Sample Chapter 16 Manning Publications Co

This textbook considers statistical learning applications when interest centers on the conditional distribution of a response variable, given a set of predictors, and in the absence of a credible model that can be specified before the data analysis begins. Consistent with modern data analytics, it emphasizes that a proper statistical learning data analysis depends in an integrated fashion on sound data collection, intelligent data management, appropriate statistical procedures, and an accessible interpretation of results. The unifying theme is that supervised learning properly can be seen as a form of regression analysis. Key concepts and procedures are illustrated with a large number of real applications and their associated code in R, with an eye toward practical implications. The growing integration of computer science and statistics is well represented including the occasional, but salient, tensions that result. Throughout, there are links to the big picture. The third edition considers significant advances in recent years, among which are: the development of overarching, conceptual frameworks for statistical learning; the impact of "big data" on statistical learning; the nature and consequences of post-model selection statistical inference; deep learning in various forms; the special challenges to statistical inference posed by statistical learning; the fundamental connections between data collection and data analysis; interdisciplinary ethical and political issues surrounding the application of algorithmic methods in a wide variety of fields, each linked to concerns about transparency, fairness, and accuracy. This edition features new sections on accuracy, transparency, and fairness, as well as a new chapter on deep learning. Precursors to deep learning get an expanded treatment. The connections between fitting and forecasting are considered in greater depth. Discussion of the estimation targets for algorithmic methods is revised and expanded throughout to reflect the latest research. Resampling procedures are emphasized. The material is written for upper undergraduate and graduate students in the social, psychological and life sciences and for researchers who want to apply statistical learning procedures to scientific and policy problems.

Entity Framework Core in Action, Second Edition teaches you to write flawless database interactions for .NET applications. Summary Entity Framework Core in Action, Second Edition is an in-depth guide to reading and writing databases with EF Core. Revised from the bestselling original edition, it's filled with over 100 diagrams, code snippets, and examples—including building and scaling your own bookselling web application. Learn from author Jon Smith's extensive experience working with EF Core in production, as you discover time-saving patterns and best practices for security, performance tuning, and unit testing. All of the book's code is available on GitHub. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Entity Framework radically simplifies data access in .NET applications. This easy-to-use object-relational mapper (ORM) lets you write database code in pure C#. It automatically maps classes to database tables and enables queries with standard LINQ commands. It even generates SQL, so you don't have to! About the book Entity Framework Core in Action, Second Edition teaches you to write flawless database interactions for .NET applications. Following relevant examples from author Jon Smith's extensive experience, you'll progress quickly from EF basics to advanced techniques. In addition to the latest EF features, this book addresses performance, security, refactoring, and unit testing. This updated edition also contains new material on NoSQL databases. What's inside Configure EF to define every table and column Update your schema as your app grows Integrating EF with existing C# application Write and test business logic for database access Applying a Domain-Driven Design to EF Core Getting the best performance out of EF Core About the reader For .NET developers familiar with relational databases. About the

author Jon P. Smith is a freelance software developer and architect with a special focus on .NET and Azure. Table of Contents PART 1 1 Introduction to Entity Framework Core 2 Querying the database 3 Changing the database content 4 Using EF Core in business logic 5 Using EF Core in ASP.NET Core web applications 6 Tips and techniques for reading and writing with EF Core PART 2 7 Configuring nonrelational properties 8 Configuring relationships 9 Handling database migrations 10 Configuring advanced features and handling concurrency conflicts 11 Going deeper into the DbContext PART 3 12 Using entity events to solve business problems 13 Domain-Driven Design and other architectural approaches 14 EF Core performance tuning 15 Master class on performance-tuning database queries 16 Cosmos DB, CQRS, and other database types 17 Unit testing EF Core applications

Updated with new code, new projects, and new chapters, Machine Learning with TensorFlow, Second Edition gives readers a solid foundation in machine-learning concepts and the TensorFlow library. Summary Updated with new code, new projects, and new chapters, Machine Learning with TensorFlow, Second Edition gives readers a solid foundation in machine-learning concepts and the TensorFlow library. Written by NASA JPL Deputy CTO and Principal Data Scientist Chris Mattmann, all examples are accompanied by downloadable Jupyter Notebooks for a hands-on experience coding TensorFlow with Python. New and revised content expands coverage of core machine learning algorithms, and advancements in neural networks such as VGG-Face facial identification classifiers and deep speech classifiers. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Supercharge your data analysis with machine learning! ML algorithms automatically improve as they process data, so results get better over time. You don't have to be a mathematician to use ML: Tools like Google's TensorFlow library help with complex calculations so you can focus on getting the answers you need. About the book Machine Learning with TensorFlow, Second Edition is a fully revised guide to building machine learning models using Python and TensorFlow. You'll apply core ML concepts to real-world challenges, such as sentiment analysis, text classification, and image recognition. Hands-on examples illustrate neural network techniques for deep speech processing, facial identification, and auto-encoding with CIFAR-10. What's inside Machine Learning with TensorFlow Choosing the best ML approaches Visualizing algorithms with TensorBoard Sharing results with collaborators Running models in Docker About the reader Requires intermediate Python skills and knowledge of general algebraic concepts like vectors and matrices. Examples use the super-stable 1.15.x branch of TensorFlow and TensorFlow 2.x. About the author Chris Mattmann is the Division Manager of the Artificial Intelligence, Analytics, and Innovation Organization at NASA Jet Propulsion Lab. The first edition of this book was written by Nishant Shukla with Kenneth Fricklas. Table of Contents PART 1 - YOUR MACHINE-LEARNING RIG 1 A machine-learning odyssey 2 TensorFlow essentials PART 2 - CORE LEARNING ALGORITHMS 3 Linear regression and beyond 4 Using regression for call-center volume prediction 5 A gentle introduction to classification 6 Sentiment classification: Large movie-review dataset 7 Automatically clustering data 8 Inferring user activity from Android accelerometer data 9 Hidden Markov models 10 Part-of-speech tagging and word-sense disambiguation PART 3 - THE NEURAL NETWORK PARADIGM 11 A peek into autoencoders 12 Applying autoencoders: The CIFAR-10 image dataset 13 Reinforcement learning 14 Convolutional neural networks 15 Building a real-world CNN: VGG-Face ad VGG-Face Lite 16 Recurrent neural networks 17 LSTMs and automatic speech recognition 18 Sequence-to-sequence models for chatbots 19 Utility landscape

Parallel and High Performance Computing offers techniques guaranteed to boost your code's effectiveness. Summary Complex calculations, like training deep learning models or running large-scale simulations, can take an extremely long time. Efficient parallel programming can save hours—or even days—of computing time. Parallel and High Performance Computing shows you how to deliver faster run-times, greater

scalability, and increased energy efficiency to your programs by mastering parallel techniques for multicore processor and GPU hardware. About the technology Write fast, powerful, energy efficient programs that scale to tackle huge volumes of data. Using parallel programming, your code spreads data processing tasks across multiple CPUs for radically better performance. With a little help, you can create software that maximizes both speed and efficiency. About the book Parallel and High Performance Computing offers techniques guaranteed to boost your code's effectiveness. You'll learn to evaluate hardware architectures and work with industry standard tools such as OpenMP and MPI. You'll master the data structures and algorithms best suited for high performance computing and learn techniques that save energy on handheld devices. You'll even run a massive tsunami simulation across a bank of GPUs. What's inside Planning a new parallel project Understanding differences in CPU and GPU architecture Addressing underperforming kernels and loops Managing applications with batch scheduling About the reader For experienced programmers proficient with a high-performance computing language like C, C++, or Fortran. About the author Robert Robey works at Los Alamos National Laboratory and has been active in the field of parallel computing for over 30 years. Yuliana Zamora is currently a PhD student and Siebel Scholar at the University of Chicago, and has lectured on programming modern hardware at numerous national conferences. Table of Contents PART 1 INTRODUCTION TO PARALLEL COMPUTING 1 Why parallel computing? 2 Planning for parallelization 3 Performance limits and profiling 4 Data design and performance models 5 Parallel algorithms and patterns PART 2 CPU: THE PARALLEL WORKHORSE 6 Vectorization: FLOPs for free 7 OpenMP that performs 8 MPI: The parallel backbone PART 3 GPUS: BUILT TO ACCELERATE 9 GPU architectures and concepts 10 GPU programming model 11 Directive-based GPU programming 12 GPU languages: Getting down to basics 13 GPU profiling and tools PART 4 HIGH PERFORMANCE COMPUTING ECOSYSTEMS 14 Affinity: Truce with the kernel 15 Batch schedulers: Bringing order to chaos 16 File operations for a parallel world 17 Tools and resources for better code

More starkly than any other contemporary social conflict, the crisis in South Africa highlights the complexities and conflicts in race, gender, class, and nation. These original articles, most of which were written by South African authors, are from a special issue of the Radical History Review, published in Spring 1990, that mapped the development of interpretations of the South African past that depart radically from the official history. The articles range from the politics of black movements in the nineteenth and twentieth centuries to studies of film, television, and theater as reflections of modern social conflict. History from South Africa is presented in two main sections: discussions of the historiography of South Africa from the viewpoint of those rewriting it with a radical outlook; and investigations into popular history and popular culture—the production and reception of history in the public realm. In addition, two photo essays dramatize this history visually; maps and a chronology complete the presentation. The book provides a fresh look at major issues in South African social and labor history and popular culture, and focuses on the role of historians in creating and interacting with a popular movement of resistance and social change. Summary The Spark distributed data processing platform provides an easy-to-implement tool for ingesting, streaming, and processing data from any source. In Spark in Action, Second Edition, you'll learn to take advantage of Spark's core features and incredible processing speed, with applications including real-time computation, delayed evaluation, and machine learning. Spark skills are a hot commodity in enterprises worldwide, and with Spark's powerful and flexible Java APIs, you can reap all the benefits without first learning Scala or Hadoop. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Analyzing enterprise data starts by reading, filtering, and merging files and streams from many sources. The Spark data processing engine handles this varied volume like a champ, delivering speeds 100 times faster than Hadoop systems. Thanks to SQL support, an intuitive

interface, and a straightforward multilanguage API, you can use Spark without learning a complex new ecosystem. About the book Spark in Action, Second Edition, teaches you to create end-to-end analytics applications. In this entirely new book, you'll learn from interesting Java-based examples, including a complete data pipeline for processing NASA satellite data. And you'll discover Java, Python, and Scala code samples hosted on GitHub that you can explore and adapt, plus appendixes that give you a cheat sheet for installing tools and understanding Spark-specific terms. What's inside Writing Spark applications in Java Spark application architecture Ingestion through files, databases, streaming, and Elasticsearch Querying distributed datasets with Spark SQL About the reader This book does not assume previous experience with Spark, Scala, or Hadoop. About the author Jean-Georges Perrin is an experienced data and software architect. He is France's first IBM Champion and has been honored for 12 consecutive years. Table of Contents PART 1 - THE THEORY CRIPPLED BY AWESOME EXAMPLES 1 So, what is Spark, anyway? 2 Architecture and flow 3 The majestic role of the dataframe 4 Fundamentally lazy 5 Building a simple app for deployment 6 Deploying your simple app PART 2 - INGESTION 7 Ingestion from files 8 Ingestion from databases 9 Advanced ingestion: finding data sources and building your own 10 Ingestion through structured streaming PART 3 - TRANSFORMING YOUR DATA 11 Working with SQL 12 Transforming your data 13 Transforming entire documents 14 Extending transformations with user-defined functions 15 Aggregating your data PART 4 - GOING FURTHER 16 Cache and checkpoint: Enhancing Spark's performances 17 Exporting data and building full data pipelines 18 Exploring deployment

This second edition of Lucky Strikes and a Three Martini Lunch: Thinking About Television's Mad Men explores the attributes of the AMC series that allow it to be such a popular and vital contribution to contemporary cultural discourse. Set in the 1960s in New York, the Emmy and Peabody-winning series follows the competitive, seductive, and oftentimes ruthless lives of the men and women of Madison Avenue's advertising agencies. Many alluring and captivating qualities constitute the Mad Men experience: the way it evokes nostalgia, even from those who did not live in the era being portrayed; its interrogations of identities, and how these explorations of the past illuminate viewers' concepts of the present; the compelling (and often heartbreaking) relationships between characters trying to make their way in an ever-changing and increasingly complex world; and the titillation of the characters' discovery of the power of mass-mediated communication and its abilities to allow learning, information sharing, manipulation, and connection, not to mention how their journeys reflect our own in contemporary society. The essays collected in this volume speak to both fans of the show who may not typically embrace theory and criticism, as well as those who do. Additionally, this version was designed with educators in mind. It still includes engaging essays that critically analyze the show from a multitude of perspectives, but now they are organized in way to facilitate easy use in the classroom. This structure allows educators to simply construct and conduct a course using this book as a primary textbook and organize the course according to the way it is laid out. Each chapter provides any type of reader with the opportunity to think about and enjoy the show even after it is no longer on the air.

Summary Groovy in Action, Second Edition is a thoroughly revised, comprehensive guide to Groovy programming. It introduces Java developers to the dynamic features that Groovy provides, and shows how to apply Groovy to a range of tasks including building new apps, integration with existing code, and DSL development. Covers Groovy 2.4. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology In the last ten years, Groovy has become an integral part of a Java developer's toolbox. Its comfortable, common-sense design, seamless integration with Java, and rich ecosystem that includes the Grails web framework, the Gradle build system, and Spock testing platform have created a large Groovy community About the Book Groovy in Action,

Second Edition is the undisputed definitive reference on the Groovy language. Written by core members of the Groovy language team, this book presents Groovy like no other can—from the inside out. With relevant examples, careful explanations of Groovy's key concepts and features, and insightful coverage of how to use Groovy in-production tasks, including building new applications, integration with existing code, and DSL development, this is the only book you'll need. Updated for Groovy 2.4. Some experience with Java or another programming language is helpful. No Groovy experience is assumed. What's Inside Comprehensive coverage of Groovy 2.4 including language features, libraries, and AST transformations Dynamic, static, and extensible typing Concurrency: actors, data parallelism, and dataflow Applying Groovy: Java integration, XML, SQL, testing, and domain-specific language support Hundreds of reusable examples About the Authors Authors Dierk König, Paul King, Guillaume Laforge, Hamlet D'Arcy, Cédric Champeau, Erik Pragt, and Jon Skeet are intimately involved in the creation and ongoing development of the Groovy language and its ecosystem. Table of Contents PART 1 THE GROOVY LANGUAGE Your way to Groovy Overture: Groovy basics Simple Groovy datatypes Collective Groovy datatypes Working with closures Groovy control structures Object orientation, Groovy style Dynamic programming with Groovy Compile-time metaprogramming and AST transformations Groovy as a static language PART 2 AROUND THE GROOVY LIBRARY Working with builders Working with the GDK Database programming with Groovy Working with XML and JSON Interacting with Web Services Integrating Groovy PART 3 APPLIED GROOVY Unit testing with Groovy Concurrent Groovy with GPars Domain-specific languages The Groovy ecosystem

The official book on the Rust programming language, written by the Rust development team at the Mozilla Foundation, fully updated for Rust 2018. The Rust Programming Language is the official book on Rust: an open source systems programming language that helps you write faster, more reliable software. Rust offers control over low-level details (such as memory usage) in combination with high-level ergonomics, eliminating the hassle traditionally associated with low-level languages. The authors of The Rust Programming Language, members of the Rust Core Team, share their knowledge and experience to show you how to take full advantage of Rust's features--from installation to creating robust and scalable programs. You'll begin with basics like creating functions, choosing data types, and binding variables and then move on to more advanced concepts, such as: • Ownership and borrowing, lifetimes, and traits • Using Rust's memory safety guarantees to build fast, safe programs • Testing, error handling, and effective refactoring • Generics, smart pointers, multithreading, trait objects, and advanced pattern matching • Using Cargo, Rust's built-in package manager, to build, test, and document your code and manage dependencies • How best to use Rust's advanced compiler with compiler-led programming techniques You'll find plenty of code examples throughout the book, as well as three chapters dedicated to building complete projects to test your learning: a number guessing game, a Rust implementation of a command line tool, and a multithreaded server. New to this edition: An extended section on Rust macros, an expanded chapter on modules, and appendixes on Rust development tools and editions.

Rust in Action introduces the Rust programming language by exploring numerous systems programming concepts and techniques.You'll be learning Rust by delving into how computers work under the hood. You'll find yourself playing with

persistent storage, memory, networking and even tinkering with CPU instructions. The book takes you through using Rust to extend other applications and teaches you tricks to write blindingly fast code. You'll also discover parallel and concurrent programming. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Building software is harder than ever. As a developer, you not only have to chase ever-changing technological trends but also need to understand the business domains behind the software. This practical book provides you with a set of core patterns, principles, and practices for analyzing business domains, understanding business strategy, and, most importantly, aligning software design with its business needs. Author Vlad Khononov shows you how these practices lead to robust implementation of business logic and help to future-proof software design and architecture. You'll examine the relationship between domain-driven design (DDD) and other methodologies to ensure you make architectural decisions that meet business requirements. You'll also explore the real-life story of implementing DDD in a startup company. With this book, you'll learn how to: Analyze a company's business domain to learn how the system you're building fits its competitive strategy Use DDD's strategic and tactical tools to architect effective software solutions that address business needs Build a shared understanding of the business domains you encounter Decompose a system into bounded contexts Coordinate the work of multiple teams Gradually introduce DDD to brownfield projects

The new edition of this leading reader for courses in American foreign policy offers students an up-to-date, highly accessible introduction to the broad array of domestic factors influencing U.S. policymakers. Editor James M. McCormick has carefully selected two dozen current insightful and sometimes controversial essays by a distinguished group of leading experts— scholars, journalists and public officials—including 11 new and 7 updated contributions. In his introduction, McCormick evaluates the challenges facing U.S. foreign policy makers in recent years and assesses the Obama Administration's successes and failures in its efforts to pursue a new direction in American foreign policy. The volume is then divided into three major parts with an opening essay by the editor to place each part in context and then a selection of essays that analyzes the topic in that part in more detail. Part I, "The Societal Environment," contains a series of articles on the position of interest groups, the impact of military experience, the effect of public opinion, and the role of elections and political parties on foreign policy. Part II, "The Institutional Setting," examines how various political institutions, such as Congress, the presidency, and various bureaucracies (e.g., the National Security Council, the intelligence community) shape American foreign policy. Part III, "Decision makers and Their Policymaking Positions," provides various case analyses over several administrations to illustrate how individuals and bureaucracies affect the foreign policy decision making at the highest levels of government.

Summary Solr in Action is a comprehensive guide to implementing scalable search using Apache Solr. This clearly written book walks you through well-documented examples ranging from basic keyword searching to scaling a system for billions of documents and queries. It will give you a deep understanding of how to implement core Solr capabilities. About the Book Whether you're handling big (or small) data, managing documents, or building a website, it is important to be able to quickly search through your content and discover meaning in it. Apache Solr is your tool: a ready-to-deploy, Lucene-based, open source, full-text search engine. Solr can scale across many servers to enable real-time queries and data analytics across billions of documents. Solr in Action teaches you to implement scalable search using Apache Solr. This easy-to-read guide balances conceptual discussions with practical examples to show you how to implement all of Solr's core capabilities. You'll master topics like text analysis, faceted search, hit highlighting, result grouping, query suggestions, multilingual search, advanced geospatial and data operations, and relevancy tuning. This book assumes basic knowledge of Java and standard database technology. No prior knowledge of Solr or Lucene is required. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside How to scale Solr for big data Rich real-world examples Solr as a NoSQL data store Advanced multilingual, data, and relevancy tricks Coverage of versions through Solr 4.7 About the Authors Trey Grainger is a director of engineering at CareerBuilder. Timothy Potter is a senior member of the engineering team at LucidWorks. The authors work on the scalability and reliability of Solr, as well as on recommendation engine and big data analytics technologies. Table of Contents PART 1 MEET SOLR Introduction to Solr Getting to know Solr Key Solr concepts Configuring Solr Indexing Text analysis PART 2 CORE SOLR CAPABILITIES Performing queries and handling results Faceted search Hit highlighting Query suggestions Result grouping/field collapsing Taking Solr to production PART 3 TAKING SOLR TO THE NEXT LEVEL SolrCloud Multilingual search Complex query operations Mastering relevancy
Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands, providing a comfortable Python experience that gets you started quickly and then grows with you as you—and your deep learning skills—become more sophisticated. Deep Learning with PyTorch will make that journey engaging and fun. Summary Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands, providing a comfortable Python experience that gets you started quickly and then grows with you as you—and your deep learning skills—become more sophisticated. Deep Learning with PyTorch will make that journey engaging and fun. Foreword by Soumith Chintala, Cocreator of PyTorch. Purchase of the print book includes a free eBook in PDF, Kindle,

and ePub formats from Manning Publications. About the technology Although many deep learning tools use Python, the PyTorch library is truly Pythonic. Instantly familiar to anyone who knows PyData tools like NumPy and scikit-learn, PyTorch simplifies deep learning without sacrificing advanced features. It's excellent for building quick models, and it scales smoothly from laptop to enterprise. Because companies like Apple, Facebook, and JPMorgan Chase rely on PyTorch, it's a great skill to have as you expand your career options. It's easy to get started with PyTorch. It minimizes cognitive overhead without sacrificing the access to advanced features, meaning you can focus on what matters the most - building and training the latest and greatest deep learning models and contribute to making a dent in the world. PyTorch is also a snap to scale and extend, and it partners well with other Python tooling. PyTorch has been adopted by hundreds of deep learning practitioners and several first-class players like FAIR, OpenAI, FastAI and Purdue. About the book Deep Learning with PyTorch teaches you to create neural networks and deep learning systems with PyTorch. This practical book quickly gets you to work building a real-world example from scratch: a tumor image classifier. Along the way, it covers best practices for the entire DL pipeline, including the PyTorch Tensor API, loading data in Python, monitoring training, and visualizing results. After covering the basics, the book will take you on a journey through larger projects. The centerpiece of the book is a neural network designed for cancer detection. You'll discover ways for training networks with limited inputs and start processing data to get some results. You'll sift through the unreliable initial results and focus on how to diagnose and fix the problems in your neural network. Finally, you'll look at ways to improve your results by training with augmented data, make improvements to the model architecture, and perform other fine tuning. What's inside Training deep neural networks Implementing modules and loss functions Utilizing pretrained models from PyTorch Hub Exploring code samples in Jupyter Notebooks About the reader For Python programmers with an interest in machine learning. About the author Eli Stevens had roles from software engineer to CTO, and is currently working on machine learning in the self-driving-car industry. Luca Antiga is cofounder of an AI engineering company and an AI tech startup, as well as a former PyTorch contributor. Thomas Viehmann is a PyTorch core developer and machine learning trainer and consultant. consultant based in Munich, Germany and a PyTorch core developer. Table of Contents PART 1 - CORE PYTORCH 1 Introducing deep learning and the PyTorch Library 2 Pretrained networks 3 It starts with a tensor 4 Real-world data representation using tensors 5 The mechanics of learning 6 Using a neural network to fit the data 7 Telling birds from airplanes: Learning from images 8 Using convolutions to generalize PART 2 - LEARNING FROM IMAGES IN THE REAL WORLD: EARLY DETECTION OF LUNG CANCER 9 Using PyTorch to fight cancer 10 Combining data sources into a unified dataset 11 Training a classification model to detect suspected tumors 12 Improving training with metrics and augmentation 13 Using segmentation to find suspected nodules 14 End-to-end nodule analysis, and where

to go next PART 3 - DEPLOYMENT 15 Deploying to production

This book presents an analysis of the foundations organised by the Birla family in India. Several generations were involved in the renovation and establishment of sanctuaries, temples and other sacral buildings. As a result, between 1933 and 1998, nineteen Birla Mandirs were established, mainly in northern and central India. All the temples have the capacity to surprise with their various decorative motifs, not seen in other places, which – apart from their aesthetic function – above all bear important symbolic content. Therefore, is it possible to treat the Birla Mandirs as a specific medium – the carrier of a particular message that is not only religious, but with a significance that permeates other layers of social and political discourse. This message, as the authors of the book claim, have a bearing on the socio-political thought of India – supported by the creation and propagation of ideas related to identity and a national art. It also conveys the idea of hierarchical Hindu inclusivism which, although considering all religions as equal, treats Hinduism in a unique way – seeing within it the most perfect form of religion, giving man the opportunity to learn the highest truth. The book also examines whether the temples founded by the Birla family and the religious activities undertaken therein apply the concept of "inventing" tradition, and whether traditions created (or "modernised") in contemporary times are a way of enhancing the appeal of the message conveyed from temple to society. "The Vastness of Culture" is a series of publications presenting cultural studies and emphasizing the role of comparative research and analyses that reveal similarities, differences and intercultural influences. In our publications, cultures and civilizations are in a state of constant flux, engaging in dialogue, creating new understandings, competing for meaning under the influence of global content, without any clear boundaries, but with a vastness that forces questions to be raised.

Summary Get Programming with JavaScript is a hands-on introduction to programming for readers who have never programmed. You'll be writing your own web apps, games, and programs in no time! Foreword by Remy Sharp. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book Are you ready to start writing your own web apps, games, and programs? You're in the right place! Get Programming with JavaScript is a hands-on introduction to programming for readers who have never written a line of code. Since you're just getting started, this friendly book offers you lots of examples backed by careful explanations. As you go along, you'll find exercises to check your understanding and plenty of opportunities to practice your new skills. You don't need anything special to follow the examples—just the text editor and web browser already installed on your computer. We even give you links to working online code so you can see how everything should look live on your screen. What's Inside All the basics—objects, functions, responding to users, and more Think like a coder and design your own programs Create a text-based adventure game Enhance web pages with JavaScript Run your programs in a web

browser Four bonus chapters available online About the Reader No experience required! All you need is a web browser and an internet connection. About the Author John Larsen is a mathematics and computing teacher with an interest in educational research. He has an MA in mathematics and an MSc in information technology. He started programming in 1982, writing simple programs for teaching mathematics in 1993, building websites in 2001, and developing data-driven web-based applications for education in 2006. Table of Contents PART 1 CORE CONCEPTS ON THE CONSOLE Programming, JavaScript, and JS Bin Variables: storing data in your program Objects: grouping your data Functions: code on demand Arguments: passing data to functions Return values: getting data from functions Object arguments: functions working with objects Arrays: putting data into lists Constructors: building objects with functions Bracket notation: flexible property names PART 2 ORGANIZING YOUR PROGRAMS Scope: hiding information Conditions: choosing code to run Modules: breaking a program into pieces Models: working with data Views: displaying data Controllers: linking models and views PART 3 JAVASCRIPT IN THE BROWSER HTML: building web pages Controls: getting user input Templates: filling placeholders with data XHR: loading data Conclusion: get programming with JavaScript BONUS ONLINE CHAPTERS Node: running JavaScript outside the browser Express: building an API Polling: repeating requests with XHR Socket.IO: real-time messaging

"For technology and business readers. No prior SSI, cryptography, or blockchain experience required"--Back cover.

This volume provides the first detailed biography Percy Manning (1870-1917), an Oxford antiquary who amassed enormous collections about the history of Oxford and Oxfordshire.

Climate change over the past thousands of years is undeniable, but debate has arisen about its impact on past human societies. This book explores the link between climate and society in ancient worlds, focusing on the ancient economies of western Eurasia and northern Africa from the fourth millennium BCE up to the end of the first millennium CE. This book contributes to the multi-disciplinary debate between scholars working on climate and society from various backgrounds. The chronological boundaries of the book are set by the emergence of complex societies in the Neolithic on the one end and the rise of early-modern states in global political and economic exchange on the other. In order to stimulate comparison across the boundaries of modern periodization, this book ends with demography and climate change in early-modern and modern Italy, a society whose empirical data allows the kind of statistical analysis that is impossible for ancient societies. The book highlights the role of human agency, and the complex interactions between the natural environment and the socio-cultural, political, demographic, and economic infrastructure of any given society. It is intended for a wide audience of scholars and students in ancient economic history, specifically Rome and Late Antiquity.

Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure.

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

Field-tested tips, tricks, and design patterns for building Machine Learning projects that are deployable, maintainable, and secure from concept to production. Machine Learning Engineering in Action lays out an approach to building deployable, maintainable production machine learning systems. You'll adopt software development standards that deliver better code management, and make it easier to test, scale, and even reuse your machine learning code! You'll learn how to plan and scope your project, manage cross-team logistics that avoid fatal communication failures, and design your code's architecture for improved resilience. You'll even discover when not to use machine learning—and the

alternative approaches that might be cheaper and more effective. When you're done working through this toolbox guide, you'll be able to reliably deliver cost-effective solutions for organizations big and small alike. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Indonesia enters the new millennium at a time of transition. It has experienced several crises - in particular the economic crisis of 1997-98, a severe intensification of its environmental degradation, and more recently the East Timor crisis, the ongoing Aceh demand for independence, the change of government from the autocratic Soeharto regime to one democratically elected and under the leadership of President Abdurrahman Wahid, and the outbreak of a number of violent communal conflicts. These crises were separate but have interlinked social and political dynamics. This major volume is the first wide-ranging analysis of recent developments. It analyses the social and political dimensions of reformation: poverty and income, environment and livelihood, civil society and legal institutions, and Islam and politics. Contributors include Indonesian and Australian scholars from a range of social science disciplines.

Covers topics such as using Asynchronous Delegates, controlling thread execution, handling errors, protecting data, coordinating threads, and using ThreadPools.

The latest work from respected family policy expert Shirley Zimmerman. Family Policy offers the only single-authored reference book to provide a comprehensive and coherent introduction to the topic. The author clearly and cogently guides students through the foundations, policy frameworks, and implications of policy decisions for family well-being, ending with a carefully considered set of conclusions and implications for policy practice.

Pro Spring updates the perennial bestseller with the latest that the Spring Framework 4 has to offer. Now in its fourth edition, this popular book is by far the most comprehensive and definitive treatment of Spring available. With Pro Spring, you'll learn Spring basics and core topics, and share the authors' insights and real–world experiences with remoting, Hibernate, and EJB. Beyond the basics, you'll learn how to leverage the Spring Framework to build the various tiers or parts of an enterprise Java application: transactions, web and presentation tiers, deployment, and much more. A full sample application allows you to apply many of the technologies and techniques covered in this book and see how they work together. The agile, lightweight, open-source Spring Framework continues to be the de facto leading enterprise Java application development framework for today's Java programmers and developers. It works with other leading open-source, agile, and lightweight Java technologies such as Hibernate, Groovy, MyBatis, and more. Spring now works with Java EE and JPA 2 as well. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom.

JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that

demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. Summary JUnit is the gold standard for unit testing Java applications. Filled with powerful new features designed to automate software testing, JUnit 5 boosts your productivity and helps avoid debugging nightmares. Whether you're just starting with JUnit or you want to ramp up on the new features, JUnit in Action, Third Edition has you covered. Extensively revised with new code and new chapters, JUnit in Action, Third Edition is an up-to-date guide to smooth software testing. Dozens of hands-on examples illustrate JUnit 5's innovations for dependency injection, nested testing, parameterized tests, and more. Throughout, you'll learn how to use JUnit 5 to automate your testing, for a process that consumes less resources, and gives you more time for developing. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology The JUnit framework is the gold standard for unit testing Java applications—and knowing it is an essential skill for Java developers. The latest version, JUnit 5, is a total overhaul, now supporting modern Java features like Lambdas and Streams. About the book JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. You'll benefit from author Catalin Tudose's unique "pyramid" testing strategy, which breaks the testing process into layers and sets you on the path to bug-free code creation. What's inside Migrating from JUnit 4 to 5 Effective test automation Test-driven development and behavior-driven development Using mocks for test isolation Connecting JUnit 5 with Maven or Gradle About the reader For intermediate Java developers. About the author Catalin Tudose has a Ph.D. in Computer Science, and over 15 years of experience as a Senior Java Developer and Technical Team Lead. Previous editions were authored by Petar Tahchiev, Felipe Leme, Gary Gregory, and Vincent Massol. Table of Contents PART 1 - JUNIT 1 JUnit jump-start 2 Exploring core JUnit 3 JUnit architecture 4 Migrating from JUnit 4 to JUnit 5 5 Software testing principles PART 2 - DIFFERENT TESTING STRATEGIES 6 Test quality 7 Coarse-grained testing with stubs 8 Testing with mock objects 9 In-container testing PART 3 - WORKING WITH JUNIT 5 AND OTHER TOOLS 10 Runing JUnit tests from Maven 3 11 Running JUnit tests from Gradle 6 12 JUnit 5 IDE support 13 Coninuous integration with JUnit 5 PART 4 - WORKING WITH MODERN FRAMEWORKS AND JUNIT 5 14 JUnit 5 extension model 15 Presentation-layer testing 16 Testing Spring applications 17 Testing Spring Boot applications 18 Testing a REST API 19 Testing database applications PART 5 - DEVELOPING APPLICATIONS WITH JUNIT 5 20 Test-driven development with JUnit 5 21 Behavior-driven development in JUnit 5 22 Implementing a test pyramid strategy with JUnit 5

Summary Aurelia in Action teaches you how to build fantastic single-page applications with the Aurelia framework. You'll learn about modern design practices and a modular architecture based on web components, perfect for hybrid web +

mobile apps. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Try Aurelia, and you may not go back to your old web framework. Flexible and efficient, Aurelia enforces modern design practices and a modular architecture based on web components. It's perfect for hybrid web + mobile apps, with hot features like dynamic routes, pluggable pipelines, and APIs for nearly every flavor of JavaScript. About the Book Aurelia in Action teaches you how to build extraordinary web applications using the Aurelia framework. You'll immediately take advantage of key elements like web components and decorators when you start to explore the book's running example: a virtual bookshelf. As the app unfolds, you'll dig into templating and data binding the Aurelia way. To complete the project, you'll take on routing and HTTP, along with tuning, securing, and deploying your finished product. What's Inside Templating and data-binding Communication between components Server-side and SPA design techniques View composition About the Reader Written for developers comfortable with JavaScript and MVC-style web development. About the Author Sean Hunter is a web developer with nearly 10 years of experience. He's extremely passionate about all things Aurelia and has been working with the framework in production since the early beta days. Sean got a taste for teaching developers how to get started with Aurelia while visiting user groups across the UK, and he's been excited to expand on this teaching effort with this book. These days, Sean is working in a variety of web-development technologies with companies across Australia, and he blogs at https://sean-hunter.io. Table of Contents PART 1 - INTRODUCTION TO AURELIA Introducing Aurelia Building your first Aurelia application PART 2 - EXPLORING AURELIA View resources, custom elements, and custom attribute Aurelia templating and data bindin Value converters and binding behaviors Intercomponent communication Working with forms Working with HTTP Routing Authentication Dynamic composition Web Components and Aurelia Extending Aurelia Animation PART 3 - AURELIA IN THE REAL WORLD Testing Deploying Aurelia applications

Summary OpenCL in Action is a thorough, hands-on presentation of OpenCL, with an eye toward showing developers how to build high-performance applications of their own. It begins by presenting the core concepts behind OpenCL, including vector computing, parallel programming, and multi-threaded operations, and then guides you step-by-step from simple data structures to complex functions. About the Technology Whatever system you have, it probably has more raw processing power than you're using. OpenCL is a high-performance programming language that maximizes computational power by executing on CPUs, graphics processors, and other number-crunching devices. It's perfect for speed-sensitive tasks like vector computing, matrix operations, and graphics acceleration. About this Book OpenCL in Action blends the theory of parallel computing with the practical reality of building high-performance applications using OpenCL. It first guides you through the fundamental data structures in an intuitive manner. Then, it explains techniques

for high-speed sorting, image processing, matrix operations, and fast Fourier transform. The book concludes with a deep look at the all-important subject of graphics acceleration. Numerous challenging examples give you different ways to experiment with working code. A background in C or C++ is helpful, but no prior exposure to OpenCL is needed. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside Learn OpenCL step by step Tons of annotated code Tested algorithms for maximum performance *********** Table of Contents PART 1 FOUNDATIONS OF OPENCL PROGRAMMING Introducing OpenCL Host programming: fundamental data structures Host programming: data transfer and partitioning Kernel programming: data types and device memory Kernel programming: operators and functions Image processing Events, profiling, and synchronization Development with C++ Development with Java and Python General coding principles PART 2 CODING PRACTICAL ALGORITHMS IN OPENCL Reduction and sorting Matrices and QR decomposition Sparse matrices Signal processing and the fast Fourier transform PART 3 ACCELERATING OPENGL WITH OPENCL Combining OpenCL and OpenGL Textures and renderbuffers

Written for IT and business professionals, this book provides the technical and business insight needed to plan, deploy and manage the services provided by the Microsoft Azure cloud. Find out how to integrate the infrastructure-as-a-service (IaaS) and platform-as-a-service (PaaS) models with your existing business infrastructure while maximizing availability, ensuring continuity and safety of your data, and keeping costs to a minimum. The book starts with an introduction to Microsoft Azure and how it differs from Office 365—Microsoft's 'other' cloud. You'll also get a useful overview of the services available. Part II then takes you through setting up your Azure account, and gets you up-and-running on some of the core Azure services, including creating web sites and virtual machines, and choosing between fully cloud-based and hybrid storage solutions, depending on your needs. Part III now takes an in-depth look at how to integrate Azure with your existing infrastructure. The authors, Anthony Puca, Mike Manning, Brent Rush, Marshall Copeland and Julian Soh, bring their depth of experience in cloud technology and customer support to guide you through the whole process, through each layer of your infrastructure from networking to operations. High availability and disaster recovery are the topics on everyone's minds when considering a move to the cloud, and this book provides key insights and step-by-step guidance to help you set up and manage your resources correctly to optimize for these scenarios. You'll also get expert advice on migrating your existing VMs to Azure using InMage, mail-in and the best 3rd party tools available, helping you ensure continuity of service with minimum disruption to the business. In the book's final chapters, you'll find cutting edge examples of cloud technology in action, from machine learning to business intelligence, for a taste of some exciting ways your business could benefit from your new Microsoft Azure deployment.

Statistical approaches to processing natural language text have become dominant in recent years. This foundational text is the first comprehensive introduction to statistical natural language processing (NLP) to appear. The book contains all the theory and algorithms needed for building NLP tools. It provides broad but rigorous coverage of mathematical and linguistic foundations, as well as detailed discussion of statistical methods, allowing students and researchers to construct their own implementations. The book covers collocation finding, word sense disambiguation, probabilistic parsing, information retrieval, and other applications.

Summary This third revision of Manning's popular The Quick Python Book offers a clear, crisp updated introduction to the elegant Python programming language and its famously easy-to-read syntax. Written for programmers new to Python, this latest edition includes new exercises throughout. It covers features common to other languages concisely, while introducing Python's comprehensive standard functions library and unique features in detail. Foreword by Nicholas Tollervey, Python Software Foundation. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Initially Guido van Rossum's 1989 holiday project, Python has grown into an amazing computer language. It's a joy to learn and read, and powerful enough to handle everything from low-level system resources to advanced applications like deep learning. Elegantly simple and complete, it also boasts a massive ecosystem of libraries and frameworks. Python programmers are in high demand/mdash;you can't afford not to be fluent! About the Book The Quick Python Book, Third Edition is a comprehensive guide to the Python language by a Python authority, Naomi Ceder. With the personal touch of a skilled teacher, she beautifully balances details of the language with the insights and advice you need to handle any task. Extensive, relevant examples and learn-by-doing exercises help you master each important concept the first time through. Whether you're scraping websites or playing around with nested tuples, you'll appreciate this book's clarity, focus, and attention to detail. What's Inside Clear coverage of Python 3 Core libraries, packages, and tools In-depth exercises Five new data science-related chapters About the Reader Written for readers familiar with programming concepts--no Python experience assumed. About the Author Naomi Ceder is chair of the Python Software Foundation. She has been learning, using, and teaching Python since 2001.
Table of Contents PART 1 - STARTING OUT 1. About Python 2. Getting started 3. The Quick Python overview PART 2 - THE ESSENTIALS 4. The absolute basics 5. Lists, tuples, and sets 6. Strings 7. Dictionaries 8. Control flow 9. Functions 10. Modules and scoping rules 11. Python programs 12. Using the filesystem 13. Reading and writing files 14. Exceptions PART 3 - ADVANCED LANGUAGE FEATURES 15. Classes and object-oriented programming 16. Regular expressions 17. Data types as objects 18. Packages 19. Using Python libraries PART 4 - WORKING WITH DATA 20. Basic file wrangling 21. Processing data files 22. Data over the network 23. Saving data 24. Exploring data

Spring Security in Action shows you how to prevent cross-site scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. Summary While creating secure applications is critically important, it can also be tedious and time-consuming to stitch together the required collection of tools. For Java developers, the powerful Spring Security framework makes it easy for you to bake security into your software from the very beginning. Filled with code samples and practical examples, Spring Security in Action teaches you how to secure your apps from the most common threats, ranging from injection attacks to lackluster monitoring. In it, you'll learn how to manage system users, configure secure endpoints, and use OAuth2 and OpenID Connect for authentication and authorization. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Security is non-negotiable. You rely on Spring applications to transmit data, verify credentials, and prevent attacks. Adopting "secure by design" principles will protect your network from data theft and unauthorized intrusions. About the book Spring Security in Action shows you how to prevent cross-site scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. What's inside Encoding passwords and authenticating users Securing endpoints Automating security testing Setting up a standalone authorization server About the reader For experienced Java and Spring developers. About the author Laurentiu Spilca is a dedicated development lead and trainer at Endava, with over ten years of Java experience. Table of Contents PART 1 - FIRST STEPS 1 Security Today 2 Hello Spring Security PART 2 - IMPLEMENTATION 3 Managing users 4 Dealing with passwords 5 Implementing authentication 6 Hands-on: A small secured web application 7 Configuring authorization: Restricting access 8 Configuring authorization: Applying restrictions 9 Implementing filters 10 Applying CSRF protection and CORS 11 Hands-on: A separation of responsibilities 12 How does OAuth 2 work? 13 OAuth 2: Implementing the authorization server 14 OAuth 2: Implementing the resource server 15 OAuth 2: Using JWT and cryptographic signatures 16 Global method security: Pre- and postauthorizations 17 Global method security: Pre- and postfiltering 18 Hands-on: An OAuth 2 application 19 Spring Security for reactive apps 20 Spring Security testing Class-tested and coherent, this textbook teaches classical and web information retrieval, including web search and the related areas of text classification and text clustering from basic concepts. It gives an up-to-date treatment of all aspects of the design and

implementation of systems for gathering, indexing, and searching documents; methods for evaluating systems; and an introduction to the use of machine learning methods on text collections. All the important ideas are explained using examples and figures, making it perfect for introductory courses in information retrieval for advanced undergraduates and graduate students in computer science. Based on feedback from extensive classroom experience, the book has been carefully structured in order to make teaching more natural and effective. Slides and additional exercises (with solutions for lecturers) are also available through the book's supporting website to help course instructors prepare their lectures.

Even experienced developers struggle with software systems that sprawl across distributed servers and APIs, are filled with redundant code, and are difficult to reliably test and modify. Grokking Simplicity is a friendly, practical guide that will change the way you approach software design and development. Even experienced developers struggle with software systems that sprawl across distributed servers and APIs, are filled with redundant code, and are difficult to reliably test and modify. Grokking Simplicity is a friendly, practical guide that will change the way you approach software design and development. Grokking Simplicity guides you to a crystal-clear understanding of why certain features of modern software are so prone to complexity and introduces you to the functional techniques you can use to simplify these systems so that they're easier to read, test, and debug. Through hands-on examples, exercises, and numerous self-assessments, you'll learn to organize your code for maximum reusability and internalize methods to keep unwanted complexity out of your codebase. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

To keep programming productive and enjoyable, state-of-the-art practices andprinciples are essential. Object-oriented programming and design help managecomplexity by keeping components cleanly separated. Unit testing helps preventendless, exhausting debugging sessions. Refactoring keeps code supple andreadable. PHP offers all this-and more. PHP in Action shows you how to apply PHP techniques and principles to all themost common challenges of web programming, including: Web presentation and templates User interaction including the Model-View-Contoller architecture Input validation and form handling Database connection and querying and abstraction Object persistence Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.

Research is an increasing priority for workers throughout the mental health sector, and therapeutic communities are no exception. Those working in TCs increasingly have to justify the success and efficiency of their methods to outside bodies, and the prime means of doing so is through research. This volume collects a wide range of papers by experienced contributors discussing all aspects of TC research. They consider questions of which methods are most appropriate in the unique environment of TCs, how research studies affect the TC environment, as well as practical and ethical questions. The book also includes accounts of several research studies undertaken at, among other places, the Cassel Hospital. Taken as a whole, the book will be an invaluable resource for anyone involved in researching therapeutic communities - whether undertaking a study, attempting to anticipate its clinical impact, or seeking to understand the kinds of results which TC research produces.

ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Summary Fully updated to ASP.NET 5.0, ASP.NET Core in Action, Second Edition is a hands-on primer to building cross-platform web applications with your C# and .NET skills. Even if you've never worked with ASP.NET you'll start creating productive cross-platform web apps fast. And don't worry about late-breaking changes to ASP.NET Core. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Build full-stack web applications that run anywhere. Developers love ASP.NET Core for its libraries and pre-built components that maximize productivity. Version 5.0 offers new features for server-side apps, as well as background services for cross-platform development. About the book ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Illustrations and annotated code make learning visual and easy. Master logins, dependency injection, security, and more. This updated edition covers the latest features, including Razor Pages and the new hosting paradigm. What's inside Developing apps for Windows and non-Windows servers Configuring applications Building custom components Logging, testing, and security About the reader For intermediate C# developers. About the author Andrew Lock is a Microsoft MVP who has worked with ASP.NET Core since before its first release. Table of Contents PART 1 - GETTING STARTED WITH ASP.NET CORE 1 Getting started with ASP.NET Core 2 Your first application 3 Handling requests with the middleware pipeline 4 Creating a website with Razor Pages 5 Mapping URLs to Razor Pages using routing 6 The binding model: Retrieving and validating user input 7 Rendering HTML using Razor views 8 Building forms with Tag Helpers 9 Creating a Web API for mobile and client applications using MVC PART 2 - BUILDING COMPLETE APPLICATIONS 10 Service configuration with dependency injection 11 Configuring an ASP.NET Core application 12 Saving data with Entity Framework Core 13 The MVC and Razor Pages filter pipeline 14 Authentication: Adding users to your application with Identity 15 Authorization: Securing your application 16 Publishing and deploying your application PART 3 - EXTENDING YOUR APPLICATIONS 17 Monitoring and troubleshooting errors with logging 18 Improving your application's security 19 Building custom components 20 Building custom MVC and Razor Pages components 21 Calling remote APIs with IHttpClientFactory 22 Building background tasks and services 23 Testing your application
Summary Grokking Deep Learning teaches you to build deep learning neural networks from scratch! In his engaging style, seasoned deep learning expert Andrew Trask shows you the science under the hood, so you grok for yourself every detail of training neural networks. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Deep learning, a branch of artificial intelligence, teaches computers to learn by using neural networks, technology inspired by the human brain. Online text translation, self-driving cars, personalized product recommendations, and virtual voice assistants are just a few of the exciting modern advancements possible thanks to deep learning. About the Book Grokking Deep Learning teaches you to build deep learning neural networks from scratch! In his engaging style, seasoned deep learning expert Andrew Trask shows you the science under the hood, so you grok for yourself

every detail of training neural networks. Using only Python and its math-supporting library, NumPy, you'll train your own neural networks to see and understand images, translate text into different languages, and even write like Shakespeare! When you're done, you'll be fully prepared to move on to mastering deep learning frameworks. What's inside The science behind deep learning Building and training your own neural networks Privacy concepts, including federated learning Tips for continuing your pursuit of deep learning About the Reader For readers with high school-level math and intermediate programming skills. About the Author Andrew Trask is a PhD student at Oxford University and a research scientist at DeepMind. Previously, Andrew was a researcher and analytics product manager at Digital Reasoning, where he trained the world's largest artificial neural network and helped guide the analytics roadmap for the Synthesys cognitive computing platform. Table of Contents Introducing deep learning: why you should learn it Fundamental concepts: how do machines learn? Introduction to neural prediction: forward propagation Introduction to neural learning: gradient descent Learning multiple weights at a time: generalizing gradient descent Building your first deep neural network: introduction to backpropagation How to picture neural networks: in your head and on paper Learning signal and ignoring noise:introduction to regularization and batching Modeling probabilities and nonlinearities: activation functions Neural learning about edges and corners: intro to convolutional neural networks Neural networks that understand language: king - man + woman == ? Neural networks that write like Shakespeare: recurrent layers for variable-length data Introducing automatic optimization: let's build a deep learning framework Learning to write like Shakespeare: long short-term memory Deep learning on unseen data: introducing federated learning Where to go from here: a brief guide

This handbook provides an up-to-date survey of corpus linguistics. Spoken, written, and multimodal corpora serve as the bases for quantitative and qualitative research on many issues of linguistic interest. The two volumes together comprise 61 articles by renowned experts from around the world. They sketch the history of corpus linguistics and its relationship with neighbouring disciplines, show its potential, discuss its problems, and describe various methods of collecting, annotating, and searching corpora, as well as processing corpus data. Key features: up-to-date and complete handbook includes both an overview and detailed discussions gathers together a great number of experts

Provides an accessible introduction to the philosophy of restorative justice and its application in a wide range of settings, demonstrating how it can help to rehabilitate both victims and offenders when harm has been done.

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