own algorithms Who This Book Is For This book is suitable for an ROS beginner as well as an experienced ROS roboticist or ROS user or developer who is curious to learn ROS Kinetic and its features to make an autonomous Robot. The book is also suitable for those who want to integrate sensors and embedded systems with other software and tools using ROS as a framework. What You Will Learn Understand the concepts of ROS, the command-line tools, visualization GUIs, and how to debug ROS Connect robot sensors and actuators to ROS Obtain and analyze data from cameras and 3D sensors Use Gazebo for robot/sensor and environment simulation Design a robot and see how to make it map the environment, navigate autonomously, and manipulate objects in the environment using MoveIt! Add vision capabilities to the robot using OpenCV 3.0 Add 3D perception capabilities to the robot using the latest version of PCL In Detail Building and programming a robot can be cumbersome and time-consuming, but not when you have the right collection of tools, libraries, and more importantly expert collaboration. ROS enables collaborative software development and offers an unmatched simulated environment that simplifies the entire robot building process. This book is packed with hands-on examples that will help you program your robot and give you complete solutions using open source ROS libraries and tools. It also shows you how to use virtual machines and Docker containers to simplify the installation of Ubuntu and the ROS framework, so you can start working in an isolated and control environment without changing your regular computer setup. It starts with the installation and basic concepts, then continues with more complex modules available in ROS such as sensors and actuators integration (drivers), navigation and mapping (so you can create an autonomous mobile robot), manipulation, Computer Vision, perception in 3D with

PCL, and more. By the end of the book, you'll be able to leverage all the ROS Kinetic features to build a fully fledged robot for all your needs. Style and approach This book is packed with hands-on examples that will help you program your robot and give you complete solutions using ROS open source libraries and tools. All the robotics concepts and modules are explained and multiple examples are provided so that you can understand them easily.

This book is a practical tutorial that explains all the features of Kinect SDK by creating sample applications throughout the book. It includes a detailed discussion of APIs with step-by-step explanation of development of a real-world sample application. The purpose of this book is to explain how to develop applications using the Kinect for Windows SDK. If you are a beginner and looking to start developing applications using the Kinect for Windows SDK, and if you want to build motion-sensing, speech-recognizing applications with Kinect, this book is for you. This book uses C# and WPF (Windows P).

This is the quick, visual, one-stop tutorial for everyone who wants to get maximum fun and entertainment out of their Xbox 360, Xbox Live, and Kinect controller. Gaming experts Christina and Bill Loguidice cover everything Xbox has to offer, uncovering cool features and tools most users won't ever discover on their own. You learn how to get started with Xbox 360; fast-network your Xbox 360s; run the media content in your Windows PCs; personalize your Xbox experiences; find great stuff on Microsoft's Game, Video, and Music Marketplaces; get acquainted with your Xbox friends and communities; get to know the Kinect controller and Hub; and find great Kinect games and get better at playing them. This book's concise, step-by-step instructions link to callouts on Xbox screen captures that show you exactly what to do. Tips and Notes help you discover powerful new techniques and shortcuts, and Help features guide you past common problems. This book is designed for all 50,000,000 Xbox 360 owners: from those who've just purchased their first system, to those diving headfirst into Kinect gaming, to millions of Xbox Live subscribers who want to get even more out of Microsoft's online services.

Master the art of machine learning with .NET and gain insight into real-world applications About This Book Based on .NET framework 4.6.1, includes examples on ASP.NET Core 1.0 Set up your business application to start using machine learning techniques Familiarize the user with some of the more common .NET libraries for machine learning Implement several common machine learning techniques Evaluate, optimize and adjust machine learning models Who This Book Is For This book is targeted at .Net developers who want to build complex machine learning systems. Some basic understanding of data science is required. What You Will Learn Write your own machine learning applications and experiments using the latest .NET framework, including .NET Core 1.0 Set up your business application to start using machine learning. Accurately predict the future using regressions. Discover hidden patterns using decision trees. Acquire, prepare, and combine datasets to drive insights. Optimize business throughput using Bayes Classifier. Discover (more) hidden patterns using KNN and Naive Bayes. Discover (even more) hidden patterns using K-Means and PCA. Use Neural Networks to improve business decision making while using the latest ASP.NET technologies. Explore "Big Data", distributed computing, and how to deploy machine learning models to IoT devices – making machines self-learning and adapting Along the way, learn about Open Data, Bing maps, and MBrace In Detail .Net is one of the widely used platforms for developing applications. With the meteoric rise of Machine learning, developers are now keen on finding out how can they make their .Net applications smarter. Also, .NET developers are interested into moving into the world of devices and how to apply machine learning techniques to, well, machines. This book is packed with real-world examples to easily use machine learning techniques in your business applications. You will begin with introduction to F# and prepare yourselves for machine learning using .NET framework. You will be writing a simple linear regression model using an example which predicts sales of a product. Forming a base with the regression model, you will start using machine learning libraries available in .NET framework such as Math.NET, Numl.NET and Accord.NET with the help of a sample application. You will then move on to writing multiple linear regressions and logistic regressions. You will learn what is open data and the awesomeness of type providers. Next, you are going to address some of the issues that we have been glossing over so far and take a deep dive into obtaining, cleaning, and organizing our data. You will compare the utility of building a KNN and Naive Bayes model to achieve best possible results. Implementation of Kmeans and PCA using Accord.NET and Numl.NET libraries is covered with the help of an example application. We will then look at many of issues confronting creating real-world machine learning models like overfitting and how to combat them using confusion matrixes, scaling, normalization, and feature selection. You will now enter into the world of Neural Networks and move your line of business application to a hybrid scientific application. After you have covered all the above machine learning models, you will see how to deal with very large datasets using MBrace and how to deploy machine learning models to Internet of Thing (IoT) devices so that the machine can learn and adapt on the fly Style and approach This book will guide you in learning everything about how to tackle the flood of data being encountered these days in your .NET applications with the help of popular machine learning libraries offered by the .NET framework.

Meet the Kinect introduces the exciting world of volumetric computing using the Microsoft Kinect. You'll learn to write scripts and software enabling the use of the Kinect as an input device. Interact directly with your computer through physical motion. The Kinect will read and track body movements, and is the bridge between the physical reality in which you exist and the virtual world created by your software. Microsoft's Kinect was released in fall 2010 to become the fastest-selling electronic device ever. For the first time, we have an inexpensive, three-dimensional sensor enabling direct interaction between human and computer, between the physical world and the virtual. The Kinect has been enthusiastically adopted by a growing culture of enthusiasts, who put it to work in creating technology-based art projects, three-dimensional scanners, adaptive devices for sight-impaired individuals, new ways of interacting with PCs, and even profitable business opportunities. Meet the Kinect is the resource to get you started in mastering the Kinect and the exciting possibilities it brings. You'll learn about the Kinect hardware and what it can do. You'll install drivers and learn to download and run the growing amount of Kinect software freely available on the Internet. From there, you'll move into writing code using some of the more popular frameworks and APIs, including the official Microsoft API and the language known as Processing that is popular in the art and creative world. Along the way, you'll learn principles and terminology. Volumetric computing didn't begin with the Kinect. The field is decades old—if you've ever had an MRI, for example, you have benefitted from volumetric computing technology. Meet the Kinect goes beyond just the one device to impart the principles and terminology underlying the exciting field of volumetric computing that is now wide-open and accessible to the average person. One of 2021's Most Highly Anticipated New Books--Newsweek One of The 20 New Leadership Books--Adam Grant One The Best New Wellness Books Hitting Shelves In January--Shape.com A Next Big Idea Club Nominee Social Chemistry will utterly transform the way you think about "networking." Understanding the contours of your social network can dramatically enhance personal relationships, work life, and even your global impact. Are you an Expansionist, a Broker, or a Convener? The answer

