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Prepare for Microsoft Exam MS-100–and help demonstrate your real-world mastery of skills and knowledge needed to effectively design, deploy, manage, and secure Microsoft 365 services. Designed for experienced IT professionals, Exam Ref focuses on critical thinking and decision-making acumen needed for success at the Microsoft Certified Expert level. Focus on the expertise measured by these objectives: Design and implement Microsoft 365 services Manage user identity and roles Manage access and authentication Plan Office 365 workloads and applications This Microsoft Exam Ref. Organizes its coverage by exam objectives Features strategic, what-if scenarios to challenge you Assumes you have working knowledge of Microsoft 365 workloads, networking, server administration, and IT fundamentals; and have administered at least one Microsoft 365 workload About the Exam Exam MS-100 focuses on knowledge needed to manage domains; plan a Microsoft 365 implementation; set up and manage Microsoft 365 tenancy and subscriptions; plan user and data migration; design identity strategy; plan and manage identity synchronization with Azure AD Connect; manage Azure AD identities and user roles; manage authentication; implement MFA; configure application access; implement access for external users of Microsoft 365 workloads; and plan Office 365 workload and applications deployment. About Microsoft Certification Passing this exam and Exam MS-101 Microsoft 365 Mobility and Security (and earning one Microsoft 365 workload administrator certification or the MCSE Productivity certification) fulfills your requirements for the Microsoft 365 Certified Enterprise Administrator Expert certification credential. This demonstrates your ability to evaluate, plan, migrate, deploy, and manage Microsoft 365 services.

Practical Guidance and Inspiration for Launching, Sustaining, or Improving Any Agile Enterprise Transformation Initiative As long-time competitive advantages disappear, astute executives and change agents know they must achieve true agile transformation. In Unlocking Agility, Jorgen Hesselberg reveals what works, what doesn't, and how to overcome the daunting obstacles. Distilling 10+ years of experience leading agile transformation in the enterprise, Hesselberg guides you on jumpstarting change, sustaining momentum, and executing superbly on customer commitments as you move forward. He helps you identify appropriate roles for consultants, optimize organizational structures, set realistic expectations, and measure against them. He shares first-hand accounts from pioneering transformation leaders at firms including Intel, Nokia, Salesforce.com, Spotify, and many more.
• Balance building the right thing, the right way, at the right speed
• Design a holistic transformation strategy using five dimensions of agility: Technology, Organizational Design, People, Leadership, and Culture
• Promote agile skills, knowledge, and abilities throughout your workforce
• Incorporate powerful leadership models, including Level 5, Teal, and Beyond Budgeting
• Leverage business-agility metrics to affect norms and change organizational culture
• Establish your Agile Working Group, the engine of agile transformation
• Define operating models and strategic roadmaps for unlocking agility, and track your progress You already know agile transformation is essential. Now, discover how to customize your strategy, execute on it in your environment, and achieve it.

Statistical Computation for Programmers, Scientists, Quants, Excel Users, and Other Professionals Using the open source R language, you can build powerful statistical models to answer many of your most challenging questions. R has traditionally been difficult for non-statisticians to learn, and most R books assume far too much knowledge to be of help. R for Everyone, Second Edition, is the solution. Drawing on his unsurpassed experience teaching new users, professional data scientist Jared P. Lander has written the perfect tutorial for anyone new to statistical programming and modeling. Organized to make learning easy and intuitive, this guide focuses on the 20 percent of R functionality you'll need to accomplish 80 percent of modern data tasks. Lander's self-contained chapters start with the absolute basics, offering extensive hands-on practice and sample code. You'll download and install R; navigate and use the R environment; master basic program control, data input, manipulation, and visualization; and walk through several essential tests. Then, building on this foundation, you'll construct several complex models, both linear and nonlinear, and use some data mining techniques. After all this you'll make your own code reproducible with LaTeX, RMarkdown, and Shiny. By the time you're done, you won't just know how to write R programs, you'll be ready to tackle the statistical problems you care about most. Coverage includes Explore R, RStudio, and R packages Use R for math: variable types, vectors, calling functions, and more Exploit data structures, including data.frames, matrices, and lists Read many different types of data Create attractive, intuitive statistical graphics Write user-defined functions Control program flow with if, ifelse, and complex checks Improve program efficiency with group manipulations Combine and reshape multiple datasets Manipulate strings using R's facilities and regular expressions Create normal, binomial, and Poisson probability distributions Build linear, generalized linear, and nonlinear models Program basic statistics: mean, standard deviation, and t-tests Train machine learning models Assess the quality of models and variable selection Prevent overfitting and perform variable selection, using the Elastic Net and Bayesian methods Analyze univariate and multivariate time series data Group data via K-means and hierarchical clustering Prepare reports, slideshows, and web pages with knit Display interactive data with RMarkdown and htm widgets Implement dashboards with Shiny Build reusable R packages with devtools and Rcpp Register your product at informt.com/register for convenient access to downloads, updates, and/or corrections as they become available.

The Practical, Comprehensive Guide to Applying Cybersecurity Best Practices and Standards in Real Environments In Effective Cybersecurity, William Stallings introduces the technology, operational procedures, and management practices needed for successful cybersecurity. Stallings makes extensive use of standards and best practices documents that are often used to guide or mandate cybersecurity implementation. Going beyond these, he offers in-depth tutorials on the "how" of implementation, integrated into a unified framework and realistic plan of action. Each chapter contains a clear technical overview, as well as a detailed discussion of action items and appropriate policies. Stallings offers many pedagogical features designed to help readers master the material: clear learning objectives, keyword lists, review questions, and QR codes linking to relevant standards documents and web resources. Effective Cybersecurity aligns with the comprehensive Information Security Forum document "The Standard of Good Practice for Information Security," extending ISF's work with extensive insights from ISO, NIST, COBIT, other official standards and guidelines, and modern professional, academic, and industry literature.
• Understand the cybersecurity discipline and the role of standards and best practices
• Define security governance, assess risks, and manage strategy and tactics
• Safeguard information and privacy, and ensure GDPR compliance
• Harden systems across the system development life cycle (SDLC)
• Protect servers, virtualized systems, and storage
• Secure networks and electronic communications, from email to VoIP
• Apply the most appropriate methods for user authentication
• Mitigate security risks in supply chains and cloud environments This knowledge is indispensable to every cybersecurity professional. Stallings presents it systematically and coherently, making it practical and actionable.

Pandas for Everyone

Pragmatic AI

Jumpstart Your Linux Programming Skills

your journey to mastery, 20th Anniversary Edition

Large-Scale Scrum

Introduction to Game Design, Prototyping, and Development

Exploring the Foundational Principles Behind Good Game Design

Linux for Developers shows you how to start writing great code for Linux, whether you're a Linux user with little or no coding experience, or an experienced Windows programmer. Leading IT trainer/author William ‘Bo’ Rothwell begins with a clear and up-to-date review of modern open source software, including the licensing arrangements and tradeoffs all developers need to understand. He presents essential skills for both Linux command line and GUI environments, introducing to editors and other tools for efficient coding. Building on this knowledge, Rothwell introduces scripting tools such as Bash, Python, and Perl, as well as traditional object-oriented programming languages such as Java, C++, and C. Finally, he presents a full section on the powerful Git version control system, teaching skills you can use in Linux and many other environments. Access Linux systems, use GUIs, and work at the command line Learn how Linux organizes files and navigate its filesystems Use basic developer commands such as gzip and grep Edit programs with vi and vim, and explore alternative editors Perform basic sysadmin tasks that developers often need to handle Compare Linux languages to choose the best one for each task Write Bash scripts that interact with users or other shell features Program with Python and Perl: flow control, variables, and more Understand Linux features related to building C, C++, and Java programs Stay on top of com projects with Git revision control Work in Git: staging, committing, branches, diffs, merges, and patches Manage local and remote Git repositories This guide's modular coverage helps you quickly access whatever information you need right now.

Master the Principles and Vocabulary of Game Design Why aren't videogames getting better? Why does it feel like we're playing the same games, over and over again? Why aren't game helping us transform our lives, like great music, books, and movies do? The problem is language. We still don't know how to talk about game design. We can't share our visions. We forget what works (and doesn't). We don't learn from history. It's too hard to improve. The breakthrough starts here. Game Design Vocabulary gives us the complete game design framework we desperately need—whether we create games, study them, review them, or build businesses on them. Craft amazing experiences. Anna Anthropy and Naomi Clark share foundational principles, examples, and exercises that help you create great player experiences...completion intuition with design discipline...and craft games that succeed brilliantly on every level. Liberate yourself from stale clichés and genre tropes. Great stories: go way beyond cutscenes and text dumps Control the crucial relationships between game “verbs” and “objects” Wield the full power of development, conflict, climax, and resolution Shape scenes, pacing, and player choices Deepen context via art, animation, music, and sound Help players discover, understand, engage, and “talk back” to you Effectively use resistance and difficulty: the “push and pull” of games Design holistically: integrate visuals, audio, and controls Communicate a design vision everyone can understand

Effective SQL brings together the hands-on solutions and practical insights you need to solve a wide range of complex problems with SQL, and to design databases that make it far easier to manage data in the future. Leveraging the proven format of the best-selling Effective series, it focuses on providing clear, practical explanations, expert tips, and plenty of realistic examples -- all in full color. Drawing on their immense experience as consultants and instructors, three world-class database experts identify specific challenges, and distill each solution into five pages or less. Throughout, they provide well-annotated SQL code designed for all leading platforms, as well as code for specific implementations ranging from SQL Server to Oracle and MySQL, wherever these vary or permit you to achieve your goal more efficiently. Going beyond mere syntax, the authors also show how to avoid poor database design that makes it difficult to write effective SQL, how to improve suboptimal designs, and how to work around designs you can't change. You'll also find detailed sections on filtering and finding data, aggregation, subqueries, and metadata, as well as specific solutions for everything from listing products to scheduling events and defining data hierarchies. Simply put, if you already know the basics of SQL, Effective SQL will help you become a world-class SQL problem-solver.

"This is an incredibly wide and useful book. The authors have considerable real-world experience in delivering quality systems that matter, and their expertise shines through in these pages. Here you will learn what technical debt is, what it is not, how to manage it, and how to pay it down in responsible ways. This is a book I wish I had when I was just beginning my career. The authors present a myriad of case studies, born from years of experience, and offer a multitude of action insights for how to apply it to your project." –Grady Boock, IBM Fellow Master Best Practices for Managing Technical Debt to Promote Software Quality and Productivity As software systems mature, earlier design or code decisions made in the context of budget or schedule constraints increasingly impede evolution and innovation. This phenomenon is called technical debt, and practical solutions exist. In Managing Technical Debt, three leading experts introduce integrated, empiricly developed principles and practices that any software professional can use to gain control of technical debt in any software system. Using real-life examples, the authors explain the forms of technical debt that afflict software-intensive systems, their root causes, and their impacts. They introduce proven approaches for identifying and assessing specific sources of technical debt, limiting new debt, and “paying off” debt over time. They describe how to establish managing technical debt as a core software engineering practice in your organization. Discover how technical debt damages manageability, quality, productivity, and morale—and what you can do about it Clarify root causes of debt, including the linked roles of business goals, source code, architecture, testing, and infrastructure Identify technical debt items, and analyze their costs so you can prioritize action Choose the right solution for each technical debt item: eliminate, reduce, or mitigate Integrate software engineering practices that minimize new debt Managing Technical Debt will be a valuable resource for every software professional who wants to accelerate innovation in existing systems, or build new systems that will be easier to maintain and evolve.

3D User Interfaces

Part I

Exam Ref MS-100 Microsoft 365 Identity and Services

Developing and Optimizing Data Science Workflows and Applications

OpenACC for Programmers

Software Ownership Transfer

Value-Driven Digital Transformation

"One of the most significant books in my life." –Obie Fernandez, Author, The Rails Way "Twenty years ago, the first edition of The Pragmatic Programmer completely changed the trajectory of my career. This new edition could do the same for yours." –Mike Cohn, Author of Succeeding with Agile, Agile Estimating and Planning, and User Stories Applied " . . . filled with practical advice, both technical and professional, that will serve you and your projects well for years to come." –Andrea Goulet, CEO, Corbybytes, Founder, LegacyCode.Rocks " . . . lightning does strike twice, and this book is proof." –VM (Vicky) Brasseur, Director of Open Source Strategy, Juniper Networks The Pragmatic Programmer is one of those rare tech books you'll read, re-read, and read again over the years. Whether you're new to the field or an experienced practitioner, you'll come away with fresh insights each and every time. Dave Thomas and Andy Hunt wrote the first edition of this influential book in 1999 to help their clients create better software and rediscover the joy of coding. These lessons have helped a generation of programmers examine the very essence of software development, independent of any particular language, framework, or methodology, and the Pragmatic philosophy has spawned hundreds of books, screencasts, and audio books, as well as thousands of careers and success stories. Now, twenty years later, this new edition re-examines what it means to be a modern programmer. Topics range from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you'll learn how to: Fight software rot Learn continuously Avoid the trap of duplicating knowledge Write flexible, dynamic, and adaptable code Harness the power of basic tools Avoid programming by coincidence Learn real requirements Solve the underlying problems of concurrent code Guard against security vulnerabilities Build teams of Pragmatic Programmers Take responsibility for your work and career Test ruthlessly and effectively, including property-based testing Implement the Pragmatic Starter Kit Delight your users Written as a series of self-contained sections and filled with classic and fresh anecdotes, thoughtful examples, and interesting analogies, The Pragmatic Programmer illustrates the best approaches and major pitfalls of many different aspects of software development. Whether you're a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you'll quickly see improvements in personal productivity, accuracy, and job satisfaction. You'll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You'll become a Pragmatic Programmer. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

The Complete, Up-to-Date Guide to Building AR and VR Games Google's new ARCore and Daydream VR platforms enable you to deliver advanced augmented and virtual reality games and apps on a wide spectrum of modern Android devices. Now for the first time, there's a comprehensive deep dive into both ARCore and Daydream for every Android developer and designer. Multi-award-winning AR/VR developer Sam Keene takes a hands-on approach, leading you through all aspects of the ARCore and Daydream frameworks and SDKs, with step-by-step tutorials and advice for building pro-quality AR/VR games and apps. Keene presents his material as a cookbook of recipes to get you up and running with VR/AR development as fast and as painlessly as possible. The recipes in most chapters start by assembling the essential building blocks, which are pieced together to create something larger. You are then free to take these building blocks and turn them into your own creation. Keene also provides an extensive library of downloadable, up-to-the-minute ARCore and Daydream code to jumpstart your project. In addition, he takes you through crucial UX design principles and best practices learned from building large scale VR and AR apps at Google. Google Daydream VR Cookbook shows you how to: Install and explore the Google Daydream development tools Master basic and advanced Daydream Controller techniques Implement intuitive VR user interfaces Integrate audio, video, and realistic physics into your VR games Install and explore the ARCore SDK and development tools Learn how to build AR apps that solve real user needs Master AR game development using ARCore Optimize VR and AR game performance Whether you are a software developer, UX professional, visual designer, beginner, or you come from a different design field, this book is a great practical introduction to VR and AR.

The Complete, Up-To-Date Great 3D User Interfaces for Any Application 3D interaction is suddenly everywhere. But simply using 3D input or displays isn't enough: 3D interfaces must be carefully designed for optimal user experience. 3D User Interfaces: Theory and Practice, Second Edition is today's most comprehensive primary reference to building state-of-the-art 3D user interfaces and interactions. Five pioneering researchers and practitioners cover the full spectrum of emerging applications, techniques, and best practices. The authors combine theoretical foundations, analysis of leading devices, and empirically validated design guidelines. This edition adds two new chapters on human factors and general human-computer interaction—indispensable foundational knowledge for building any 3D user interfaces. It also demonstrates advanced concepts at work through two running case studies: a first-person VR game and a mobile augmented reality application. Coverage includes 3D user interfaces: evolution, elements, and roadmaps Key applications: virtual and augmented reality (VR, AR), mobile/wearable devices What 3D UI designers should know about human sensory systems and cognition ergonomics How proven human-computer interaction techniques apply to 3D UIs 3D UI output hardware for visual, auditory, and haptic/ tactile systems Obtaining 3D position, orientation, and motion data for users in physical space 3D object selection and manipulation Navigation and wayfinding techniques for moving through virtual and physical spaces Changing application state with system control techniques, issuing commands, and enabling other forms of user input Strategies for choosing, developing, and evaluating 3D user interfaces Utilizing 2D, “magic,” “natural,” multimodal, and two-handed interaction The future of 3D user interfaces: open research problems and emerging technologies Praise for this book, Python Without Fear “This is really a great book. I wish I'd had it when I was learning Python.” –John M. Wargo, author of Apache Cordova 4 Programming Praise for the previous book in the series, C++ Without Fear “I'm in love with your C++ Without Fear book. It keeps me awake for hours during the night. Thanks to you, I got most of the idea in just a few hours.” –Laura Viral, graduate physics student at CERN and Istanbul, Turkey “It's hard to tell where I began and ended with your book. I felt like I woke up and literally knew how to write C++ code. I can't overstate the confidence you gave me.” –Danny Grady, senior programmer/analyst at a Fortune 500 Company Whether you're new to programming or moving from another language, Python Without Fear will quickly make you productive! Brian Overland's unique approach to Python includes: Taking you by the hand while teaching topics from the very basics to intermediate and advanced features of Python Teaching by examples that are explained line by line Heavy emphasis on examples that are fun and useful, including games, graphics, database Apache Cordova 3 Programming

Android Database Best Practices

Discovering Modern C++

R for Everyone

Designing and Building Effective Analytics at Scale

Effective Cybersecurity

Python Without Fear

Foundational Hands-On Skills for Succeeding with Real Data Science Projects This pragmatic book introduces both machine learning and data science, bridging gaps between data scientist and engineer, and helping you bring these techniques into production. It helps ensure that your efforts actually solve your problem, and offers unique coverage of real-world optimization in production settings. –From the Foreword by Paul Dix, series editor Machine

Learning in Production is a crash course in data science and machine learning for people who need to solve real-world problems in production environments. Written for technically competent “accidental data scientists” with more curiosity and ambition than formal training, this complete and rigorous introduction stresses practice, not theory. Building on agile principles, Andrew and Adam Kellerer show how to quickly deliver significant value in production, resisting overhyped tools and unnecessary complexity. Drawing on their extensive experience, they help you ask useful questions and then execute production projects from start to finish. The authors show just how much information you can glean with straightforward queries, aggregations, and visualizations, and they teach indispensable error analysis methods to avoid costly mistakes. They turn to workhorse machine learning techniques such as linear regression, classification, clustering, and Bayesian inference, helping you choose the right algorithm for each production problem. Their concluding section on hardware, infrastructure, and distributed systems offers unique and invaluable guidance on optimization in production environments. Andrew and Adam always focus on what matters in production: solving the problems that offer the highest return on investment, using the simplest, lowest-risk approach that will maximize efficiency in production projects. Learn from practical Python code examples and visualizations that bring essential algorithmic concepts to life Start with simple heuristics and improve them as your data pipeline matures Avoid bad conclusions by implementing foundational error analysis techniques Communicate your results with basic data visualization techniques Master basic machine learning techniques, starting with linear regression and random forests Perform classification and clustering on both vector and graph data Learn the basics of graphical models and Bayesian inference Understand correlation and causation in machine learning models Explore overfitting, model capacity, and other advanced machine learning techniques Make informed architectural decisions about storage, data transfer, computation, and communication Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

In Large-Scale Scrum , Craig Larman and Bas Vodde offer the most direct, concise, actionable guide to reaping the full benefits of agile in distributed, global enterprises. Larman and Vodde have distilled their immense experience helping geographically distributed development organizations move to agile. Going beyond their previous books, they offer today's fastest, most focused guidance: “brass tacks” advice and field-proven best practices for achieving value fast, and achieving even more value as you move forward. Targeted to enterprise project participants and stakeholders, Large-Scale Scrum offers straight-to-the-point insights for scaling Scrum across the entire project lifecycle, from sprint planning to retrospective. Larman and Vodde help you: Implement proven Scrum frameworks for large-scale developments Scale requirements, planning, and product management Scale design and architecture Effectively manage defects and interruptions Integrate Scrum into multisite and offshore projects Choose the right adoption strategies and organizational designs This will be the go-to resource for enterprise stakeholders at all levels: everyone who wants to maximize the value of Scrum in large, complex projects.

The Comprehensive, Expert Guide to C# Language Programming “This book has been a classic for years, and remains one of the most venerable and trusted titles in the world of C# content, and probably far beyond . . . Mark is super smart, insists on understanding everything to the core, and has phenomenal insight into how things affect real developers. . . . He goes right to the essence and communicates with great integrity—no sugarcoating—and has a keen eye for practical value and real-world problems.” –Mads Torgersen, C# Program Manager, Microsoft’s Essential C# 7.0 is a well-organized, no-fluff guide to C# 7.0 for programmers at all levels of experience. Reflecting the most important C# features from 3.0 through 7.0 and including modern programming patterns, it will help you write code that's simple, powerful, robust, secure, and maintainable. Author Mark Michels is a world-class C# expert: a long-time Microsoft MVP and Regional Director who also has served on Microsoft's C# design review team. He presents a comprehensive tutorial and reference for the entire language, including expert coverage of key C# 7.0 enhancements, C# 7.0's use with .NET Core/.NET Standard, and cross-platform compilation. He illustrates key C# constructs with succinct examples, and presents best-practice coding guidelines. To help you maintain existing code, separate indexes provide version-specific answers for C# 5.0, 6.0, and 7.0, and visual icons show when each language innovation was introduced. Make the most of C# 7.0 enhancements, including tuples, deconstructors, pattern matching, local functions, and ref returns Write more robust code with C# object-oriented constructs Implement reliable, effective exception handling Reduce code complexity with generics, delegates, lambda expressions, and events Leverage advanced dynamic and declarative programming techniques Query diverse data collections using LINQ with query expressions Create custom collections that operate against business objects Access .NET collections via collection interfaces and standard query operators Master multithreading and synchronization, including the async/await paradigm Optimize performance and interoperability with P/Invoke and unsafe code Run your code on Linux or macOS with C# 7.0 cross-platform compilation Includes C# 7.1, 7.2, and 7.3 language enhancements This guide offers you a complete foundation for successful development with modern versions of the C# language in any project or environment.

The Practical, Proven Guide to Creating and Empowering High-Performing Agile Teams A leader is like a farmer, who doesn't grow crops by pulling them but instead creates the perfect environment for the crops to grow and thrive. If you lead in organizations that have adopted agile methods, you know it's crucial to create the right environment for your agile teams. Traditional tools such as Gantt charts, detailed plans, and internal KPIs aren't adequate for complex and fast-changing markets, but merely trusting employees and teams to self-manage is insufficient as well. In Agile Leadership Toolkit, longtime agile leader Peter Koning provides a practical and invaluable steering wheel for agile leaders and their teams. Drawing on his extensive experience helping leaders drive more value from agile, Koning offers a comprehensive toolkit for continuously improving your environment, including structures, metrics, meeting techniques, and governance for creating thriving teams that build disruptive products and services. Koning thoughtfully explains how to lead agile teams at large scale and how team members fit into both the team and the wider organization. Architect environments that help teams learn, grow, and flourish for the long term Get timely feedback everyone can use to improve Co-create goals focused on the customer, not the internal organization Help teams brainstorm and visualize the value of their work to the customer Facilitate team ownership and accelerate team learning Support culture change, and design healthier team habits Make bigger changes faster This actionable guide is for leaders at all levels—whether you're supervising your first agile team, responsible for multiple teams, or lead the entire company. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

The Pragmatic Programmer

Agile Leadership Toolkit

Learning to Thrive with Self-Managing Teams

Practical Data Science with Hadoop and Spark

Unreal Engine 4 for Design Visualization

Deep Learning Illustrated

A Visual, Interactive Guide to Artificial Intelligence

The Complete Guide to OpenACC for Machine Parallel Programming Scientists and technical professionals can use OpenACC to leverage the immense power of modern GPUs without the complexity traditionally associated with programming them. OpenACC™ for Programmers is one of the first comprehensive and practical overviews of OpenACC for massively parallel programming. This book integrates contributions from 19 leading parallel-programming experts from academia, public research organizations, and industry. The authors and editors explain each key concept behind OpenACC, demonstrate how to use essential OpenACC development tools, and thoroughly explore each OpenACC feature set. Throughout, you'll find realistic examples, hands-on exercises, and case studies showcasing the efficient use of OpenACC language constructs. You'll discover how OpenACC's language constructs can be translated to maximize application performance, and how its standard interface can target multiple platforms via widely used programming languages. Each chapter builds on what you've already learned, helping you build practical mastery one step at a time, whether you're a GPU programmer, scientist, engineer, or student. All example code and exercise solutions are available for download at GitHub. Discover how OpenACC makes scalable parallel programming easier and more practical Walk through the OpenACC spec and learn how OpenACC directive syntax is structured Get productive with OpenACC code editors, compilers, debuggers, and performance analysis tools Build your first real-world OpenACC programs Exploit loop-level parallelism in OpenACC, understand the levels of parallelism available, and maximize accuracy or performance Learn how OpenACC programs are compiled Master OpenACC programming best practices Overcome common performance, portability, and interoperability challenges Efficiently distribute tasks across multiple processors Register your product at informt.com/register for convenient access to downloads, updates, and/or corrections as they become available.

Battle-Tested Strategies for Storing, Managing, and Sharing Android Data “Android” Database Best Practices goes well beyond API documentation to offer strategic advice about how to handle data in an Android application and the tools needed to develop productively. This arms the developer with a trove of solutions to nearly any problem an application may face involving data. Mastering the concepts in this book are therefore essential for any developer who wants to create professional Android applications.” –Greg Milette, Android developer, Gradson Technologies, Inc. This is the first guide to focus on one of the most critical aspects of Android development: how to efficiently store, retrieve, manage, and share information from your app's internal database. Through real-world code examples, which you can use in your own apps, you'll learn how to take full advantage of SQLite and the database-related classes on Android. A part of Addison-Wesley's Android™ Deep Dive series for experienced Android developers, Android Database Best Practices draws on Adam Stachurski's extensive experience leading cutting-edge app projects. Stroud reviews the core database theory and SQL techniques you need to efficiently build, manipulate, and read SQLite databases. He explores SQLite in detail, illuminates Android's APIs for database interaction, and shares modern best practices for working with databases in the Android environment. Through a complete case study, you'll learn how to design your data access layer to simplify all facets of data management and avoid unwanted technical debt. You'll also find detailed solutions for common challenges in building data-enabled Android apps, including issues associated with threading, remote data access, and showing data on users. Extensive, up-to-date sample code is available for download at github.com/android-database-best-practices/device-database. You will Discover how SQLite database differs from other relational databases Use SQL DDL to add structure to a database, and use DML to manipulate data Define and work with SQLite data types Persist highly structured data for fast, efficient access Master Android classes for create, read, update, and delete (CRUD) operations and database queries Share data within or between apps via content providers Master efficient UI strategies for displaying data, while accounting for threading issues Use Android's Intents API to pass data between activities when starting a new activity or service Achieve two-way communication between apps and remote web APIs Manage the complexities of app-to-server communication, and avoid common problems Use Android's new Data Binding API to write less code and improve performance

Master the Unity Game Engine to Design and Develop Games for Web, Mobile, Windows, macOS, and More! If you want to design and develop games, there's no substitute for strong hands-on experience with modern techniques and tools—and that is exactly what this book provides. The first edition was frequently the top-selling game design book on Amazon, with more than 70% of the reviews being 5 stars. In a testament to the iterative process of design, this new edition includes hundreds of improvements throughout the text, all designed to make the book easier to understand and even more useful. This book was written with Unity 2017; the book,prototools.net website will cover changes for later versions of the software. Award-winning game designer and professor Jeremy Gibson Bond has spent more than a decade teaching game design and building great games. In that time, his most successful students have been those who combine knowledge of three critical disciplines: game design theory, rapid iterative prototyping, and practical programming. In this practical, step-by-step guide, you'll learn the iterative process of design. The iterative process of design • Methods and tools to manage game projects and small teams • Processes to make prototyping and feedback easier Part II: Digital Prototyping Unity and C# • Chapters that guide you through learning C# the right way Instruction that takes you from a prior programming knowledge through object-oriented programming • Deep exploration of Unity, today's most popular game engine on both macOS and Windows • Methods for understanding and debugging code issues you encounter Part III: Game Protocol Examples and Tutorials • In-depth tutorials for seven different game prototypes, including a simple action game, a space shooter, a solitary card game, a word game, and a top-down adventure • Instructions to compile these games for PC, web, or any of the dozens of other release platforms supported by Unity • Improved structure and layout that makes the steps of each tutorial easier to follow • A completely new Dungeon Deliver prototype not present in the first edition

The Complete Guide to Data Science with Hadoop—For Technical Professionals, Businesspeople, and Students Demand is soaring for professionals who can solve real data science problems with Hadoop and Spark. Practical Data Science with Hadoop® and Spark is your complete guide to doing just that. Drawing on immense experience with Hadoop and big data, three leading experts bring together everything you need: high-level concepts, deep-dive techniques, real-world use cases, practical applications, and hands-on tutorials. The authors introduce the essentials of data science and the modern Hadoop ecosystem, explaining how Hadoop and Spark have evolved into an effective platform for solving data science problems at scale. In addition to comprehensive application coverage, the authors also provide useful guidance on the important steps of data ingestion, data munging, and visualization. Once the groundwork is in place, the authors focus on specific applications, including machine learning, predictive modeling for sentiment analysis, clustering for document analysis, anomaly detection, and natural language processing (NLP). This guide provides a strong technical foundation for those who want to do practical data science, and also presents business-driven guidance on how to apply Hadoop and Spark to optimize ROI of data science initiatives. Learn What data science is, how it has evolved, and how to plan a data science career How data volume, variety, and velocity shape data science use cases Hadoop and its ecosystem, including HDFS, MapReduce, YARN, and Spark Data ingestion with Hive and Spark Data quality, preprocessing, preparation, and modeling Visualization: surfacing insights from huge data sets Machine learning: classification, regression, clustering, and anomaly detection Algorithms and Hadoop tools for predictive modeling Cluster analysis and similarity functions Large-scale anomaly detection NLP: applying data science to human language

The Maltreatment of Children

An Insider's Guide to Agile Enterprise Transformation

Reducing Friction in Software Development

Machine Learning in Production

Developing Stunning Interactive Visualizations, Animations, and Renderings

Managing Spark, YARN, and MapReduce

A Game Design Vocabulary

"The authors' clear visual style provides a comprehensive look at what's currently possible with artificial neural networks as well as a glimpse of the magic that's to come." –Tim Urban, author of Wait But Why Fully Practical, Insightful Guide to Modern Deep Learning Deep learning is transforming software, facilitating powerful new artificial intelligence capabilities, and driving unprecedented algorithm performance. Deep Learning Illustrated is uniquely intuitive and offers a complete introduction to the discipline's techniques. Packed with full-color figures and easy-to-follow code, it sweeps away the complexity of building deep learning models, making the subject approachable and fun to learn. World-class instructor and practitioner Jon Krohn—with visionary content from Grant Beylvedel and beautiful illustrations by Aglae Bassens—presents straightforward analogies to explain what deep learning is, why it has become so popular, and how it relates to other machine learning approaches. Krohn has created a practical reference and tutorial for developers, data scientists, researchers, analysts, and students who want to start applying it. He illuminates theory with hands-on Python code in accompanying Jupyter notebooks. To help you progress quickly, he focuses on the versatile deep learning library Keras to nimbly construct efficient TensorFlow models; PyTorch, the leading alternative library, is also covered. You'll gain a pragmatic understanding of all major deep learning approaches and their uses in applications ranging from machine vision and natural language processing to image generation and game-playing algorithms. Discover what makes deep learning systems unique, and the implications for practitioners Explore new tools that make deep learning models easier to build, use, and improve Master essential theory: artificial neurons, training, optimization, convolutional nets, recurrent nets, generative adversarial networks (GANs), deep reinforcement learning, and more Walk through building interactive deep learning applications, and move forward with your own artificial intelligence projects Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

The “Bible” for Rails Development: Fully Updated for Rails 5 “When I read The Rails Way for the first time, I felt like I truly understood Rails for the first time.” —Steve Klabinik, Rails contributor and mentor The Rails™ 5 Way is the comprehensive, authoritative reference guide for professionals delivering production-quality code using modern Ruby on Rails. Obie Fernandez illuminates the entire Rails 5 API, its most powerful idioms, design approaches, and libraries. He presents new and updated content on Action Cable, RSpec 3.4, Turbolenks 5.0, the Attributes API, and many other enhancements, both major and subtle. Through detailed code examples, you'll dive deep into Ruby on Rails, discover why it's designed as it is, and learn to make it do exactly what you want. Proven in thousands of production systems, the knowledge in this book will maximize your productivity and help you build more successful solutions. Build powerful, scalable, REST-compliant back-end services Program complex program flows using action Controller Represent models, relationships, and operations in Active Record, and apply advanced Active Record techniques Smoothly evolve database schema via Migrations Craft front-ends with ActionView and the Asset Pipeline Optimize performance and scalability with caching and Turbolenks 5.0 Improve your productivity using Haml HTML templating Secure your systems against attacks like SQL Injection, XSS, and XSRF Integrate email using Action Mailer Enable real-time, websocket-based browser behavior with Action Cable Improve responsiveness with background processing Build “API-only” back-end projects that speak JSON Leverage enhancements to Active Job, serialization, and Ajax support EDGE: The Agile Operating Model That Will Help You Successfully Execute Your Digital Transformation “[The authors’] passion for technology allows them to recognize that for most enterprises in the 21st century, technology is THE business. This is what really separates the EDGE approach. It is a comprehensive operating model with technology at its core.” —From the Foreword by Heidi Musser, Executive Vice President and Principal Consultant, Leading Agile; retired, Vice President and CIO, USAA Maximum innovation happens at the edge of chaos: the messy, risky, and uncertain threshold between randomness and structure. Operating there is uncomfortable but it's where organizations “invent the future.” EDGE is a set of fast, iterative, adaptive, lightweight, and value-driven tools to achieve digital transformation, and EDGE: Value-Driven Digital Transformation is your guide to using this operating model for innovation. Jim Highsmith is one of the world's leading agile pioneers and a coauthor of the Agile Manifesto. He, Linda Luu, and David Robinson know from their vast in-the-trenches experience that sustainable digital transformation requires far more than adopting isolated agile practices or conventional portfolio management. This hard, indispensable work involves changing culture and mindset, and going beyond transforming the IT department. EDGE embraces an adaptive mindset in the face of market uncertainty, a visible, value-centered portfolio approach that encourages continual value linkages from vision to detailed initiatives, incremental funding that shifts as strategies evolve, collaborative decision-making, and better risk mitigation. This guide shows leaders how to use the breakthrough EDGE approach to go beyond incremental improvement in a world of exponential opportunities. Build an organization that adapts fast enough to thrive Clear away unnecessary governance processes, obsolete “command and control” leadership approaches, and slow budgeting/planning cycles Improve collaboration when major, fast-paced responses are necessary Continually optimize investment allocation and monitoring based on your vision and goals Register your product for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Covers PhoneGap 3.X Written for experienced mobile developers, **Apache Cordova 3 Programming** is a complete introduction to Apache Cordova 3 and Adobe PhoneGap 3. It describes what makes Cordova important and shows how to install and use the tools, the new Cordova CLI, the native SDKs, and more. If you're brand new to Cordova, this book will be just what you need to get started. If you're familiar with an older version of Cordova, this book will show you in detail how to use all of the new stuff that's in Cordova 3 plus stuff that has been around for a while (like the Cordova core APIs). After walking you through the process of downloading and setting up the framework, mobile expert John M. Wargo shows you how to install and use the command line tools to manage the Cordova application lifecycle and how to set up and use development environments for several of the more popular Cordova supported mobile device platforms. Of special interest to new developers are the chapters on the anatomy of a Cordova application, as well as the mechanics of Cordova development. Wargo also covers the development process and the tools you can use to test and debug your Cordova applications, and provides a complete chapter that introduces the Cordova APIs, in addition to a chapter that shows you how to create your own plugins. Filled with lots of examples and code, the book includes includes complete coverage of Android, iOS, BlackBerry 1.0 and Windows Phone development for Cordova. Topics covered include How to install and use the Cordova CLI and associated tools How to configure the Android developer tools (ADT) to run, test, and debug your Cordova applications for Android How to use Xcode—Apple's development tool for iOS development—to run, test, and debug Cordova applications for iOS devices How to use the Safari browser to debug Cordova applications on iOS devices How to use the Microsoft development tools to run, test, and debug Cordova applications for Windows Phone 8 How to set up and use the PhoneGap Build service to package Cordova applications and share those applications with others How to create Cordova plugins for both Android and iOS The author maintains a web site for the book at cordovaprogramming.com where updates, errata, and the source code for the book are available. Algorithms

61 Specific Ways to Write Better SQL

Concepts and Strategies

More with LeSS

Unlocking Agility

Essential C# 7.0

This book is Part I of the fourth edition of Robert Sedgewick and Kevin Wayne's Algorithms , the leading textbook on algorithms today, widely used in colleges and universities worldwide. Part I contains Chapters 1 through 3 of the book. The fourth edition of Algorithms surveys the most important computer algorithms currently in use and provides a full treatment of data structures and algorithms for sorting, searching, graph processing, and string processing -- including fifty algorithms every programmer should know. In this edition, new Java implementations are written in an accessible modular programming style, where all of the code is exposed to the reader and ready to use. The algorithms in this book represent a body of knowledge developed over the last 50 years that has become indispensable, not just for professional programmers and computer science students but for any student with interests in science, mathematics, and engineering, not to mention students who use computation in the liberal arts. The companion web site, algs4.cs.princeton.edu contains An online synopsis Full Java implementations Test data Exercises and answers Dynamic Visualizations Lecture slides Programming assignments with checklists Links to related material The MOOC related to this book is accessible via the "Online Course" link at algs4.cs.princeton.edu. The course offers more than 100 video lecture segments that are integrated with the text, extensive online assessments, and the large-scale discussion forums that have proven so valuable. Offered each fall and spring, this course regularly attracts tens of thousands of registrants. Robert Sedgewick and Kevin Wayne are developing a modern approach to disseminating knowledge that fully embraces technology, enabling people all around the world to discover new ways of learning and teaching. By integrating their textbook, online content, and MOOC, all at the state of the art, they have built a unique resource that greatly expands the breadth and depth of the educational experience. The Official, Full-Color Guide to Developing Interactive Visualizations, Animations, and Renderings with Unreal Engine 4 Unreal Engine 4 (UE4) was created to develop video games, but it has gone viral among architecture, science, engineering, and medical visualization communities. UE4's stunning visual quality, cutting-edge toolset, unbeatable price (free!), and unprecedented ease of use redefines the state of the art and has turned the gaming, film, and visualization industries on their heads. Unreal Engine 4 for Design Visualization delivers the knowledge visualization professionals need to leverage UE4's immense power. World-class UE4 expert Tom Shannon introduces Unreal Engine 4's components and technical concepts, mentoring you through the entire process of building outstanding visualization content--all with realistic, carefully documented, step-by-step sample projects. Shannon answers the questions most often asked about UE4 visualization, addressing issues ranging from data import and processing to lighting, advanced materials, and rendering. He reveals important ways in which UE4 works differently from traditional rendering systems, even when it uses similar terminology. Throughout, he writes from the perspective of visualization professionals in architecture, engineering, or science--not gaming. Understand UE4's components and development environment Master UE4's pipeline from source data to delivered application Recognize and adapt to the differences between UE4 and traditional visualization and rendering techniques Achieve staggering realism with UE4's Physically Based Rendering (PBR) Materials, Lighting, and Post-Processing pipelines Create production-ready Materials with the interactive real-time Material Editor Quickly set up projects, import massive datasets, and populate worlds with accurate visualization data Develop bright, warm lighting for architectural visualizations Create pre-rendered animations with Sequencer Use Blueprints Visual Scripting to create complex interactions without writing a single line of code Work with (and around) UE4's limitations and leveraging its advantages to achieve your vision All UE4 project files and 3ds Max source files, plus additional resources and links, are available at the book's companion website.

Object-oriented programming (OOP) is the foundation of modern programming languages, including C++, Java, C#, Visual Basic .NET, Ruby, Objective-C, and Swift. Objects also form the basis for many web technologies such as JavaScript, Python, and PHP. It is of vital importance to learn the fundamental concepts of object orientation before starting to use object-oriented development environments. OOP promotes good design practices, code portability, and reuse—but it requires a shift in thinking to be fully understood. Programmers new to OOP should resist the temptation to jump directly into a particular programming language or a modeling language, and instead first take the time to learn what author Matt Weisfeld calls “the object-oriented thought process.” Written by a developer for developers who want to improve their understanding of object-oriented technologies, The Object-Oriented Thought Process provides a solutions-oriented approach to object-oriented programming. Readers will learn to understand the proper uses of inheritance and composition, the difference between aggregation and association, and the important distinction between interfaces and implementations. While programming technologies have been changing and evolving over the years, object-oriented concepts remain a constant—no matter what the platform. This revised edition focuses on the OOP technologies that have survived the past 20 years and remain at its core, with new and expanded coverage of design patterns, avoiding dependencies, and the SOLID principles to help make software designs understandable, flexible, and maintainable.

Everlasting and answers Dynamic Visualizations Lecture slides Programming assignments with checklists Links to related material The MOOC related to this book is accessible via the "Online Course" link at algs4.cs.princeton.edu. The course offers more than 100 video lecture segments that are integrated with the text, extensive online assessments, and the large-scale discussion forums that have proven so valuable. Offered each fall and spring, this course regularly attracts tens of thousands of registrants. Robert Sedgewick and Kevin Wayne are developing a modern approach to disseminating knowledge that fully embraces technology, enabling people all around the world to discover new ways of learning and teaching. By integrating their textbook, online content, and MOOC, all at the state of the art, they have built a unique resource that greatly expands the breadth and depth of the educational experience. The Official, Full-Color Guide to Developing Interactive Visualizations, Animations, and Renderings with Unreal Engine 4 Unreal Engine 4 (UE4) was created to develop video games, but it has gone viral among architecture, science, engineering, and medical visualization communities. UE4's stunning visual quality, cutting-edge toolset, unbeatable price (free!), and unprecedented ease of use redefines the state of the art and has turned the gaming, film, and visualization industries on their heads. Unreal Engine 4 for Design Visualization delivers the knowledge visualization professionals need to leverage UE4's immense power. World-class UE4 expert Tom Shannon introduces Unreal Engine 4's components and technical concepts, mentoring you through the entire process of building outstanding visualization content--all with realistic, carefully documented, step-by-step sample projects. Shannon answers the questions most often asked about UE4 visualization, addressing issues ranging from data import and processing to lighting, advanced materials, and rendering. He reveals important ways in which UE4 works differently from traditional rendering systems, even when it uses similar terminology. Throughout, he writes from the perspective of visualization professionals in architecture, engineering, or science--not gaming. Understand UE4's components and development environment Master UE4's pipeline from source data to delivered application Recognize and adapt to the differences between UE4 and traditional visualization and rendering techniques Achieve staggering realism with UE4's Physically Based Rendering (PBR) Materials, Lighting, and Post-Processing pipelines Create production-ready Materials with the interactive real-time Material Editor Quickly set up projects, import massive datasets, and populate worlds with accurate visualization data Develop bright, warm lighting for architectural visualizations Create pre-rendered animations with Sequencer Use Blueprints Visual Scripting to create complex interactions without writing a single line of code Work with (and around) UE4's limitations and leveraging its advantages to achieve your vision All UE4 project files and 3ds Max source files, plus additional resources and links, are available at the book's companion website.

The Rails 5 Way Learning Blender Python Data Analysis Theory and Practice Computer Networking: A Top-Down Approach Featuring the Internet, 3/e Google Daydream VR Cookbook Evolving Knowledge Transfer for the Agile World This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. The Comprehensive, Up-to-Date Apache Hadoop Administration Handbook and Reference “Sam Alapati has worked with production Hadoop clusters for six years. His unique depth of experience has enabled him to write the go-to resource for all administrators looking to spec, size, expand, and secure production Hadoop clusters of any size.” —Paul Dix, Series Editor In Expert Hadoop® Administration, leading Hadoop administrator Sam R. Alapati brings together authoritative knowledge for creating, configuring, securing, managing, and optimizing production Hadoop clusters in any environment. Drawing on his experience with large-scale Hadoop administration, Alapati integrates action-oriented advice with carefully researched explanations of both problems and solutions. He covers an unmatched range of topics and offers an unparalleled collection of realistic examples. Alapati demystifies complex Hadoop environments, helping you understand exactly what happens behind the scenes when you administer your cluster. You'll gain unprecedented insight as you walk through building clusters from scratch and configuring high availability, performance, security, encryption, and other key attributes. The high-value administration skills you learn here will be indispensable no matter what Hadoop distribution you use or what Hadoop applications you run. Understand Hadoop's architecture from an administrator's standpoint Create simple and fully distributed clusters Run MapReduce and Spark applications in a Hadoop cluster Manage and protect Hadoop data and high availability Work with HDFS commands, file permissions, and storage management Move data, and use YARN to allocate resources and schedule jobs Manage job workflows with Oozie and Hue Secure, monitor, log, and optimize Hadoop Benchmark and troubleshoot Hadoop

The Hands-On, Example-Rich Introduction to Pandas Data Analysis in Python Today, analysts must manage data characterized by extraordinary variety, velocity, and volume. Using the open source Pandas library, you can use Python to rapidly automate and perform virtually any data analysis task, no matter how large or complex. Pandas can help you ensure the veracity of your data, visualize it for effective decision-making, and reliably reproduce analyses across multiple datasets. Pandas for Everyone brings together practical knowledge and insight for solving real-world problems with Pandas, even if you're new to Python data analysis. Daniel Y. Chen introduces key concepts through simple but practical examples, incrementally building on them to solve more difficult, real-world problems. Chen gives you a jumpstart on using Pandas with a realistic dataset and covers combining datasets, handling missing data, and structuring datasets for easier analysis and visualization. He demonstrates powerful data cleaning techniques, from basic string manipulation to applying functions simultaneously across dataframes. Once you're ready, Chen guides you through fitting models for prediction, clustering, inference, and exploration. He provides tips on performance and scalability, and introduces you to the wider Python data analysis ecosystem. Work with DataFrames and Series, and import or export data Create plots with matplotlib, seaborn, and pandas Combine datasets and handle missing data Reshape, tidy, and clean datasets so they're easier to work with Convert data types and manipulate text strings Apply functions to scale data manipulations Aggregate, transform, and filter large data with groupby Leverage Pandas' advanced date and time capabilities Fit linear models using statsmodels and scikit-learn libraries Use generalized linear modeling to fit models with different response variables Compare multiple models to select the "best" Regularize to overcome overfitting and improve performance Use clustering in unsupervised machine learning

In The Swift Developer's Cookbook, renowned author Erica Sadun joins powerful strategies with ready-to-use Swift code for solving everyday development challenges. As in all of Sadun's programming best-sellers, The Swift Developer's Cookbook translates modern best practices into dozens of well-tested, easy-to-apply solutions. This book's code examples were created in response to real-world questions from working developers to reflect Swift's newest capabilities and best practices. Each chapter groups related tasks together. You can jump straight to your solution without having to identify the right class or framework first. Sadun covers key Swift development concepts, shows you how to write robust and efficient code, and helps you avoid common pitfalls other developers struggle with. She offers expert strategies for working with this immensely powerful language, taking into account Swift's rapid evolution and its migration tools. Whether you're moving to modern Swift from Objective-C, from older versions of the Swift language, or from the world of non-Apple languages, this guide will help you master both "how" and "why" of effective Swift development. Industry recruiters are scrambling to find Swift developers who can solve real problems and produce effective working code. Get this book, and you'll be ready. Coverage includes Writing effective Swift code that communicates clearly and coherently to the compiler, your team, and to "future you," who will be maintaining this code Using Xcode to handle changes in Swift's language constructs as the language evolves Building feedback, documentation, and output to meet your development and debugging needs Mastering the most of options and their supporting concepts Using closures to encapsulate state and functionality, and treat actions as variables for later execution Leveraging control flow with innovative Swift-specific statements Working with all Swift types, classes, enumerations, and structures Using generics and protocols to build robust code that expands functionality beyond single types Making the most of the powerful Swift error system Working with innovative features such as array indexing, general subscripting, statement labels, custom operators, and is book is part of the Pearson Content Update Program (CUP). As the technology changes, sections of this book will be updated or new sections will be added. The updates will be delivered to you via a free Web Edition of this book, which can be accessed with any internet connection.

As scientific and engineering projects grow larger and more complex, it is increasingly likely that those projects will be written in C++. With embedded hardware growing more powerful, much of its software is moving to C++, too. Mastering C++ gives you strong skills for programming at nearly every level, from "close to the hardware" to the highest-level abstractions. In short, C++ is a language that scientific and technical practitioners need to know. Peter Gottschling's Discovering Modern C++ is an intensive introduction that guides you smoothly to sophisticated approaches based on advanced features. Gottschling introduces key concepts using examples from many technical problem domains, drawing on his extensive experience training professionals and teaching C++ to students of physics, math, and engineering. This book is designed to help you get started rapidly and then master increasingly robust features, from lambdas to expression templates. You'll also learn how to take advantage of the powerful libraries available to C++ programmers: both the Standard Template Library (STL) and scientific libraries for arithmetic, linear algebra, differential equations, and graphs. Throughout, Gottschling demonstrates how to write clear and expressive software using object orientation, generics, metaprogramming, and procedural techniques. By the time you're finished, you'll have mastered all the abstractions you need to write C++ programs with exceptional quality and performance.

Linux for Developers

Managing Technical Debt

Building Games and Apps with Google Daydream and Unity

From Concept to Playable Game with Unity and C#

Effective SQL

A Guide to Using Best Practices and Standards

Advanced Analytics and Graphics

Organizations invest immense amounts of time, resources, and attention in their software projects. But all too often, when it's time to transfer the finished project to new "owners," they settle for the most superficial classroom training, documentation, and code walkthroughs. These conventional approaches to knowledge transfer often fail, dramatically reducing the value of new systems in production. You can do much better - and Software Ownership Transfer will show you how. This is the first practical, hands-on guide to knowledge transfer in today's agile environments. Using a realistic, large-scale case study, ThoughtWorks expert Vinod Sankaranarayanan shows how to elevate knowledge transfer from "necessary evil" to an activity full of agility and innovation, and bring together multiple organizations and cultures to make ownership transfer work. Sankaranarayanan explains why mere documentation of error reports and processes isn't enough, and shows how to successfully craft a knowledge transfer program that's more substantive and effective. Along the way, he offers guidance on overcoming the commercial compromises and personal tensions often associated with transferring systems to new ownership; and on transforming mere "knowledge transfer" into something much better: "taking ownership."

The maltreatment of children is an issue that has always been with us and civilized societies provide a range of services both social and medical to care for the children and families afflicted. In recent years, greater attention has been drawn to the medical aspects by competent authorities in the fields of forensic medicine, forensic psychiatry, epidemiological psychiatry, child psychiatry and family psychiatry; as well as the social aspects by those child welfare and child care agencies who have the difficult and distasteful task of removing children, with the help of the courts, from parents who can abuse them and are not able to care for them adequately. A multitude of social agencies, whose range of activities involve both the care and, where possible, the social betterment of afflicted families are now involved. Not least in importance is an increase in our global knowledge to help in the prevention or better treatment of these problems. This means more information on familial and genetic factors in human central nervous system development in its broadest sense. This would include how the central nervous system originates, mediates and controls the build up, speed of development and impulsive release, mastery and direction of aggressive drives and impulses. Very little is so far known about these factors.

Complete ComprehensionsHennemann Educational BooksThe Rails 5 WayAddison-Wesley Professional

Master Powerful Off-the-Shelf Business Solutions for AI and Machine Learning Pragmatic AI will help you solve real-world problems with contemporary machine learning, artificial intelligence, and cloud computing tools. Noah Gift demystifies all the concepts and tools you need to get results—even if you don't have a strong background in math or data science. Gift illuminates powerful off-the-shelf cloud offerings from Amazon, Google, and Microsoft, and demonstrates proven techniques using the Python data science ecosystem. His workflows and examples help you streamline and simplify every step, from deployment to production, and build exceptionally scalable solutions. As you learn how machine language (ML) solutions work, you'll gain a more intuitive understanding of what you can achieve with them and how to maximize their value. Building on these fundamentals, you'll walk step-by-step through building cloud-based AI/ML applications to address realistic issues in sports marketing, project management, product pricing, real estate, and beyond. Whether you're a business professional, decision-maker, student, or programmer, Gift's expert guidance and wide-ranging case studies will prepare you to solve data science problems in virtually any environment. Get and configure all the tools you'll need Quickly review all the Python you need to start building machine learning applications Master the AI and ML toolchain and project Lifecycle Work with Python data science tools such as IPython, Pandas, Numpy, Jupyter Notebook, and Sklearn Incorporate a pragmatic feedback loop that continually improves the efficiency of your workflows and systems Develop cloud AI solutions with Google Cloud Platform, including TPU, Colaboratory, and Datalab services Define Amazon Web Services cloud AI workflows, including spot instances, code pipelines, boto, and more Work with Microsoft Azure AI APIs Walk through building six real-world AI applications, from start to finish Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Data Munging with Hadoop

Complete Comprehension

Agile Application Lifecycle Management

Using DevOps to Drive Process Improvement

An Intensive Course for Scientists, Engineers, and Programmers

The Object-Oriented Thought Process

A Hands-On Guide to Creating 3D Animated Characters

Integrate Agile ALM and DevOps to Build Better Software and Systems at Lower Cost Agile Application Lifecycle Management (ALM) is a comprehensive development lifecycle that embodies essential Agile principles and guides all activities needed to deliver successful software or systems. Agile ALM embodies Agile Configuration Management (CM) and much more. Flexible and robust, it offers "just enough process" to get the job done and leverages DevOps to enhance interactions among all participants. Agile Application Lifecycle Management offers practical advice and strategies for implementing Agile ALM in your complex environment. Leading experts Bob Aiello and Leslie Sachs show how to fully leverage Agile benefits without sacrificing structure, traceability, or repeatability. You'll find realistic guidance for managing source code, builds, environments, change control, releases, and more. The authors help you support Agile in organizations that maintain traditional practices; conventional ALM systems; or siloed, non-Agile teams. They also show how to scale Agile ALM to large or distributed teams, and to environments from cloud to mainframe. Coverage includes Understanding key concepts underlying modern application and system lifecycles Creating your best processes for developing your most complex software and systems Automating build engineering, continuous integration, and continuous delivery/deployment Enforcing Agile ALM controls without compromising productivity Creating effective IT operations that align with Agile ALM processes Gaining more value from testing and retrospectives Making ALM work in the cloud, and across the enterprise Preparing for the future of Agile ALM Today, you need maximum control, quality, and productivity, and this guide will help you achieve those by using Agile ALM, CM, and DevOps together.

The Example-Rich, Hands-On Guide to Data Munging with Apache HadoopTM Data scientists spend much of their time "munging" data: handling day-to-day tasks such as data cleansing, normalization, aggregation, sampling, and transformation. These tasks are both critical and surprisingly interesting. Most important, they deepen your understanding of your data's structure and limitations: crucial insight for improving accuracy and mitigating risk in any analytical project. Now, two leading Hortonworks data scientists, Ofer Mendelevitch and Casey Stella, bring together powerful, practical insights for effective Hadoop-based data munging of large datasets. Drawing on extensive experience with advanced analytics, the authors offer realistic examples that address the common issues you're most likely to face. They describe each task in detail, presenting example code based on widely used tools such as Pig, Hive, and Spark. This concise, hands-on eBook is valuable for every data scientist, data engineer, and architect who wants to master data munging: not just in theory, but in practice with the field's #1 platform—Hadoop. Coverage includes A framework for understanding the various types of data quality checks, including cell-based rules, distribution validation, and outlier analysis Assessing tradeoffs in common approaches to imputing missing values Implementing quality checks with Pig or Hive UDFs Transforming raw data into "feature matrix" format for machine learning algorithms Choosing features and instances Implementing text features via "bag-of-words" and NLP techniques Handling time-series data via frequency- or time-domain methods Manipulating feature values to prepare for modeling Data Munging with Hadoop is part of a larger, forthcoming work entitled Data Science Using Hadoop. To be notified when the larger work is available, register your purchase of Data Munging with Hadoop at informit.com/register and check the box "I would like to hear from InformIT and its family of brands about products and special offers."

An Introduction to Cloud-Based Machine Learning

The Swift Developer's Cookbook (includes Content Update Program)

Understanding Big Data Scalability

EDGE

Expert Hadoop 2 Administration