Enterprise Architecture For Dummies

Find the right big data solution for your business ororganization Big data management is one of the major challenges facingbusiness, industry, and not-for-profit organizations. Data setssuch as customer transactions for a mega-retailer, weather patternsmonitored by meteorologists, or social network activity can quicklyoutpace the capacity of traditional data management tools. If youneed to develop or manage big data solutions, you'll appreciate howthese four experts define, explain, and guide you through this newand often confusing concept. You'll learn what it is, why itmatters, and how to choose and implement solutions that work. Effectively managing big data is an issue of growing importanceto businesses, not-for-profit organizations, government, and ITprofessionals Authors are experts in information management, big data, and avariety of solutions Explains big data in detail and discusses how to select andimplement a solution, security concerns to consider, data storageand presentation issues, analytics, and much more Provides essential information in a no-nonsense,easy-to-understand style that is empowering Big Data For Dummies cuts through the confusion and helpsyou take charge of big data solutions for your organization.

Combine business sense, statistics, and computers in a new and intuitive way, thanks to Big Data Predictive analytics is a branch of data mining that helps predict probabilities and trends. Predictive Analytics For Dummies explores the power of predictive analytics and how you can use it to make valuable predictions for your business, or in fields such as advertising, fraud detection, politics, and others. This practical book does not bog you down with loads of mathematical or scientific theory, but instead helps you quickly see how to use the right algorithms and tools to collect and analyze data and apply it to make predictions. Topics include using structured and unstructured data, building models, creating a predictive analysis roadmap, setting realistic goals, budgeting, and much more. Shows readers how to use Big Data and data mining to discover patterns and make predictions for tech-savvy businesses Helps readers see how to shepherd predictive analytics projects through their companies Explains just enough of the science and math, but also focuses on practical issues such as protecting project budgets, making good presentations, and more Covers nuts-and-bolts topics including predictive analytics basics, using structured and unstructured data, data mining, and algorithms and techniques for analyzing data Also covers clustering, association, and statistical models; creating a predictive analytics roadmap; and applying predictions to the web, marketing, finance, health care, and elsewhere Propose, produce, and protect predictive analytics projects through your company with Predictive Analytics For Dummies.

Get up to speed on the nuances of NoSQL databases and what they mean for your organization This easy to read guide to NoSQL databases provides the type of no-nonsense overview and analysis that you need to learn, including what NoSQL is and which database is right for you. Featuring specific evaluation criteria for NoSQL databases, along with a look into the pros and cons of the most popular options, NoSQL For Dummies provides the fastest and easiest way to dive into the details of this incredible technology. You'll gain an understanding of how to use NoSQL databases for mission-critical enterprise architectures and projects, and real-world examples reinforce the primary points to create an action-oriented resource for IT pros. If you're planning a big data project or platform, you probably already know you need to select a NoSQL database to complete your architecture. But with options flooding the market and updates and add-ons coming at a rapid pace, determining what you require now, and in the future, can be a tall task. This is where NoSQL For Dummies comes in! Learn the basic tenets of NoSQL databases and why they have come to the forefront as data has outpaced the capabilities of relational databases Discover major players among NoSQL databases, including Cassandra, MongoDB, MarkLogic, Neo4J, and others Get an in-depth look at the benefits and disadvantages of the wide variety of NoSQL database options Explore the needs of your organization as they relate to the capabilities of specific NoSQL databases Big data and Hadoop get all the attention, but when it comes down to it, NoSQL databases are the engines that power many big data analytics initiatives. With NoSQL For Dummies, you'll go beyond relational databases to ramp up your enterprise's data architecture in no time.

Based on an extensive study of the actual industry best practices, this book provides a systematic conceptual description of an EA practice and offers practically actionable answers to the key questions related to enterprise architecture.

Fifty Enterprise Architect Tricks

RFID For Dummies

A Practical Guide Using UML and BPMN

Pattern-Oriented Software Architecture For Dummies

Enterprise Software Architecture and Design

Apply cloud design patterns to overcome real-world challenges by building scalable, secure, highly available, and cost-effective solutions Key FeaturesApply AWS Well-Architected Framework concepts to common real-world use casesUnderstand how to select AWS patterns and architectures that are best suited to your needsEnsure the security and stability of a solution without impacting cost or performanceBook Description One of the most popular cloud platforms in the world, Amazon Web Services (AWS) offers hundreds of services with thousands of features to help you build scalable cloud solutions; however, it can be overwhelming to navigate the vast number of services and decide which ones best suit your requirements. Whether you are an application architect, enterprise architect, developer, or operations engineer, this book will take you through AWS architectural patterns and guide you in selecting the most appropriate services for your projects. AWS for Solutions Architects is a comprehensive guide that covers the essential concepts that you need to know for designing well-architected AWS solutions that solve the challenges organizations face daily. You'll get to grips with AWS architectural principles and patterns by implementing best practices and recommended techniques for real-world use cases. The book will show you how to enhance operational efficiency, security, reliability, performance, and cost-effectiveness using real-world examples. By the end of this AWS book, you'll have gained a clear understanding of how to design AWS architectures using the most appropriate services to meet your organization's technological and business requirements. What you will learnRationalize the selection of AWS as the right cloud provider for your organizationChoose the most appropriate service from AWS for a particular use case or projectImplement change and operations managementFind out the right resource type and size to balance performance and efficiencyDiscover how to mitigate risk and enforce security, authentication, and authorizationIdentify common business scenarios and select the right reference architectures for themWho this book is for This book is for application and enterprise architects, developers, and operations engineers who want to become well-versed with AWS architectural patterns, best practices, and advanced techniques to build scalable, secure, highly available, and cost-effective solutions in the cloud. Although existing AWS users will find this book most useful, it will also help potential users understand how leveraging AWS can benefit their organization.

All the answers to your data science questions Over half of all businesses are using data science to generate insights and value from big data. How are they doing it? Data Science Strategy For Dummies answers all your questions about how to build a data science capability from scratch, starting with the "what" and the "why" of data science and covering what it takes to lead and nurture a top-notch team of data scientists. With this book, you'll learn how to incorporate data science as a strategic function into any business, large or small. Find solutions to your real-life challenges as you uncover the stories and value hidden within data. Learn exactly what data science is and why it's important Adopt a data-driven mindset as the foundation to success Understand the processes and common roadblocks behind data science Keep your data science program focused on generating business value Nurture a top-quality data science team In non-technical language, Data Science Strategy For Dummies outlines new perspectives and strategies to effectively lead analytics and data science functions to create real value.

You too can understand the statistics of life, even if you're math-challenged! What do you need to calculate? Manufacturing output? A curve for test scores? Sports stats? You and Excel can do it, and this non-intimidating guide shows you how. It demystifies the different types of statistics, how Excel functions and formulas work, the meaning of means and medians, how to interpret your figures, and more — in plain English. Getting there — learn how variables, samples, and probability are used to get the information you want Excel tricks — find out what's built into the program to help you work with Excel formulas Playing with worksheets — get acquainted with the worksheet functions for each step Graphic displays — present your data as pie graphs, bar graphs, line graphs, or scatter plots What's normal? — understand normal distribution and probability Hyping hypotheses — learn to use hypothesis testing with means and variables When regression is progress — discover when and how to use regression for forecasting What are the odds — work with probability, random variables, and binomial distribution Open the book and find: Ten statistical and graphical tips and traps The difference between descriptive and inferential statistics Why graphs are good How to measure variations What standard scores are and why they're used When to use two-sample hypothesis testing How to use correlations Different ways of working with probability

SOA is the most important initiative facing IT today and is difficult to grasp; this book demystifies the complex topic of SOA and makes it accessible to all those people who hear the term but aren't really sure what it means This team of well-respected authors explains that SOA is a collection of applications that enables resources to be available to other participants in a network using any service-based technology Examines how SOA enables faster and cheaper application development and how it offers reusable code that can be used across various applications Covers what SOA is, why it matters, how it can impact businesses, and how to take steps to implement SOA in a corporate environment

Enterprise Application Architecture with .NET Core

CISSP For Dummies

Big Data For Dummies

The Intelligent Enterprise in the Era of Big Data

Creating a Foundation for Business Execution

Architect and design highly scalable, robust, clean and highly performant applications in .NET Core About This Book Incorporate architectural soft-skills such as DevOps and Agile methodologies to enhance program-level objectives Gain knowledge of architectural approaches on the likes of SOA architecture and microservices to provide traceability and rationale for architectural decisions Explore a variety of practical use cases and code examples to implement the tools and techniques described in the book Who This Book Is For This book is for experienced .NET developers who are aspiring to become architects of enterprise-grade applications, as well as software architects who would like to leverage .NET to create effective blueprints of applications. What You Will Learn Grasp the important aspects and best practices of application lifecycle management Leverage the popular ALM tools, application insights, and their usage to monitor performance, testability, and optimization tools in an enterprise Explore various authentication models such as social media-based authentication, 2FA and OpenID Connect, learn authorization techniques Explore Azure with various solution approaches for Microservices and Serverless architecture along with Docker containers Gain knowledge about the recent market trends and practices and how they can be achieved with .NET Core and Microsoft tools and technologies In Detail If you want to design and develop enterprise applications using .NET Core as the development framework and learn about industry-wide best practices and guidelines, then this book is for you. The book starts with a brief introduction to enterprise architecture, which will help you to understand what enterprise architecture is and what the key components are. It will then teach you about the types of patterns and the principles of software development, and explain the various aspects of distributed computing to keep your applications effective and scalable. These chapters act as a catalyst to start the practical implementation, and design and develop applications using different architectural approaches, such as layered architecture, service oriented architecture, microservices and cloud-specific solutions. Gradually, you will learn about the different approaches and models of the Security framework and explore various authentication and authorization techniques, such as social media-based authentication and safe using using app secrets. By the end of the book, you will get to know the concepts and usage of the emerging fields, such as DevOps, BigData, architectural practices, and Artificial Intelligence. Style and approach Filled with examples and use cases, this guide takes a no-nonsense approach to show you the best tools and techniques required to become a successful software architect.

This book fills a gap between high–level overview texts that are often too general and low–level detail oriented technical handbooks that lose sight the "big picture". This book discusses SOA from the low–level perspective of middleware, various XML–based technologies, and basic service design. It also examines broader implications of SOA, particularly where it intersects with business process management and process modeling. Concrete overviews will be provided of the methodologies in those fields, so that students will have a hands–on grasp of how they may be used in the context of SOA.

Intelligent readers who want to build their own embedded computer systems-- installed in everything from cell phones to cars to handheld organizers to refrigerators-- will find this book to be the most in-depth, practical, and up-to-date guide on the market. Designing Embedded Hardware carefully steers between the practical and philosophical aspects, so developers can both create their own devices and gadgets and customize and extend off-the-shelf systems. There are hundreds of books to choose from if you need to learn programming, but only a few are available if you want to learn to create hardware. Designing Embedded Hardware provides software and hardware engineers with no prior experience in embedded systems with the necessary conceptual and design building blocks to understand the architectures of embedded systems. Written to provide the depth of coverage and real-world examples developers need, Designing Embedded Hardware also provides a road-map to the pitfalls and traps to avoid in designing embedded systems. Designing Embedded Hardware covers such essential topics as: The principles of developing computer hardware Core hardware designs Assembly language concepts Parallel I/O Analog-digital conversion Timers (internal and external) UART Serial Peripheral Interface Inter-Integrated Circuit Bus Controller Area Network (CAN) Data Converter Interface (DCI) Low-power operation This invaluable and eminently useful book gives you the practical tools and skills to develop, build, and program your own application-specific computers.

" … the enterprise of today has changed … wherever you sit in this new corporation … Srinivasan gives us a practical and provocative guide for rethinking our business process … calling us all to action around rapid development of our old, hierarchical structures into flexible customer centric competitive force …. A must read for today's business leader." Mark Nunnelly, Executive Director, MassIT, Commonwealth of Massachusetts and Managing Director, Bain Capital "'Efficiency,' 'agile,' and 'analytics' used to be the rage. Venkat Srinivasan explains in this provocative book why organizations can no longer afford to stop there. They need to move beyond – to be 'intelligent.' It isn't just theory. He's done it." Bharat Anand, Henry R. Byers Professor of Business Administration, Harvard Business School In the era of big data and automation, the book presents a cutting-edge approach to how enterprises should organize and function. Striking a practical balance between theory and practice, the Intelligent Enterprise in the Era of Big Data presents the enterprise architecture that identifies the power of the emerging technology environment. Beginning with an introduction to the key challenges that enterprises face, the book systematically outlines modern enterprise architecture through a detailed discussion of the inseparable elements of such architecture: efficiency, flexibility, and intelligence. This architecture enables rapid responses to market needs by sensing important developments in internal and external environments in real time in an integrated fashion, the Intelligent Enterprise in the Era of Big Data also features: • A detailed discussion on issues of time-to-market and flexibility with respect to enterprise application technology • Novel analyses illustrated through extensive real-world case studies to help readers better understand the applicability of the architecture and concepts • Various applications of natural language processing to real-world business transactions • Practical approaches for designing and building intelligent enterprises The Intelligent Enterprise in the Era of Big Data is an appropriate reference for business executives, information technology professionals, data scientists, and management consultants. The book is also an excellent supplementary textbook for upper-undergraduate and graduate-level courses in business intelligence, data mining, big data, and business process automation. "a compelling vision of the next generation of organization—the intelligent enterprise—which will leverage not just big data but also unstructured text and artificial intelligence to optimize internal processes in real time … a must-read book for CEOs and CTOs in all industries." Ravi Ramamurti, D''Amore-McKim Distinguished Professor of International Business and Strategy, and Director, Center for Emerging Markets, Northeastern University "It is about the brave new world that narrows the gap between technology and business …. The book has practical advice from a thoughtful practitioner. Intelligent automation will be a competitive strength in the future. Will your company be ready?" Victor J. Menezes, Retired Senior Vice Chairman, Citigroup Venkat Srinivasan, PhD, is Chairman and Chief Executive Officer of RAGE Frameworks, Inc., which supports the creation of intelligent business process automation solutions and cognitive intelligence solutions for global corporations. He is an entrepreneur and holds several patents in the area of knowledge-based technology architectures. He is the author of two edited volumes and over 30 peer-reviewed publications. He has served as an associate professor in the College of Business Administration at Northeastern University.

Wikis For Dummies

Enabling Test-Driven Development, Domain-Driven Design, and Event-Driven Microservices

Architecture Patterns with Python

Concepts, Technology & Architecture

Cloud Computing

Corporations have finally realized the value of collaboration tools for knowledge sharing and Wiki is the open source technology for creating collaborative Web sites, as either a public site on the Internet or on a private intranet site Shows readers how to set up Wikis in a corporate setting or on a personal site so that users can retrieve information, post information, and maintenance Discusses the advantages of using Wiki in a corporate environment, which companies such as Microsoft, Boeing, Disney, and Motorola have already discovered

The bestselling book on 3D printing 3D printing is one of the coolest inventions we've seen in our lifetime, and now you can join the ranks of businesspeople, entrepreneurs, and hobbyists who use it to do everything from printing foods and candles to replacement parts for older technologies—and tons of mind-blowing stuff in between! With 3D Printing For Dummies guidance you need to grasp the methods available to create 3D printable objects using software, 3D scanners, and even photographs through open source software applications like 123D Catch. Thanks to the growing availability of 3D printers, this remarkable technology is coming to the masses, and there's no time like the present to let your imagination run wild inexpensively. When it comes to 3D printing, the sky's the limit! Covers each type of 3D printing technology available today: stereolithography, selective sintering, used deposition, and granular binding Provides information on the potential for the transformation of production and manufacturing, reuse and recycling, intellectual property design controls, and the commodi creating a RepRap printer using open source designs, software, and hardware Offers strategies for improved success in 3D printing On your marks, get set, innovate!

Enterprise Integration Patterns provides an invaluable catalog of sixty-five patterns, with real-world solutions that demonstrate the formidable of messaging and help you to design effective messaging solutions for your enterprise. The authors also include examples covering a variety of different integration technologies, such as JMS, MSMQ, TIBCO ActiveEnterprise, describing a bond trading system illustrates the patterns in practice, and the book offers a look at emerging standards, as well as insights into what the future of enterprise integration might hold. This book provides a consistent vocabulary and visual notation framework to describe large-scale integration solutions across many technologies. It also explores in detail architectures. The authors present practical advice on designing code that connects an application to a messaging system, and provide extensive information to help you determine when to send a message, how to route it to the proper destination, and how to monitor the health of a messaging system. If you want to know how to manage, monitor, and maintain a

A sneak peek at up-and-coming trends in IT, a multidimensional vision for achieving business agility through agile architectures The Agile Architecture Revolution places IT trends into the context of Enterprise Architecture, reinventing Enterprise Architecture to support continuous business transformation. It focuses on the challenges of large organizations, while placi ecosystem that includes small and midsize organizations as well as startups Organizes the important trends that are facing technology in businesses and public sector organizations today and over the next several years Presents the five broad organizing principles called Supertrends: location independence, global cubicle, democratization of technology, deep interop perspective on service-oriented architecture in conjunction with architectural approaches to cloud computing and mobile technologies that explain how organizations can achieve better business visibility through IT and enterprise architecture Laying out a multidimensional vision for achieving agile architectures, this book discusses the crisis points that promise sub spending on IT will continue to undergo radical change over the next ten years.

Predictive Analytics For Dummies

IT Architecture For Dummies

Enterprise Architecture as Strategy

ArchiMate® 3.0.1 Specification

Data Lakes For Dummies

The ArchiMate® Specification, an Open Group Standard, defines an open and independent modeling language for Enterprise Architecture that is supported by different tool vendors and consulting firms. The ArchiMate language enables Enterprise Architects to describe, analyze, and visualize the relationships among business domains in an unambiguous way. This book is the official specification of the ArchiMate 3.0.1 modeling language from The Open Group. ArchiMate 3.0.1 is a minor update to ArchiMate 3.0, containing the set of corrections from ArchiMate 3.0 Technical Corrigendum No. 1 (U172). This addresses inconsistencies and errors identified since the publication of Version 3.0 in June 2016.The ArchiMate Specification supports modeling throughout the TOGAF® Architecture Development Method (ADM). New features in Version 3 include elements for modeling the enterprise at a strategic level, such as capability, resource, and outcome. It also includes support to model the physical world of materials and

equipment. Furthermore, the consistency and structure of the language have been improved, definitions have been aligned with other standards, and its usability has been enhanced in various other ways.The intended audience is threefold: • Enterprise Architecture practitioners, such as architects (e.g., business, application, information, process, infrastructure, and, obviously, enterprise architects), senior and operational management, project leaders, and anyone committed to work within the reference framework defined by the Enterprise Architecture. • Those who intend to implement the ArchiMate language in a software tool; they will find a complete and detailed description of the language in this book. • The academic community, on which we rely for amending and improving the language, based on state-of-the-art research results in the Enterprise Architecture field.

The easy way to understand and implement cloud computing technology written by a team of experts Cloud computing can be difficult to understand at first, but the cost-saving possibilities are great and many companies are getting on board. If you've been put in charge of implementing cloud computing, this straightforward, plain-English guide clears up the confusion and helps you get your plan in place. You'll learn how cloud computing enables you to run a more green IT infrastructure, and access technology-enabled services from the Internet ("in the cloud") without having to understand, manage, or invest in the technology infrastructure that supports them. You'll also find out what you need to consider when implementing a plan, how to handle security issues, and more. Cloud computing is a way for businesses to take advantage of storage and virtual services through the Internet, saving money on infrastructure and support This book provides a clear definition of cloud computing from the utility computing standpoint and also addresses security concerns Offers practical guidance on delivering and managing cloud computing services effectively and efficiently Presents a proactive and pragmatic approach to implementing cloud computing in any organization Helps IT managers and staff understand the benefits and challenges of cloud computing, how to select a service, and what's involved in getting it up and running Highly experienced author team consults and gives presentations on emerging technologies Cloud Computing For Dummies gets straight to the point, providing the practical information you need to know.

Understanding the world of R programming and analysis has never been easier Most guides to R, whether books or online, focus on R functions and procedures. But now, thanks to Statistical Analysis with R For Dummies, you have access to a trusted, easy-to-follow guide that focuses on the foundational statistical concepts that R addresses—as well as step-by-step guidance that shows you exactly how to implement them using R programming. People are becoming more aware of R every day as major institutions are adopting it as a standard. Part of its appeal is that it's a free tool that's taking the place of costly statistical software packages that sometimes take an inordinate amount of time to learn. Plus, R enables a user to carry out complex statistical analyses by simply entering a few commands, making sophisticated analyses available and understandable to a wide audience. Statistical Analysis with R For Dummies enables you to perform these analyses and to fully understand their implications and results. Gets you up to speed on the #1 analytics/data science software tool Demonstrates how to easily find, download, and use cutting-edge community-reviewed methods in statistics and predictive modeling Shows you how R offers intel from leading researchers in data science, free of charge Provides information on using R Studio to work with R Get ready to use R to crunch and analyze your data—the fast and easy way!

Make the most of R's extensive toolset R Projects For Dummies offers a unique learn-by-doing approach. You will increase the depth and breadth of your R skillset by completing a wide variety of projects. By using R's graphics, interactive, and machine learning tools, you'll learn to apply R's extensive capabilities in an array of scenarios. The depth of the project experience is unmatched by any other content online or in print. And you just might increase your statistics knowledge along the way, too! R is a free tool, and it's the basis of a huge amount of work in data science. It's taking the place of costly statistical software that sometimes takes a long time to learn. One reason is that you can use just a few R commands to create sophisticated analyses. Another is that easy-to-learn R graphics enable you make the results of those analyses available to a wide audience. This book will help you sharpen your skills by applying them in the context of projects with R, including dashboards, image processing, data reduction, mapping, and more. Appropriate for R users at all levels Helps R programmers plan and complete their own projects Focuses on R functions and packages Shows how to carry out complex analyses by just entering a few commands If you're brand new to R or just want to brush up on your skills, R Projects For Dummies will help you complete your projects with ease.

The Agile Architecture Revolution
Handbook on Enterprise Architecture
How Cloud Computing, REST-Based SOA, and Mobile Computing Are Changing Enterprise IT
Certified Enterprise Architect All-in-One Exam Guide
Statistical Analysis with R For Dummies

Take a dive into data lakes "Data lakes" is the latest buzz word in the world of data storage, management, and analysis. Data Lakes For Dummies decodes and demystifies the concept and helps you get a straightforward answer to the question: "What exactly is a data lake and do I need one for my business?" Written for an audience of technology decision makers tasked with keeping up with the latest and greatest data options, this book provides the perfect introductory survey of these novel and growing features of the information landscape. It explains how they can help your business, what they can (and can't) achieve, and what you need to do to create the lake that best suits your particular needs. With a minimum of jargon, prolific tech author and business intelligence consultant Alan Simon explains how data lakes differ from other data storage paradigms. Once you've got the background picture, he maps out ways you can add a data lake to your business systems; migrate existing information and switch on the fresh data supply; clean up the product; and open channels to the best intelligence software for to interpreting what you've stored. Understand and build data lake architecture Store, clean, and synchronize new and existing data Compare the best data lake vendors Structure raw data and produce usable analytics Whatever your business, data lakes are going to form ever more prominent parts of the information universe every business should have access to. Dive into this book to start exploring the deep competitive advantage they make possible—and make sure your business isn't left standing on the shore.

Many companies have asked suppliers to begin using RFID (radio frequency identification) tags by 2006 RFID allows pallets and products to be scanned at a greater distance and with less effort than barcode scanning, offering superior supply-chain management efficiencies This unique plain-English resource explains RFID and shows CIOs, warehouse managers, and supply-chain managers how to implement RFID tagging in products and deploy RFID scanning at a warehouse or distribution center Covers the business case for RFID, pilot programs, timelines and strategies for site assessments and deployments, testing guidelines, privacy and regulatory issues, and more

This important text provides a single point of reference for state-of-the-art cloud computing design and implementation techniques. The book examines cloud computing from the perspective of enterprise architecture, asking the question; how do we realize new business potential with our existing enterprises? Topics and features: with a Foreword by Thomas Erl; contains contributions from an international selection of preeminent experts; presents the state-of-the-art in enterprise architecture approaches with respect to cloud computing models, frameworks, technologies, and applications; discusses potential research directions, and technologies to facilitate the realization of emerging business models through enterprise architecture approaches; provides relevant theoretical frameworks, and the latest empirical research findings.

Feeling overwhelmed by the buzz about SOA—service oriented architecture? Take heart! Service Oriented Architecture For Dummies, 2nd Edition makes it easy to understand, plan, and implement the latest SOA solutions for your business. Whether you're the IT person responsible for developing SOA or the executive who's trying to get a handle on the concept, Service Oriented Architecture For Dummies, 2nd Edition will help you understand what SOA is, why it's important, and how you can make the most of it. You'll find out about the business and financial aspects of SOA, how to decide if you need it, and what it can mean to your bottom line. Discover how to: Identify the main components of SOA and how they work to create business processes Create reusable, flexible systems and avoid common pitfalls Deconstruct business processes and applications to identify their components, then put them together in new ways Construct SOA business applications for maximum adaptability Confirm quality in a situation that's difficult to test, and assure the quality and consistency of your data Develop a governance strategy for SOA based on your company's philosophy and culture Work with XML and understand how it's used in SOA Maximize the benefits of unified communications Understand software ecosystems, rich interfaces, and the development lifecycle Packed with real-life case studies illustrating how SOA has been applied in a variety of industries, Service Oriented Architecture For Dummies, 2nd Edition demystifies one of today's hottest business tools.

Statistical Analysis with Excel For Dummies
Design your cloud infrastructure by implementing DevOps, containers, and Amazon Web Services
Cloud Computing for Enterprise Architectures
Modeling Enterprise Architecture with TOGAF
Service Oriented Architecture For Dummies

Enterprise architecture defines a firm's needs for standardized tasks, job roles, systems, infrastructure, and data in core business processes. This book explains enterprise architecture's vital role in enabling - or constraining - the execution of business strategy. It provides frameworks, case examples, and more.

Simple SysML for Beginners Using Sparx Enterprise Architect is for beginners. The book assumes that you have just purchased a copy of Enterprise Architect and are anxious to get started, but otherwise don't know too much about SysML and don't have much experience using Enterprise Architect or any other similar tool. There are several good books on the market about SysML. However, these books show only finished diagrams. They don't cover the steps needed to construct the models and the diagrams. These steps can be remarkably complicated; the sequence of steps needed to construct the underlying model for a diagram is often less than obvious when using a real SysML tool. The purpose of this book is to help you get through the initial learning curve and get you on your way to becoming proficient at SysML modeling.

This effective study guide offers comprehensive coverage of topics comprising the enterprise architecture body of knowledge. The book provides detailed coverage and lays out actionable methodologies and best practices to create and maintain successful EA models, artifacts and building blocks. It helps prepare readers to take any of the various EA certification exams and academic courses in enterprise architecture. This highly effective self-study guide offers comprehensive coverage of all topics in the enterprise architecture body of knowledge. Written by a team of experienced academics, practitioners, and professionals, the book takes a holistic look at the practice of enterprise architecture. You will get actionable methodologies and best practices and learn how to develop, deploy, and maintain successful enterprise architecture models, artifacts, and building blocks. Designed to help you prepare for certification, the Certified Enterprise Architect All-in-One Exam Guide also serves as an essential on-the-job reference. Coverage includes:•Enterprise architecture foundation concepts•Planning the enterprise architecture•Enterprise architecture development, governance, and maintenance•Defense frameworks•Viewpoints and views•The Zachman Framework•The Open Group Architecture Framework (TOGAF)•The Common Approach to Federal Enterprise Architecture•FEAF2•Comparison of frameworks•Case Study integrated throughout the text•And much more

As Python continues to grow in popularity, projects are becoming larger and more complex. Many Python developers are now taking an interest in high-level software design patterns such as hexagonal/clean architecture, event-driven architecture, and the strategic patterns prescribed by domain-driven design (DDD). But translating those patterns into Python isn't always straightforward. With this hands-on guide, Harry Percival and Bob Gregory from MADE.com introduce proven architectural design patterns to help Python developers manage application complexity—and get the most value out of their test suites. Each pattern is illustrated with concrete examples in beautiful, idiomatic Python, avoiding some of the verbosity of Java and C# syntax. Patterns include: Dependency inversion and its links to ports and adapters (hexagonal/clean architecture) Domain-driven design's distinction between entities, value objects, and aggregates Repository and Unit of Work patterns for persistent storage Events, commands, and the message bus Command-query responsibility segregation (CQRS) Event-driven architecture and reactive microservices

Software Fortresses
Designing Embedded Hardware
NoSQL For Dummies
AWS for Solutions Architects
A Modern Approach to Business and IT Alignment

This book introduces a new approach for modeling large enterprise systems: the software fortress model. In the software fortress model, an enterprise architecture is viewed as a series of self-contained, mutually suspicious, marginally cooperating software fortresses interacting with each other through carefully crafted and meticulously managed treaty relationships. The software fortress model is an intuitive, simple, expressive approach that maps readily to existing technologies such as .NET and Java 2 Enterprise Edition (J2EE). This book is designed to meet an immediate need to define, clarify, and explain the basics of this new modeling methodology for large enterprise software architectures. "Software Fortresses is your essential roadmap to all aspects of software fortresses. Key topics include: The fundamental concepts and terminology of software fortressesDocumentation techniques, including Fortress Ally Responsibility Cards (based on Class Responsibility Cards) and Sequence Ally Diagrams (based on UML's Class Sequence Diagrams) The proper use of drawbridges to provide fortress interoperabilityThe innovative software fortress model for enterprise securityCorrect design approaches to fortress walls, which keep intruders out, and to guards, which let allies in.The role of loosely coupled and tightly coupled transactions in a software fortress architectureDesign and technology issues associated with the six major software fortress types This book is a must-read for all enterprise software professionals, whether you are a manager seeking to rein in run-away enterprise system complexity, an architect seeking to design interoperable, scalable, and highly secure systems, a consultant expected to give advice on how .NET and J2EE fit into the enterprise space, an implementer wanting to understand how your system relates to a larger enterprise architecture, or a business analyst needing to know that your system requirements will be translated into a successful software implementation. 0321166086B12202002

This handbook is about methods, tools and examples of how to architect an enterprise through considering all life cycle aspects of Enterprise Entities. It is based on ISO15704:2000, or the GERAM Framework. A wide audience is addressed, as the handbook covers methods and tools necessary to design or redesign enterprises, as well as those necessary to structure the implementation into manageable projects.

Modeling Enterprise Architecture with TOGAF explains everything you need to know to effectively model enterprise architecture with The Open Group Architecture Framework (TOGAF), the leading EA standard. This solution-focused reference presents key techniques and illustrative examples to help you model enterprise architecture. This book describes the TOGAF standard and its structure, from the architecture transformation method to governance, and presents enterprise architecture modeling practices with plenty of examples of TOGAF deliverables in the context of a case study. Although widespread and growing quickly, enterprise architecture is delicate to manage across all its dimensions. Focusing on the architecture transformation method, TOGAF provides a wide framework, which covers the repository, governance, and a set of recognized best practices. The examples featured in this book were realized using the open source Modelio tool, which includes extensions for TOGAF. Includes intuitive summaries of the complex TOGAF standard to let you effectively model enterprise architecture Uses practical examples to illustrate ways to adapt TOGAF to the needs of your enterprise Provides model examples with Modelio, a free modeling tool, letting you exercise TOGAF modeling immediately using a dedicated tool Combines existing modeling standards with TOGAF

A solid introduction to the practices, plans, and skills required for developing a smart system architecture Information architecture combines IT skills with business skills in order to align the IT structure of an organization with the mission, goals, and objectives of its business. This friendly introduction to IT architecture walks you through the myriad issues and complex decisions that many organizations face when setting up IT systems to work in sync with business procedures. Veteran IT professional and author Kirk Hausman explains the business value behind IT architecture and provides you with an action plan for implementing IT architecture procedures in an organization. You'll explore the many challenges that organizations face as they attempt to use technology to enhance their business's productivity so that you can gain a solid understanding of the elements that are required to plan and create an architecture that meets specific business goals. Defines IT architecture as a blend of IT skills and business skills that focuses on business optimization, business architecture, performance management, and organizational structure Uncovers and examines every topic within IT architecture including network, system, data, services, application, and more Addresses the challenges that organizations face when attempting to use information technology to enable profitability and business continuity While companies look to technology more than ever to enhance productivity, you should look to IT Architecture For Dummies for guidance in this field.

3D Printing For Dummies
Enterprise Integration Patterns
Using Sparx Enterprise Architect
Designing, Building, and Deploying Messaging Solutions
R Projects For Dummies

Explores cloud computing, breaking down the concepts, models, mechanisms, and architectures of this technology while allowing for the financial assessment of resources and how they compare to traditional storage systems.

An expert guide to selecting the right cloud service model for your business Cloud computing is all the rage, allowing for the delivery of computing and storage capacity to a diverse community of end-recipients. However, before you can decide on a cloud model, you need to determine what the ideal cloud service model is for your business. Helping you cut through all the haze, Architecting the Cloud is vendor neutral and guides you in making one of the most critical technology decisions that you will face: selecting the right cloud service model(s) based on a combination of both business and technology requirements. Guides corporations through key cloud design considerations Discusses the pros and cons of each cloud service model Highlights major design considerations in areas such as security, data privacy, logging, data storage, SLA monitoring, and more Clearly defines the services cloud providers offer for each service model and the cloud services IT must provide Arming you with the information you need to choose the right cloud service provider, Architecting the Cloud is a comprehensive guide covering everything you need to be aware of in selecting the right cloud service model for you.

ArchiMate®, an Open Group Standard, is an open and independent modelling language for Enterprise Architecture that is supported by different tool vendors and consulting firms. ArchiMate provides instruments to enable enterprise architects to describe, analyze, and visualize the relationships among business domains in an unambiguous way. This book provides the official specification of ArchiMate 2.1 from The Open Group. ArchiMate 2.1 is a maintenance update to ArchiMate 2.0, addressing comments raised since the introduction of ArchiMate 2.0 in 2012.The ArchiMate 2.1 Standard supports modelling throughout the TOGAF® Architecture Development Method (ADM).The intended audience is threefold: Enterprise Architecture practitioners, such as architects (e.g. application, information, process, infrastructure, and, obviously, enterprise architects), senior and operational management, project leaders, and anyone committed to work within the reference framework defined by the Enterprise Architecture. Those who intend to implement ArchiMate in a software tool; they will find a complete and detailed description of the language in this book. The academic community, on which we rely for amending and improving the language, based on state-of-the-art research results in the Enterprise Architecture field.

Implement programming best practices from the ground up Imagine how much easier it would be to solve a programming problem, if you had access to the best practices from all the top experts in the field, and you could follow the best design patterns that have evolved through the years. Well, now you can. This unique book offers development solutions ranging from high-level architectural patterns, to design patterns that apply to specific problems encountered after the overall structure has been designed, to idioms in specific programming languages--all in one, accessible, guide. Not only will you improve your understanding of software design, you'll also improve the programs you create and successfully take your development ideas to the next level. Pulls together the best design patterns and best practices for software design into one accessible guide to help you improve your programming projects Helps you avoid re-creating the wheel and also meet the ever-increasing pace of rev cycles, as well as the ever-increasing number of new platforms and technologies for mobile, web, and enterprise computing Fills a gap in the entry-level POSA market, as well as a need for guidance in implementing best practices from the ground up Save time and avoid headaches with your software development projects with Pattern-Oriented Software Architecture For Dummies.

Cloud Computing For Dummies
Design Decisions for Cloud Computing Service Models (SaaS, PaaS, and IaaS)
Entities, Services, and Resources
Simple SysML for Beginners
Modeling Enterprise Architectures