

Kinect Programming Guide

Unveil the world of mixed reality with HoloLens About This Book Bring holographic insights to existing line-of-business applications, tools, and workflows Focus on developing end-to-end realistic holographic application. Build interactive model scripts and test them in Unity3D and holographic emulators Who This Book Is For This book is targeted at developers and designers working on mixed-reality developments for complex integrated scenarios using HoloLens. What You Will Learn Interact with holograms using different interaction models Develop your first holographic app Integrate holographic applications with cloud systems Visualize data feeds coming from the cloud through holograms Manage the application distribution of enterprise-enabled HoloLens Integrate HoloLens applications with services deployed on Azure Identify and create 3D Assets and Scenes Use HoloLens to explore the Internet of Things In Detail Do you want to create stunning applications with HoloLens? Are you a developer who is fascinated with Microsoft HoloLens and its capabilities? If so, this is the book for you. This book introduces and demystifies the HoloLens platform and shows you different ways of interaction with computers (mixed-reality). You will start your mixed-reality journey by understanding different types of digital reality. You will learn to build your first holographic app. Also, you will understand holographic application integration possibilities within Line of Business Applications using Azure. Moving ahead, you will create Integrated Solutions using IoT with HoloLens. Gradually you'll learn how to create and deploy apps on a device. You will learn to publish application to the store; if you are an enterprise developer, you will also manage and distribute applications for enterprise-enabled or domain-joined HoloLens. Finally, you will develop an end-to-end realistic holographic app, ranging from scenario identification to sketching, development, deployment, and, finally, production. Style and approach The book is a project-based guide to help you to create some really astonishing mixed-reality applications. It will provide end-to-end solutions and enable you to build stunning applications for HoloLens. 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.

"This 10-volume compilation of authoritative, research-based articles contributed by thousands of researchers and experts from all over the world emphasized modern issues and the presentation of potential opportunities, prospective solutions, and future directions in the field of information science and technology"--Provided by publisher.

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.

Brave NUI World

3D Vision with Kinect, Processing, Arduino, and MakerBot

Blended Learning: Concepts, Methodologies, Tools, and Applications

Street Gang

Programming with the Kinect for Windows Software Development Kit

Healing the Broken Brain

GPU Pro4: Advanced Rendering Techniques presents ready-to-use ideas and procedures that can help solve many of your day-to-day graphics programming challenges. Focusing on interactive media and games, the book covers up-to-date methods for producing real-time graphics. Section editors Wolfgang Engel, Christopher Oat, Carsten Dachsbacher, Michal Valient, Wessam Bahnassi, and Sebastien St-Laurent have once again assembled a high-quality collection of cutting-edge techniques for advanced graphics processing unit (GPU) programming. Divided into six sections, the book begins with discussions on the ability of GPUs to process and generate geometry in exciting ways. It next introduces new shading and global illumination techniques for the latest real-time rendering engines and explains how image space algorithms are becoming a key way to achieve a more realistic and higher quality final image. Moving on to the difficult task of rendering shadows, the book describes the state of the art in real-time shadow maps. It then covers game engine design, including quality, optimization, and high-level architecture. The final section explores approaches that go beyond the normal pixel and triangle scope of GPUs as well as techniques that take advantage of the parallelism of modern graphic processors in a variety of applications. Useful to beginners and seasoned game and graphics programmers alike, this color book offers practical tips and techniques for creating real-time graphics. Example programs and source code are available for download on the book's CRC Press web page. The directory structure of the online material closely follows the book structure by using the chapter numbers as the name of the subdirectory.

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.

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.

Time-of-Flight Cameras and Microsoft Kinect™ closely examines the technology and general characteristics of time-of-flight range cameras, and outlines the best methods for maximizing the data captured by these devices. This book also analyzes the calibration issues that some end-users may face when using these type of cameras for research, and suggests methods for improving the real-time 3D reconstruction of dynamic and static scenes. Time-of-Flight Cameras and Microsoft Kinect™ is intended for researchers and advanced-level students as a reference guide for time-of-flight cameras. Practitioners working in a related field will also find the book valuable.

Learn to Program in C# from First Principles

Design and Application

TestNG Beginner's Guide

Advanced Rendering Techniques

Design, Build, Blow Their Minds

Service Robots and Robotics: Design and Application

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

The book includes a series of step-by-step illustrated tutorials supported by detailed explanations for building a multimodal user interface based on Kinect for Windows.Kinect in Motion - Audio and Visual Tracking by Example is great for developers new to the Kinect for Windows SDK, and who are looking to get a good grounding in how to master video and audio tracking. It’s assumed that you have some experience in C# and XAML already.

Looks at the techniques of interactive design, covering such topics as 2D and 3D graphics, sound, computer vision, and geolocation.

Excel VBA 365 Made Easy is a complete guide to mastering Excel VBA 365, for beginner to intermediate programmers. Authored by Dr. Liew, creator of the popular online Excel VBA Tutorial at excelvbatutor.com, this book is an excellent reference text for high school or college-level computer science courses. By the end of this book, you will gain a comprehensive understanding of basic Excel VBA 365 concepts and be able to create your own code from scratch. You will learn how to: 1. Write code for objects like Worksheet, Range, Cells and more using their methods and properties 2. Write macros to automate tasks 3. Program code for all the ActiveX controls available in the Developer environment 4. Create applications using the UserForm 5. Create objects and classes using the Class module Best of all, you will gain inspiration from a variety of interesting examples like a calculator, stock trading program, slot machine, Star Wars, and more. You may modify the examples easily to suit your needs.

Concepts, Methodologies, Tools, and Applications

Consumer-Driven Technologies in Healthcare: Breakthroughs in Research and Practice

Hacking the Kinect with OpenNI, NITE, and Java

Excel VBA 365 Made Easy

Encyclopedia of Information Science and Technology, Third Edition

Making Things See

The world of medical technologies is undergoing a sea change in the domain of consumer culture. Having a grasp on what appeals to consumers and how consumers are making purchasing decisions is essential to the success of any organization that thrives by offering a product or service. As such, it is vital to examine the consumer-centered aspects of medical technological developments that have a patient-centered focus and allow patients to take part in their own personal health and wellness. Consumer-Driven Technologies in Healthcare: Breakthroughs in Research and Practice is a critical source of academic knowledge on the use of smartphones and other technological devices for cancer therapy, fitness and wellness, chronic disease monitoring, and other areas. The tracking of these items using technology has allowed consumers to take control of their own healthcare. Highlighting a range of pertinent topics such as clinical decision support systems, patient engagement, and electronic health records, this publication is an ideal reference source for doctors, nurse practitioners, hospital administrators, medical professionals, IT professionals, academicians, and researchers interested in advancing medical practice through technology.

Serious games provide a unique opportunity to engage students more fully than traditional teaching approaches. Understanding the best way to utilize games and play in an educational setting is imperative for effectual learning in the twenty-first century. Gamification: Concepts, Methodologies, Tools, and Applications investigates the use of games in education, both inside and outside of the classroom, and how this field once thought to be detrimental to student learning can be used to augment more formal models. This four-volume reference work is a premier source for educators, administrators, software designers, and all stakeholders in all levels of education.

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 The revised 13th edition of the essential reference for the prescribing of drugs for patients with mental health disorders The revised and updated 13th edition of The Maudsley Prescribing Guidelines in Psychiatry provides up-to-date information, expert guidance on prescribing practice in mental health, including drug choice, treatment of adverse effects and how to augment or switch medications. The text covers a wide range of topics including pharmacological interventions for schizophrenia, bipolar disorder, depression and anxiety, and many other less common conditions. There is advice on prescribing in children and adolescents, in substance misuse and in special patient groups. This world-renowned guide has been written in concise terms by an expert team of psychiatrists and specialist pharmacists. The Guidelines help with complex prescribing problems and include information on prescribing psychotropic medications outside their licensed indications as well as potential interactions with other medications and substances such as alcohol, tobacco and caffeine. In addition, each of the book’s 165 sections features a full reference list so that evidence on which guidance is based can be readily accessed. This important text: Is the world’s leading clinical resource for evidence-based prescribing in day-to-day clinical practice and for formulating prescribing policy Includes referenced information on topics such as transferring from one medication to another, prescribing psychotropic medications during pregnancy or breastfeeding, and treating patients with comorbid physical conditions, including impaired renal or hepatic function. Presents guidance on complex clinical problems that may not be encountered routinely Written for psychiatrists, neuropharmacologists, pharmacists and clinical psychologists as well as nurses and medical trainees, The Maudsley Prescribing Guidelines in Psychiatry are the established reference source for ensuring the safe and effective use of medications for patients presenting with mental health problems.

GPU Pro 4

Beginning Microsoft Kinect for Windows SDK 2.0

Raad 2012 Proceeding, 21th International Workshop on Robotics in Alpe-Adria-Danube Region (Naples, 10-13 September 2012)

Kinect Open Source Programming Secrets

Mastering openFrameworks: Creative Coding Demystified

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

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.

Under the motto “Healthcare Technology for Developing Countries” this book publishes many topics which are crucial for the health care systems in upcoming countries. The topics include Cyber Medical Systems Medical Instrumentation Nanomedicine and Drug Delivery Systems Public Health Entrepreneurship This proceedings volume offers the scientific results of the 6th International Conference on the Development of Biomedical Engineering in Vietnam, held in June 2016 at Ho Chi Minh City.

This book is written in a friendly, beginner’s guide style with plenty of step-by-step instructions with appropriate examples.This book is great for developers and testers who are new to TestNg and want to learn how to use TestNG for writing their application as well as functional tests. This book assumes that you have experience in Java and OOPs concepts and have worked with certain IDE.

Effective Robotics Programming with ROS

Service Orientation in Holonic and Multi Agent Manufacturing and Robotics

The Maudsley Prescribing Guidelines in Psychiatry

GPU Pro 360 Guide to 3D Engine Design

Beginning Kinect Programming with the Microsoft Kinect SDK

Microsoft HoloLens Developer’s Guide

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

Brave NUI World is the first practical guide for designing touch- and gesture-based user interfaces. Written by the team from Microsoft that developed the multi-touch, multi-user Surface® tabletop product, it introduces the reader to natural user interfaces (NUI). It gives readers the necessary tools and information to integrate touch and gesture practices into daily work, presenting scenarios, problem solving, metaphors, and techniques intended to avoid making mistakes. This book considers diverse user needs and context, real world successes and failures, and the future of NUI. It presents thirty scenarios, giving practitioners a multitude of considerations for making informed design decisions and helping to ensure that missteps are never made again. The book will be of value to game designers as well as practitioners, researchers, and students interested in learning about user experience design, user interface design, interaction design, software design, human computer interaction, human factors, information design, and information architecture. Provides easy-to-apply design guidance for the unique challenge of creating touch- and gesture-based user interfaces Considers diverse user needs and context, real world successes and failures, and a look into the future of NUI Presents thirty scenarios, giving practitioners a multitude of considerations for making informed design decisions and helping to ensure that missteps are never made again

Dr. Mike Dow is a best-selling author, psychotherapist, and relationship expert. So why is he writing a book about stroke? Well, what you probably don't know about Dr. Mike is that his younger brother, David, is a stroke survivor. What's more, David's stroke happened when he only 10 years old. This means most of Dr.

Mike’s teenage years were spent witnessing what his family was dealing with trying to find the best treatments for David. He struggled to know what to do to help his brother. He watched helplessly as his brother wrestled with depression, trying to find the motivation to recover on top of the challenges of adolescence. He mourned the loss of what could have been –and he was angry. How his family would have loved to sit down with top experts in stroke to find out what they should be doing and have their questions answered. Now Dr. Mike has the ability to do just that, and he’s doing it so that others in his family’s position don’t have the same struggle. Armed with questions from stroke survivors and their loved ones, Dr. Mike talks with the best clinicians across the country to get over 100 answers you need to know to maximize your recovery.

Research on assistive technologies is undergoing many developments in its effectiveness in helping those with varying impairments. New technologies are constantly being created, researched, and implemented for those who need these technological aides in daily life. Assistive Technologies for Physical and Cognitive Disabilities combines worldwide cases on people with physical and cognitive disabilities with the latest applications in assistive technologies. This reference work brings different researchers together under one title to discuss current findings, developments, and ongoing research in the area of rehabilitative technology. This reference book is of critical use to professionals, researchers, healthcare practitioners, caretakers, academicians, and students.

Start Here! Learn the Kinect API

Augmented Reality with Kinect

6th International Conference on the Development of Biomedical Engineering in Vietnam (BME6)

HoloLens Blueprints

OpenNI Cookbook

Kinect Hacks

Traditional classroom learning environments are quickly becoming a thing of the past as research continues to support the integration of learning outside of a structured school environment. Blended learning, in particular, offers the best of both worlds, combining classroom learning with mobile and web-based learning environments. Blended Learning: Concepts, Methodologies, Tools, and Applications explores emerging trends, case studies, and digital tools for hybrid learning in modern educational settings. Focusing on the latest technological innovations as well as effective pedagogical practice, this critical multi-volume set is a comprehensive resource for instructional designers, educators, administrators, and graduate-level students in the field of 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.

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.

This is a Cookbook with plenty of practical recipes enriched with explained code and relevant screenshots to ease your learning curve. If you are a beginner or a professional in NIUI and want to write serious applications or games, then this book is for you. Even OpenNI 1 and OpenNI 1.x programmers who want to move to new versions of OpenNI can use this book as a starting point. This book uses C++ as the primary language but there are some examples in C# and Java too, so you need to have about a basic working knowledge of C or C++ for most cases.

The Complete History of Sesame Street

Xbox 360, Kinect, and Xbox LIVE

Kinect in Motion – Audio and Visual Tracking by Example

Kinect for Windows SDK Programming Guide

Hacking the Kinect

Gamification: Concepts, Methodologies, Tools, and Applications

"This book offers the latest research within the field of service robotics, using a mixture of case studies, research, and future direction in this burgeoning field of technology"--

Wolfgang Engel's GPU Pro 360 Guide to 3D Engine Design gathers all the cutting-edge information from his previous seven GPU Pro volumes into a convenient single source anthology that covers the design of a 3D engine. This volume is complete with articles by leading programmers that focus on various aspects of 3D engine design such as quality and optimization as well as high-level architecture. GPU Pro 360 Guide to 3D Engine Design is comprised of ready-to-use ideas and efficient procedures that can help solve many computer graphics programming challenges that may arise. Key Features: Presents tips & tricks on real-time rendering of special effects and visualization data on common consumer software platforms such as PCs, video consoles, mobile devices Covers specific challenges involved in creating games on various platforms Explores the latest developments in rapidly evolving field of real-time rendering Takes practical approach that helps graphics programmers solve their daily challenges

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.

The book covers four research domains representing a trend for modern manufacturing control: Holonic and Multi-agent technologies for industrial systems; Intelligent Product and Product-driven Automation; Service Orientation of Enterprise's strategic and technical processes; and Distributed Intelligent Automation Systems. These evolution lines have in common concepts related to service orientation derived from the Service Oriented Architecture (SOA) paradigm. The service-oriented multi-agent systems approach discussed in the book is characterized by the use of a set of distributed autonomous and cooperative agents, embedded in smart components that use the SOA principles, being oriented by offer and request of services, in order to fulfil production systems and value chain goals. A new integrated vision combining emergent technologies is offered, to create control structures with distributed intelligence supporting the vertical and horizontal enterprise integration and running in truly distributed and global working environments. The service value creation model at enterprise level consists into using Service Component Architectures for business process applications, based on entities which handle services. In this componentization view, a service is a piece of software encapsulating the business/control logic or resource functionality of an entity that exhibits an individual competence and responds to a specific request to fulfil a local (product) or global (batch) objective. The service value creation model at enterprise level consists into using Service Component Architectures for business process applications, based on entities which handle services. In this componentization view, a service is a piece of software encapsulating the business/control logic or resource functionality of an entity that exhibits an individual competence and responds to a specific request to fulfil a local (product) or global (batch) objective.

Designing Natural User Interfaces for Touch and Gesture

Time-of-Flight Cameras and Microsoft Kinect™

Programming Interactivity

My Xbox

Microsoft Azure Essentials Azure Machine Learning

Tips & Tools for Motion and Pattern Detection

Kinect for Windows SDK Programming GuidePackt Publishing Ltd

Beginning Kinect Programming with the Microsoft Kinect SDK gets you up and running developing Kinect applications for your PC using Microsoft tools and the official SDK. You will have a working Kinect program by the end of the first chapter! The following chapters will open up the secrets of three-dimensional vision, skeleton tracking, audio through the Kinect, and more. Examples illustrate the concepts in the form of simple games that react to your body movements. The result is a fun read that helps you learn one of the hottest technologies out there today.

Beginning Kinect Programming with the Microsoft Kinect SDK also provides building blocks and ideas for mashing up the Kinect with other technologies to create art, interactive games, 3D models and enhanced office automation. You'll learn the fundamental code basic to almost all Kinect applications. You'll learn to integrate that code with other tools and manipulate data to create amazing Kinect applications. Beginning Kinect Programming with the Microsoft Kinect SDK is your gateway into the exciting world of three-dimensional, real-time computer interaction.

Helps you create a proper development environment for Kinect applications. Covers the basics of three-dimensional vision, skeleton tracking, gesture recognition, and audio Provides fun examples that keep you engaged and learning

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

Now an acclaimed documentary from Screen Media, the New York Times bestselling account of the story behind one of the most influential, durable, and beloved shows in the history of television: Sesame Street. "Davis tracks down every Sesame anecdote and every Sesame personality in his

book . . . Finally, we get to touch Big Bird's feathers." –The New York Times Book Review Sesame Street is the longest-running-and arguably most beloved- children's television program ever created. Today, it reaches some six million preschoolers weekly in the United States and countless

others in 140 countries around the world. Street Gang is the compelling, comical, and inspiring story of a media masterpiece and pop-culture landmark. Television reporter and columnist Michael Davis-with the complete participation of Joan Ganz Cooney, one of the show's founders-unveils

the idealistic personalities, decades of social and cultural change, stories of compassion and personal sacrifice, and miraculous efforts of writers, producers, directors, and puppeteers that together transformed an empty soundstage into the most recognizable block of real estate in

television history.

Assistive Technologies for Physical and Cognitive Disabilities

Motion and Depth Sensing for Natural User Interfaces

Arduino and Kinect Projects

The C# Programming Yellow Book

Breakthroughs in Research and Practice

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>

Program Kinect to do awesome things using a unique selection of open source software! The Kinect motion-sensing device for the Xbox 360 and Windows became the world's fastest-selling consumer electronics device when it was released (8 million sold in its first 60 days) and won prestigious awards, such as "Gaming

Gadget of the Year." Now Kinect Open Source Programming Secrets lets YOU harness the Kinect's powerful sensing capabilities for gaming, science, multimedia projects, and a mind-boggling array of other applications on platforms running Windows, Mac OS, and Linux. Dr. Andrew Davison, a user interface programming

expert, delivers exclusive coverage of how to program the Kinect sensor with the Java wrappers for OpenNI and NITE, which are APIs created by PrimeSense, the primary developers of the Kinect's technology. Beginning with the basics--depth imaging, 3D point clouds, skeletal tracking, and hand gestures--the book

examines many other topics, including Kinect gaming, FAAST-style gestures that aren't part of standard NITE, motion detection using OpenCV, how to create gesture-driven GUIs, accessing the Kinect's motor and accelerometer, and other tips and techniques. Inside: Free open source APIs to let you develop amazing Kinect

hacks for commercial or private use Full coverage of depth detection, camera, and infrared imaging point clouds; Kinect gaming; 3D programming; gesture-based GUIs, and more Online access to detailed code examples on the author's web site, plus bonus chapters on speech recognition, beamforming, and other exotica

Transform the ways you communicate, create, collaborate, and explore using Microsoft HoloLens About This Book Create immersive augmented reality apps for Microsoft HoloLens from scratch Leverage the powerful HoloLens sensors to interact with real-world motions and gestures and make your app life-like Explore the

powerful Unity 5 SDK along with the Windows Unified platform to get the most out of your HoloLens app Who This Book Is For If you are a developer who wants to create augmented reality apps for the Microsoft HoloLens platform, then this is the book for you. Coding experience with C# is assumed. What You Will Learn

Design an app for HoloLens that is feasible and attractive to use Add gestures and interact with them Create sounds in the app and place them in a 3D space Use voice generation and voice recognition to make your apps more lifelike Interact with the physical environment to place holograms on top of physical objects

Compare HoloLens with the other products and know how to use its strengths Use assets from third parties to enrich our app In Detail HoloLens, Microsoft's innovative augmented reality headset, overlaps holograms into a user's vision of their environment. Your ideas are closer to becoming real when you can create and

work with holograms in relation to the world around you. If you are dreaming beyond virtual worlds, beyond screens, beyond pixels, and want to take a big leap in the world of augmented reality, then this is the book you want. Starting off with brainstorming and the design process, you will take your first steps in

creating your application for HoloLens. You will learn to add gestures and write an app that responds to verbal commands before gradually moving on creating sounds in the app and placing them in a 3D space. You will then communicate between devices in the boundaries of the UWP model. Style and approach This book

takes a step-by-step, practical, tutorial-style approach where you will dive deep into HoloLens app development. You will work with the API and write your own complex scripts that would interact with the powerful HoloLens sensors and with realistic examples, you will be able to create immersive 3D apps for HoloLens.