Data Science From Scratch First Principles With Python

Algorithms for Data SciencePython Data Science EssentialsJulia for Data ScienceIntroduction to Machine Learning with PythonDeep Learning from ScratchThink StatsData Science Job: How to become a Data ScientistPython Data ScienceDoing Data ScienceData ScienceFundamentals of Data VisualizationPrinciples of Data ScienceCognitive (Internet of) ThingsData Science from ScratchSimilarity Methods in Engineering DynamicsHands-On Machine Learning with Scikit-Learn, Keras, and TensorFlowThe Data Science HandbookData Science for BusinessFoundations of Data ScienceIntroducing Data SciencePractical Statistics for Data ScientistsData Science from ScratchData Science from Scratch with PythonPython Machine Learning for BeginnersData Science with JuliaData Analysis from Scratch with PythonData Science from ScratchPython Data Science HandbookData Science from ScratchData Science from Scratch with PythonYour Religion Is FalseData Science from ScratchHead First Data AnalysisLearning Geospatial Analysis with PythonA Tour of Data ScienceData Science From ScratchPython for Data AnalysisA Hands-On Introduction to Data ScienceData Analysis from Scratch with PythonR for Data Science

Algorithms for Data Science

Learn the techniques and math you need to start making sense of your data About This Book Enhance your knowledge of coding with data science theory for practical insight into data science and analysis More than just a math class, learn how to perform real-world data science tasks with R and Python Create actionable insights and transform raw data into tangible value Who This Book Is For You should be fairly well acquainted with basic algebra and should feel comfortable reading snippets of R/Python as well as pseudo code. You should have the urge to learn and apply the techniques put forth in this book on either your own data sets or those provided to you. If you have the basic math skills but want to apply them in data science or you have good programming skills but lack math, then this book is for you. What You Will Learn Get to know the five most important steps of data science Use your data intelligently and learn how to handle it with care Bridge the gap between mathematics and programming Learn about probability, calculus, and how to use statistical models to control and clean your data and drive actionable results Build and evaluate baseline machine learning models Explore the most effective metrics to determine the success of your machine learning models Create data visualizations that communicate actionable insights Read and apply machine learning concepts to your problems and make actual predictions In Detail Need to turn your skills at programming into effective data science skills? Principles of Data Science is created to help you join the dots between mathematics, programming, and business analysis. With this book, you'll feel confident about asking—and answering—complex and sophisticated questions of your data to move from abstract and raw statistics to actionable ideas. With a unique approach that bridges the gap between mathematics and computer science, this books takes you through the entire data science pipeline. Beginning with cleaning and preparing data, and effective data mining strategies and techniques, you'll move on to build a comprehensive picture of how every piece of the data science puzzle fits together. Learn the fundamentals of computational mathematics and statistics, as well as some pseudocode being used today by data scientists and analysts. You'll get to grips with machine learning, discover the statistical models that help you take control and navigate even the densest datasets, and find out how to create powerful visualizations that communicate what your data means. Style and approach This is an easy-to-understand and accessible tutorial. It is a step-by-step guide with use cases, examples, and illustrations to get you well-versed with the concepts of data science. Along with explaining the

fundamentals, the book will also introduce you to slightly advanced concepts later on and will help you implement these techniques in the real world.

Python Data Science Essentials

***** BUY NOW (Will soon return to 35.59) ******Free eBook for customers who purchase the print book from Amazon****** Are you thinking of learning data science from scratch using Python? If you are looking for a complete step by step guide to data science using Python from scratch, this book is for you.After his great success with his first book "Data Analysis from Scratch with Python", Peters Morgan publish his second book focusing now in data science and machine learning. It is considered by practitioners as the easiest guide ever written in this domain. From AI Sciences Publisher Our books may be the best one for beginners; it's a step-by-step guide for any person who wants to start learning Artificial Intelligence and Data Science from scratch. If you need to see the quality of our job, AI Sciences Company offering you a free eBook in Machine Learning with Python written by Alain Kaufmann at https://aisciences.lpages.co/ai-science-l1/.To get the most out of the concepts that would be covered, readers are advised to adopt hands on approach, which would lead to better mental representations. Step By Step Guide and Visual Illustrations and Examples The Book give complete instructions for manipulating, processing, cleaning, modeling and crunching datasets in Python. This is a hands-on guide with practical case studies of data analysis problems effectively. You will learn pandas, NumPy, IPython, and Jupiter in the Process. Target Users Target UsersThe most suitable users would include: Beginners who want to approach data science, but are too afraid of complex math to start Newbies in computer science techniques and data science Professionals in data science and social sciences Professors, lecturers or tutors who are looking to find better ways to explain the content to their students in the simplest and easiest way Students and academicians, especially those focusing on data science What's Inside This Book? Part 1: Data Science Fundamentals, Concepts and Algorithms Introduction Statistics Probability Bayes' Theorem and Naïve Bayes Algorithm Asking the Right Question Data Acquisition Data Preparation Data Exploration Data Modelling Data Presentation Supervised Learning Algorithms Unsupervised Learning Algorithms Semi-supervised Learning Algorithms Reinforcement Learning Algorithms Overfitting and Underfitting Correctness The Bias-Variance Trade-off Feature Extraction and Selection Part 2: Data Science in Practice Overview of Python Programming Language Python Data Science Tools Jupyter Notebook Numerical Python (Numpy) Pandas Scientific Python (Scipy) Matplotlib Scikit-Learn K-Nearest Neighbors Naive Bayes Simple and Multiple Linear Regression Logistic Regression GLM models Decision Trees and Random forest Perceptrons Backpropagation Clustering Natural Language Processing Frequently Asked Questions Q: Is this book for me and do I need programming experience?A: if you want to smash Python for data science and machine learning, this book is for you. Little programming experience is required. If you already wrote a few lines of code and recognize basic programming statements, you'll be OK.Q: Can I have a refund if this book is not fitted for me?A: Yes, Amazon refund you if you aren't satisfied, for more information about the amazon refund service please go to the amazon help platform. We will also be happy to help you if you send us an email at contact@aisciences.net.

Julia for Data Science

Written by renowned data science experts Foster Provost and Tom Fawcett, Data Science for Business introduces the fundamental principles of data science, and walks you through the "data-analytic thinking" necessary for extracting useful knowledge and business value from the data you collect. This guide also helps you understand the many data-mining techniques in use

today. Based on an MBA course Provost has taught at New York University over the past ten years, Data Science for Business provides examples of real-world business problems to illustrate these principles. You'll not only learn how to improve communication between business stakeholders and data scientists, but also how participate intelligently in your company's data science projects. You'll also discover how to think data-analytically, and fully appreciate how data science methods can support business decision-making. Understand how data science fits in your organization—and how you can use it for competitive advantage Treat data as a business asset that requires careful investment if you're to gain real value Approach business problems data-analytically, using the data-mining process to gather good data in the most appropriate way Learn general concepts for actually extracting knowledge from data Apply data science principles when interviewing data science job candidates

Introduction to Machine Learning with Python

Become an efficient data science practitioner by understanding Python's key concepts About This Book Quickly get familiar with data science using Python 3.5 Save time (and effort) with all the essential tools explained Create effective data science projects and avoid common pitfalls with the help of examples and hints dictated by experience Who This Book Is For If you are an aspiring data scientist and you have at least a working knowledge of data analysis and Python, this book will get you started in data science. Data analysts with experience of R or MATLAB will also find the book to be a comprehensive reference to enhance their data manipulation and machine learning skills. What You Will Learn Set up your data science toolbox using a Python scientific environment on Windows, Mac, and Linux Get data ready for your data science project Manipulate, fix, and explore data in order to solve data science problems Set up an experimental pipeline to test your data science hypotheses Choose the most effective and scalable learning algorithm for your data science tasks Optimize your machine learning models to get the best performance Explore and cluster graphs, taking advantage of interconnections and links in your data In Detail Fully expanded and upgraded, the second edition of Python Data Science Essentials takes you through all you need to know to suceed in data science using Python. Get modern insight into the core of Python data, including the latest versions of Jupyter notebooks, NumPy, pandas and scikit-learn. Look beyond the fundamentals with beautiful data visualizations with Seaborn and ggplot, web development with Bottle, and even the new frontiers of deep learning with Theano and TensorFlow. Dive into building your essential Python 3.5 data science toolbox, using a single-source approach that will allow to to work with Python 2.7 as well. Get to grips fast with data munging and preprocessing, and all the techniques you need to load, analyse, and process your data. Finally, get a complete overview of principal machine learning algorithms, graph analysis techniques, and all the visualization and deployment instruments that make it easier to present your results to an audience of both data science experts and business users. Style and approach The book is structured as a data science project. You will always benefit from clear code and simplified examples to help you understand the underlying mechanics and real-world datasets.

Deep Learning from Scratch

Are you interested to get into the programming world? Do you want to learn and understand Python and Machine Learning? Python Machine Learning for Beginners is the guide for you. Python Machine Learning for Beginners is the ultimate guide for beginners looking to learn and understand how Python programming works. Python Machine Learning for Beginners is split up into easy to learn chapters that will help guide the readers through the early stages of

Python programming. It's this thought out and systematic approach to learning which makes Python Machine Learning for Beginners such a sought-after resource for those that want to learn about Python programming and about Machine Learning using an object-oriented programming approach. Inside Python Machine Learning for Beginners you will discover: An introduction to Machine Learning The main concepts of Machine Learning The basics of Python for beginners Machine Learning with Python Data Processing, Analysis, and Visualizations Case studies and much more! Throughout the book, you will learn the basic concepts behind Python programming which is designed to introduce you to Python programming. You will learn about getting started, the keywords and statements, data types and type conversion. Along with different examples, there are also exercises to help ensure that the information sinks in. You will find this book an invaluable tool for starting and mastering Machine Learning using Python. Once you complete Python Machine Learning for Beginners, you will be more than prepared to take on any Python programming. Scroll back up to the top of this page and hit BUY IT NOW to get your copy of Python Machine Learning for Beginners! You won't regret it!

Think Stats

This is a first-principles-based, practical introduction to the fundamentals of data science aimed at the mathematically-comfortable reader with some programming skills. The book covers: The important parts of Python to know The important parts of Math / Probability / Statistics to know The basics of data science How commonly-used data science techniques work (learning by implementing them) What is Map-Reduce and how to do it in Python Other applications such as NLP, Network Analysis, and more

Data Science Job: How to become a Data Scientist

A Tour of Data Science: Learn R and Python in Parallel covers the fundamentals of data science, including programming, statistics, optimization, and machine learning in a single short book. It does not cover everything, but rather, teaches the key concepts and topics in Data Science. It also covers two of the most popular programming languages used in Data Science, R and Python, in one source. Key features: Allows you to learn R and Python in parallel Cover statistics, programming, optimization and predictive modelling, and the popular data manipulation tools – data.table and pandas Provides a concise and accessible presentation Includes machine learning algorithms implemented from scratch, linear regression, lasso, ridge, logistic regression, gradient boosting trees, etc. Appealing to data scientists, statisticians, quantitative analysts, and others who want to learn programming with R and Python from a data science perspective.

Python Data Science

Through a series of recent breakthroughs, deep learning has boosted the entire field of machine learning. Now, even programmers who know close to nothing about this technology can use simple, efficient tools to implement programs capable of learning from data. This practical book shows you how. By using concrete examples, minimal theory, and two production-ready Python frameworks—Scikit-Learn and TensorFlow—author Aurélien Géron helps you gain an intuitive understanding of the concepts and tools for building intelligent systems. You'll learn a range of techniques, starting with simple linear regression and progressing to deep neural networks. With exercises in each chapter to help you apply what

you've learned, all you need is programming experience to get started. Explore the machine learning landscape, particularly neural nets Use Scikit-Learn to track an example machine-learning project end-to-end Explore several training models, including support vector machines, decision trees, random forests, and ensemble methods Use the TensorFlow library to build and train neural nets Dive into neural net architectures, including convolutional nets, recurrent nets, and deep reinforcement learning Learn techniques for training and scaling deep neural nets

Doing Data Science

Statistical methods are a key part of of data science, yet very few data scientists have any formal statistics training. Courses and books on basic statistics rarely cover the topic from a data science perspective. This practical guide explains how to apply various statistical methods to data science, tells you how to avoid their misuse, and gives you advice on what's important and what's not. Many data science resources incorporate statistical methods but lack a deeper statistical perspective. If you're familiar with the R programming language, and have some exposure to statistics, this quick reference bridges the gap in an accessible, readable format. With this book, you'll learn: Why exploratory data analysis is a key preliminary step in data science How random sampling can reduce bias and yield a higher quality dataset, even with big data How the principles of experimental design yield definitive answers to questions How to use regression to estimate outcomes and detect anomalies Key classification techniques for predicting which categories a record belongs to Statistical machine learning methods that "learn" from data Unsupervised learning methods for extracting meaning from unlabeled data

Data Science

Machine learning has become an integral part of many commercial applications and research projects, but this field is not exclusive to large companies with extensive research teams. If you use Python, even as a beginner, this book will teach you practical ways to build your own machine learning solutions. With all the data available today, machine learning applications are limited only by your imagination. You'll learn the steps necessary to create a successful machine-learning application with Python and the scikit-learn library. Authors Andreas Müller and Sarah Guido focus on the practical aspects of using machine learning algorithms, rather than the math behind them. Familiarity with the NumPy and matplotlib libraries will help you get even more from this book. With this book, you'll learn: Fundamental concepts and applications of machine learning Advantages and shortcomings of widely used machine learning algorithms How to represent data processed by machine learning, including which data aspects to focus on Advanced methods for model evaluation and parameter tuning The concept of pipelines for chaining models and encapsulating your workflow Methods for working with text data, including text-specific processing techniques Suggestions for improving your machine learning and data science skills

Fundamentals of Data Visualization

Data science libraries, frameworks, modules, and toolkits are great for doing data science, but they're also a good way to dive into the discipline without actually understanding data science. In this book, you'll learn how many of the most fundamental data science tools and algorithms work by implementing them from scratch. If you have an aptitude for mathematics and some programming skills, author Joel Grus will help you get comfortable with the math and statistics

at the core of data science, and with hacking skills you need to get started as a data scientist. Today's messy glut of data holds answers to questions no one's even thought to ask. This book provides you with the know-how to dig those answers out. Get a crash course in Python Learn the basics of linear algebra, statistics, and probability—and understand how and when they're used in data science Collect, explore, clean, munge, and manipulate data Dive into the fundamentals of machine learning Implement models such as k-nearest Neighbors, Naive Bayes, linear and logistic regression, decision trees, neural networks, and clustering Explore recommender systems, natural language processing, network analysis, MapReduce, and databases

Principles of Data Science

Here is the second revised and updated edition of probably the most practical sourcebook on similarity methods and modeling techniques available. Written by leading authorities who incorporate many of the latest advances in the field, this new work maps out techniques for modeling as well as instrumentation and data analysis for an extremely wide array of problems in engineering dynamics. This practical reference uses experimental test data on various engineering problems demonstrating exactly how and why these similarity methods work. The problems involve spread of oil slicks, explosive cratering, car crashes, space vehicle heat exchange, explosive forming, and more. The spectrum of topics covered and number of examples are far greater than in other texts. Of particular importance are the dissimilar material modeling techniques which bring new versatility and freedom to the modeler in structural dynamics. The book also contains a clear, in-depth discussion of the theory underlying modeling and includes alternate methods for developing model laws. The work will undoubtedly prove invaluable to every professional involved in testing or design of dynamic experiments.

Cognitive (Internet of) Things

Now that people are aware that data can make the difference in an election or a business model, data science as an occupation is gaining ground. But how can you get started working in a wide-ranging, interdisciplinary field that's so clouded in hype? This insightful book, based on Columbia University's Introduction to Data Science class, tells you what you need to know. In many of these chapter-long lectures, data scientists from companies such as Google, Microsoft, and eBay share new algorithms, methods, and models by presenting case studies and the code they use. If you're familiar with linear algebra, probability, and statistics, and have programming experience, this book is an ideal introduction to data science. Topics include: Statistical inference, exploratory data analysis, and the data science process Algorithms Spam filters, Naive Bayes, and data wrangling Logistic regression Financial modeling Recommendation engines and causality Data visualization Social networks and data journalism Data engineering, MapReduce, Pregel, and Hadoop Doing Data Science is collaboration between course instructor Rachel Schutt, Senior VP of Data Science at News Corp, and data science consultant Cathy O'Neil, a senior data scientist at Johnson Research Labs, who attended and blogged about the course.

Data Science from Scratch

This book explores cognitive behavior among Internet of Things. Using a series of current and futuristic examples – appliances, personal assistants, robots, driverless cars, customer care,

engineering, monetization, and many more – the book covers use cases, technology and communication aspects of how machines will support individuals and organizations. This book examines the Cognitive Things covering a number of important questions: • What are Cognitive Things? • What applications can be driven from Cognitive Things – today and tomorrow? • How will these Cognitive Things collaborate with each and other, with individuals and with organizations? • What is the cognitive era? How is it different from the automation era? • How will the Cognitive Things support or accelerate human problem solving? • Which technical components make up cognitive behavior? • How does it redistribute the work-load between humans and machines? • What types of data can be collected from them and shared with external organizations? • How do they recognize and authenticate authorized users? How is the data safeguarded from potential theft? Who owns the data and how are the data ownership rights enforced? Overall, Sathi explores ways in which Cognitive Things bring value to individuals as well as organizations and how to integrate the use of the devices into changing organizational structures. Case studies are used throughout to illustrate how innovators are already benefiting from the initial explosion of devices and data. Business executives, operational managers, and IT professionals will understand the fundamental changes required to fully benefit from cognitive technologies and how to utilize them for their own success.

Similarity Methods in Engineering Dynamics

With the resurgence of neural networks in the 2010s, deep learning has become essential for machine learning practitioners and even many software engineers. This book provides a comprehensive introduction for data scientists and software engineers with machine learning experience. You'll start with deep learning basics and move quickly to the details of important advanced architectures, implementing everything from scratch along the way. Author Seth Weidman shows you how neural networks work using a first principles approach. You'll learn how to apply multilayer neural networks, convolutional neural networks, and recurrent neural networks from the ground up. With a thorough understanding of how neural networks work mathematically, computationally, and conceptually, you'll be set up for success on all future deep learning projects. This book provides: Extremely clear and thorough mental models—accompanied by working code examples and mathematical explanations—for understanding neural networks Methods for implementing multilayer neural networks from scratch, using an easy-to-understand object-oriented framework Working implementations and clear-cut explanations of convolutional and recurrent neural networks Implementation of these neural network concepts using the popular PyTorch framework

Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow

This book provides an introduction to the mathematical and algorithmic foundations of data science, including machine learning, high-dimensional geometry, and analysis of large networks. Topics include the counterintuitive nature of data in high dimensions, important linear algebraic techniques such as singular value decomposition, the theory of random walks and Markov chains, the fundamentals of and important algorithms for machine learning, algorithms and analysis for clustering, probabilistic models for large networks, representation learning including topic modelling and non-negative matrix factorization, wavelets and compressed sensing. Important probabilistic techniques are developed including the law of large numbers, tail inequalities, analysis of random projections, generalization guarantees in machine learning, and moment methods for analysis of phase transitions in large random graphs. Additionally, important structural and complexity measures are discussed such as

matrix norms and VC-dimension. This book is suitable for both undergraduate and graduate courses in the design and analysis of algorithms for data.

The Data Science Handbook

Data science libraries, frameworks, modules, and toolkits are great for doing data science, but they're also a good way to dive into the discipline without actually understanding data science. With this updated second edition, you'll learn how many of the most fundamental data science tools and algorithms work by implementing them from scratch. If you have an aptitude for mathematics and some programming skills, author Joel Grus will help you get comfortable with the math and statistics at the core of data science, and with hacking skills you need to get started as a data scientist. Today's messy glut of data holds answers to questions no one's even thought to ask. This book provides you with the know-how to dig those answers out.

Data Science for Business

We're living in a digital world. Most of our global economy is digital and the sheer volume of data is stupendous. It's 2020 and we're living in the future. Data Scientist is one of the hottest job on the market right now. Demand for data science is huge and will only grow, and it seems like it will grow much faster than the actual number of data scientists. So if you want to make a career change and become a data scientist, now is the time. This book will guide you through the process. From my experience of working with multiple companies as a project manager, a data science consultant or a CTO, I was able to see the process of hiring data scientists and building data science teams. I know what's important to land your first job as a data scientist, what skills you should acquire, what you should show during a job interview.

Foundations of Data Science

Data science libraries, frameworks, modules, and toolkits are great for doing data science, but they're also a good way to dive into the discipline without actually understanding data science. In this book, you'll learn how many of the most fundamental data science tools and algorithms work by implementing them from scratch. If you have an aptitude for mathematics and some programming skills, author Joel Grus will help you get comfortable with the math and statistics at the core of data science, and with hacking skills you need to get started as a data scientist. Today's messy glut of data holds answers to questions no one's even thought to ask. This book provides you with the know-how to dig those answers out. Get a crash course in Python Learn the basics of linear algebra, statistics, and probability—and understand how and when they're used in data science Collect, explore, clean, munge, and manipulate data Dive into the fundamentals of machine learning Implement models such as k-nearest Neighbors, Naive Bayes, linear and logistic regression, decision trees, neural networks, and clustering Explore recommender systems, natural language processing, network analysis, MapReduce, and databases

Introducing Data Science

Master how to use the Julia language to solve business critical data science challenges. After covering the importance of Julia to the data science community and several essential data science principles, we start with the basics including how to install Julia and its powerful libraries. Many examples are provided as we illustrate how to leverage each Julia command,

dataset, and function. Specialized script packages are introduced and described. Hands-on problems representative of those commonly encountered throughout the data science pipeline are provided, and we guide you in the use of Julia in solving them using published datasets. Many of these scenarios make use of existing packages and built-in functions, as we cover: 1. 1. An overview of the data science pipeline along with an example illustrating the key points, implemented in Julia 2. 2. Options for Julia IDEs 3. 3. Programming structures and functions 4. 4. Engineering tasks, such as importing, cleaning, formatting and storing data, as well as performing data preprocessing 5. 5. Data visualization and some simple yet powerful statistics for data exploration purposes 6. 6. Dimensionality reduction and feature evaluation 7. 7. Machine learning methods, ranging from unsupervised (different types of clustering) to supervised ones (decision trees, random forests, basic neural networks, regression trees, and Extreme Learning Machines) 8. 8. Graph analysis including pinpointing the connections among the various entities and how they can be mined for useful insights. Each chapter concludes with a series of questions and exercises to reinforce what you learned. The last chapter of the book will guide you in creating a data science application from scratch using Julia.

Practical Statistics for Data Scientists

Effective visualization is the best way to communicate information from the increasingly large and complex datasets in the natural and social sciences. But with the increasing power of visualization software today, scientists, engineers, and business analysts often have to navigate a bewildering array of visualization choices and options. This practical book takes you through many commonly encountered visualization problems, and it provides guidelines on how to turn large datasets into clear and compelling figures. What visualization type is best for the story you want to tell? How do you make informative figures that are visually pleasing? Author Claus O. Wilke teaches you the elements most critical to successful data visualization. Explore the basic concepts of color as a tool to highlight, distinguish, or represent a value Understand the importance of redundant coding to ensure you provide key information in multiple ways Use the book’s visualizations directory, a graphical guide to commonly used types of data visualizations Get extensive examples of good and bad figures Learn how to use figures in a document or report and how employ them effectively to tell a compelling story

Data Science from Scratch

If you know how to program, you have the skills to turn data into knowledge using the tools of probability and statistics. This concise introduction shows you how to perform statistical analysis computationally, rather than mathematically, with programs written in Python. You'll work with a case study throughout the book to help you learn the entire data analysis process—from collecting data and generating statistics to identifying patterns and testing hypotheses. Along the way, you'll become familiar with distributions, the rules of probability, visualization, and many other tools and concepts. Develop your understanding of probability and statistics by writing and testing code Run experiments to test statistical behavior, such as generating samples from several distributions Use simulations to understand concepts that are hard to grasp mathematically Learn topics not usually covered in an introductory course, such as Bayesian estimation Import data from almost any source using Python, rather than be limited to data that has been cleaned and formatted for statistics tools Use statistical inference to answer questions about real-world data

Data Science from Scratch with Python

This is a tutorial-style book that helps you to perform Geospatial and GIS analysis with Python and its tools/libraries. This book will first introduce various Python-related tools/packages in the initial chapters before moving towards practical usage, examples, and implementation in specialized kinds of Geospatial data analysis.This book is for anyone who wants to understand digital mapping and analysis and who uses Python or another scripting language for automation or crunching data manually.This book primarily targets Python developers, researchers, and analysts who want to perform Geospatial, modeling, and GIS analysis with Python.

Python Machine Learning for Beginners

The funniest book ever written about why your religion is false!Whether you're a Christian or a Jew, a Muslim or a Hindu, a Rasta or a Jain, an Environmentalist or a Cheondoist, a Scientologist or a Giant Stone Head Worshipper, your religion is false.But don't feel bad -- so is everyone else's! When you want to know what not to believe, this is the only book you need.In addition, you'll learn* Why "god" doesn't exist* Why there's no such thing as a "soul"* How to find "meaning" in a religion-less world* Which of your religious heroes are pedophiles* Why "religious tolerance" is a terrible ideaAnd, as a bonus, the greatest religious joke ever told. You can't afford not to read this book!

Data Science with Julia

If you want to learn more about Data Science or how to master it with the Python Programming Language, then keep reading. Data Science is one of the biggest buzzwords in the business world nowadays. Many businesses know the importance of collecting information, but as they can collect so much data in a short period, the real question is: "what is the next step?" Data Science includes all the different steps that you take with the data: collecting and cleaning them if they come from more than one source, analyzing them, applying Machine Learning algorithms and models, and then presenting your findings from the analysis with some good Data Visualizations. And this is what you will learn in Python Data Science. You will learn about the main steps that are needed to correctly implement Data Science techniques and the algorithms to help you sort through the data and see some amazing results. Some of the topics that we will discuss inside include: What data science is all about and why so many companies are using it to give them a competitive edge. Why Python and how to use it to implement Data Science What is the intersection between Machine Learning and Data Science and how to combine them The main Data Structures & Object-Oriented Python, with practical codes and exercises to use Python Functions and Modules in Python The 7 most important algorithms and models in Data Science Data Aggregation and Group Operations 9 important Data Mining techniques in Data Science Interaction with databases and data in the cloud And Much More! Where most books only focus on how collecting and cleaning the data, this book goes further, providing guidance on how to perform a proper analysis in order to extract precious information that may be vital for a business. Don't miss the opportunity to learn more about these topics. Even if you have never implemented Data Science techniques, learning them is easier than it looks. You just need the right guidance. And Python Data Science provides all the knowledge you need in a simple and practical way. Regardless of your previous experience, you will learn, the techniques to manipulate and process datasets, the principles of Python programming, and its most important real-world applications. Would You Like To Know More? Scroll Up And Click The BUY NOW Button To Get Your Copy Now!

Data Analysis from Scratch with Python

A guide for data managers and analyzers shares guidelines for identifying patterns, predicting future outcomes, and presenting findings to others; drawing on current research in cognitive science and learning theory while covering such additional topics as assessing data quality, handling ambiguous information, and organizing data within market groups. Original.

Data Science from Scratch

A comprehensive overview of data science covering the analytics, programming, and business skills necessary to master the discipline Finding a good data scientist has been likened to hunting for a unicorn: the required combination of technical skills is simply very hard to find in one person. In addition, good data science is not just rote application of trainable skill sets; it requires the ability to think flexibly about all these areas and understand the connections between them. This book provides a crash course in data science, combining all the necessary skills into a unified discipline. Unlike many analytics books, computer science and software engineering are given extensive coverage since they play such a central role in the daily work of a data scientist. The author also describes classic machine learning algorithms, from their mathematical foundations to real-world applications. Visualization tools are reviewed, and their central importance in data science is highlighted. Classical statistics is addressed to help readers think critically about the interpretation of data and its common pitfalls. The clear communication of technical results, which is perhaps the most undertrained of data science skills, is given its own chapter, and all topics are explained in the context of solving real-world data problems. The book also features: • Extensive sample code and tutorials using Python™ along with its technical libraries • Core technologies of “Big Data,” including their strengths and limitations and how they can be used to solve real-world problems • Coverage of the practical realities of the tools, keeping theory to a minimum; however, when theory is presented, it is done in an intuitive way to encourage critical thinking and creativity • A wide variety of case studies from industry • Practical advice on the realities of being a data scientist today, including the overall workflow, where time is spent, the types of datasets worked on, and the skill sets needed The Data Science Handbook is an ideal resource for data analysis methodology and big data software tools. The book is appropriate for people who want to practice data science, but lack the required skill sets. This includes software professionals who need to better understand analytics and statisticians who need to understand software. Modern data science is a unified discipline, and it is presented as such. This book is also an appropriate reference for researchers and entry-level graduate students who need to learn real-world analytics and expand their skill set. FIELD CADY is the data scientist at the Allen Institute for Artificial Intelligence, where he develops tools that use machine learning to mine scientific literature. He has also worked at Google and several Big Data startups. He has a BS in physics and math from Stanford University, and an MS in computer science from Carnegie Mellon.

Python Data Science Handbook

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You’ll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a

practical, modern introduction to data science tools in Python. It’s ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

Data Science from Scratch

Summary Introducing Data Science teaches you how to accomplish the fundamental tasks that occupy data scientists. Using the Python language and common Python libraries, you'll experience firsthand the challenges of dealing with data at scale and gain a solid foundation in data science. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Many companies need developers with data science skills to work on projects ranging from social media marketing to machine learning. Discovering what you need to learn to begin a career as a data scientist can seem bewildering. This book is designed to help you get started. About the Book Introducing Data ScienceIntroducing Data Science explains vital data science concepts and teaches you how to accomplish the fundamental tasks that occupy data scientists. You'll explore data visualization, graph databases, the use of NoSQL, and the data science process. You'll use the Python language and common Python libraries as you experience firsthand the challenges of dealing with data at scale. Discover how Python allows you to gain insights from data sets so big that they need to be stored on multiple machines, or from data moving so quickly that no single machine can handle it. This book gives you hands-on experience with the most popular Python data science libraries, Scikit-learn and StatsModels. After reading this book, you'll have the solid foundation you need to start a career in data science. What's Inside Handling large data Introduction to machine learning Using Python to work with data Writing data science algorithms About the Reader This book assumes you're comfortable reading code in Python or a similar language, such as C, Ruby, or JavaScript. No prior experience with data science is required. About the Authors Davy Cielen, Arno D. B. Meysman, and Mohamed Ali are the founders and managing partners of Optimately and Maiton, where they focus on developing data science projects and solutions in various sectors. Table of Contents Data science in a big data world The data science process Machine learning Handling large data on a single computer First steps in big data Join the NoSQL movement The rise of graph databases Text mining and text analytics Data visualization to the end user

Data Science from Scratch with Python

"This book introduces you to R, RStudio, and the tidyverse, a collection of R packages designed to work together to make data science fast, fluent, and fun. Suitable for readers with no previous programming experience"--

Your Religion Is False

A concise introduction to the emerging field of data science, explaining its evolution, relation to machine learning, current uses, data infrastructure issues, and ethical challenges. The goal of

data science is to improve decision making through the analysis of data. Today data science determines the ads we see online, the books and movies that are recommended to us online, which emails are filtered into our spam folders, and even how much we pay for health insurance. This volume in the MIT Press Essential Knowledge series offers a concise introduction to the emerging field of data science, explaining its evolution, current uses, data infrastructure issues, and ethical challenges. It has never been easier for organizations to gather, store, and process data. Use of data science is driven by the rise of big data and social media, the development of high-performance computing, and the emergence of such powerful methods for data analysis and modeling as deep learning. Data science encompasses a set of principles, problem definitions, algorithms, and processes for extracting non-obvious and useful patterns from large datasets. It is closely related to the fields of data mining and machine learning, but broader in scope. This book offers a brief history of the field, introduces fundamental data concepts, and describes the stages in a data science project. It considers data infrastructure and the challenges posed by integrating data from multiple sources, introduces the basics of machine learning, and discusses how to link machine learning expertise with real-world problems. The book also reviews ethical and legal issues, developments in data regulation, and computational approaches to preserving privacy. Finally, it considers the future impact of data science and offers principles for success in data science projects.

Data Science from Scratch

You Are About To Build Your Knowledge Of Data Science To Perhaps Build A Career Out Of It Even If You Are A Complete Beginner! The most valuable resource is no longer oil and gold; data reigns supreme these days! And if data is the most valuable resource, perhaps the field of data science is the most critical of them all! It is so lucrative that the median entry level starting salary of a data scientist is $98,000! If you think I'm making this up, just think of the Cambridge Analytica story of how it was used in the 2016 Presidential elections in the US to influence people's voting decisions! I'm not being political here; whether true or not, data was used and it, to some extent, was seen to be effective in influencing people! All that is the realm of data science! And it is not just Cambridge Analytica that uses data on a massive scale. Data is used to tell which ad suggestions show up when you are browsing on your favorite website, the kind of videos you see on YouTube for instance, the friend suggestions we see on Facebook, the stuff you see on your newsfeed, the emails that land in your spam folder, our credit rating, how much we pay for insurance, the products/movies that Amazon, Netflix and other online stores display to you and much more! For all these things to be possible, lots of data (an estimated 2.5 exabytes were being generated every single day in 2012, according to IBM) has to be collected, analyzed, interpreted and manipulated to serve a given purpose! Does all this sound like music to your ears? Would you want to understand the inner workings of key concepts of data science, including high performance computing, big data analysis, data infrastructure issues, machine learning, data mining, deep learning and more? This book has a comprehensive introduction to the field of data science to help you to have an above average understanding of data science to get you started. In it, you will learn: What data science is all about, including how it works, how it is used in everyday life and more The fundamentals of computer science and the place of data science in today's highly interconnected society Fundamentals of machine learning, including the intricacies of machine learning in data science and its application in everyday life Natural language processing, automation and artificial intelligence with respect to big data and data science The role of python programming language in modern day data science Data modeling, including the place of data modelers in data science Voice recognition as an important area of data science The concept of distributed

systems and big data and their place in data science The concept of data visualization as part of data science The impact of smart technology on data entry processes And much more! The book uses beginner friendly, easy to follow, language that will ultimately help you to start seeing how to apply machine learning and big data analysis in solving everyday problems in the world! If you've ever wanted to dip your feet into the murky and interestingly mysterious world of data science, now is the time to get in! What are you waiting for? Click Buy Now In 1-Click or Buy Now at the top of this page to get started!

Head First Data Analysis

******Free eBook for customers who purchase the print book from Amazon****** Are you thinking of becoming a data analyst using Python? If you are looking for a complete guide to data analysis using Python language and its library that will help you to become an effective data scientist, this book is for you. From AI Sciences Publisher Our books may be the best one for beginners; it's a step-by-step guide for any person who wants to start learning Artificial Intelligence and Data Science from scratch. It will help you in preparing a solid foundation and learn any other high-level courses. To get the most out of the concepts that would be covered, readers are advised to adopt hands on approach, which would lead to better mental representations. Step By Step Guide and Visual Illustrations and Examples The Book give complete instructions for manipulating, processing, cleaning, modeling and crunching datasets in Python. This is a hands-on guide with practical case studies of data analysis problems effectively. You will learn pandas, NumPy, IPython, and Jupiter in the Process. Target Users This book is a practical introduction to data science tools in Python. It is ideal for analyst's beginners to Python and for Python programmers new to data science and computer science. Instead of tough math formulas, this book contains several graphs and images. What's Inside This Book? Introduction Why Choose Python for Data Science & Machine Learning Prerequisites & Reminders Python Quick Review Overview & Objectives A Quick Example Getting & Processing Data Data Visualization Supervised & Unsupervised Learning Regression Simple Linear Regression Multiple Linear Regression Decision Tree Random Forest Classification Logistic Regression K-Nearest Neighbors Decision Tree Classification Random Forest Classification Clustering Goals & Uses of Clustering K-Means Clustering Anomaly Detection Association Rule Learning Explanation Apriori Reinforcement Learning What is Reinforcement Learning Comparison with Supervised & Unsupervised Learning Applying Reinforcement Learning Neural Networks An Idea of How the Brain Works Potential & Constraints Here's an Example Natural Language Processing Analyzing Words & Sentiments Using NLTK Model Selection & Improving Performance Sources & References Frequently Asked Questions Q: Is this book for me and do I need programming experience? A: if you want to smash Python for data analysis, this book is for you. Little programming experience is required. If you already wrote a few lines of code and recognize basic programming statements, you'll be OK. Q: Does this book include everything I need to become a data science expert? A: Unfortunately, no. This book is designed for readers taking their first steps in data analysis and further learning will be required beyond this book to master all aspects. Q: Can I have a refund if this book is not fitted for me? A: Yes, Amazon refund you if you aren't satisfied, for more information about the amazon refund service please go to the amazon help platform. We will also be happy to help you if you send us an email at contact@aisciences.net. AI Sciences Company offers you a free eBooks at http: //aisciences.net/free/

Learning Geospatial Analysis with Python

"This book is a great way to both start learning data science through the promising Julia language and to become an efficient data scientist."- Professor Charles Bouveyron, INRIA Chair in Data Science, Université Côte d'Azur, Nice, France Julia, an open-source programming language, was created to be as easy to use as languages such as R and Python while also as fast as C and Fortran. An accessible, intuitive, and highly efficient base language with speed that exceeds R and Python, makes Julia a formidable language for data science. Using well known data science methods that will motivate the reader, Data Science with Julia will get readers up to speed on key features of the Julia language and illustrate its facilities for data science and machine learning work. Features: Covers the core components of Julia as well as packages relevant to the input, manipulation and representation of data. Discusses several important topics in data science including supervised and unsupervised learning. Reviews data visualization using the Gadfly package, which was designed to emulate the very popular ggplot2 package in R. Readers will learn how to make many common plots and how to visualize model results. Presents how to optimize Julia code for performance. Will be an ideal source for people who already know R and want to learn how to use Julia (though no previous knowledge of R or any other programming language is required). The advantages of Julia for data science cannot be understated. Besides speed and ease of use, there are already over 1,900 packages available and Julia can interface (either directly or through packages) with libraries written in R, Python, Matlab, C, C++ or Fortran. The book is for senior undergraduates, beginning graduate students, or practicing data scientists who want to learn how to use Julia for data science. "This book is a great way to both start learning data science through the promising Julia language and to become an efficient data scientist." Professor Charles Bouveyron INRIA Chair in Data Science Université Côte d'Azur, Nice, France

A Tour of Data Science

This textbook on practical data analytics unites fundamental principles, algorithms, and data. Algorithms are the keystone of data analytics and the focal point of this textbook. Clear and intuitive explanations of the mathematical and statistical foundations make the algorithms transparent. But practical data analytics requires more than just the foundations. Problems and data are enormously variable and only the most elementary of algorithms can be used without modification. Programming fluency and experience with real and challenging data is indispensable and so the reader is immersed in Python and R and real data analysis. By the end of the book, the reader will have gained the ability to adapt algorithms to new problems and carry out innovative analyses. This book has three parts:(a) Data Reduction: Begins with the concepts of data reduction, data maps, and information extraction. The second chapter introduces associative statistics, the mathematical foundation of scalable algorithms and distributed computing. Practical aspects of distributed computing is the subject of the Hadoop and MapReduce chapter.(b) Extracting Information from Data: Linear regression and data visualization are the principal topics of Part II. The authors dedicate a chapter to the critical domain of Healthcare Analytics for an extended example of practical data analytics. The algorithms and analytics will be of much interest to practitioners interested in utilizing the large and unwieldly data sets of the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System.(c) Predictive Analytics Two foundational and widely used algorithms, k-nearest neighbors and naive Bayes, are developed in detail. A chapter is dedicated to forecasting. The last chapter focuses on streaming data and uses publicly accessible data streams originating from the Twitter API and the NASDAQ stock market in the tutorials. This book is intended for a one- or two-semester course in data analytics for upper-division undergraduate and graduate students in mathematics, statistics, and computer science. The prerequisites are kept low, and students with one or two courses in probability or

statistics, an exposure to vectors and matrices, and a programming course will have no difficulty. The core material of every chapter is accessible to all with these prerequisites. The chapters often expand at the close with innovations of interest to practitioners of data science. Each chapter includes exercises of varying levels of difficulty. The text is eminently suitable for self-study and an exceptional resource for practitioners.

Data Science From Scratch

For many researchers, Python is a first-class tool mainly because of its libraries for storing, manipulating, and gaining insight from data. Several resources exist for individual pieces of this data science stack, but only with the Python Data Science Handbook do you get them all—IPython, NumPy, Pandas, Matplotlib, Scikit-Learn, and other related tools. Working scientists and data crunchers familiar with reading and writing Python code will find this comprehensive desk reference ideal for tackling day-to-day issues: manipulating, transforming, and cleaning data; visualizing different types of data; and using data to build statistical or machine learning models. Quite simply, this is the must-have reference for scientific computing in Python. With this handbook, you'll learn how to use: IPython and Jupyter: provide computational environments for data scientists using Python NumPy: includes the ndarray for efficient storage and manipulation of dense data arrays in Python Pandas: features the DataFrame for efficient storage and manipulation of labeled/columnar data in Python Matplotlib: includes capabilities for a flexible range of data visualizations in Python Scikit-Learn: for efficient and clean Python implementations of the most important and established machine learning algorithms

Python for Data Analysis

An introductory textbook offering a low barrier entry to data science; the hands-on approach will appeal to students from a range of disciplines.

A Hands-On Introduction to Data Science

Learn Data Science NOW. Stop asking yourself where and how to start. Keep reading and find out how this book can help you with your journey. Are you afraid not to understand the technical language of data science? If so, let me tell you something. We all have to start somewhere. Approaching data science can be overwhelming, not if you have in your hands the right tools since day one. Once you start, I can guarantee you, you will want to learn more and more. Data science is an interdisciplinary subject that brings together three different fields of study. All three fields lie at the intersection of business intelligence and big data. More specifically this book will take you through: Which specific tools and analysis you need to know Various aspects involved in Data Mining Types, Quality and Data Preprocessing Things you must know for machine learning to be successful Utilizations and Procedure of Data Science How to exactly set up the appropriate environment for your machine learning needs.and much more!! Even if you never approached Data Science before, you now have the chance to deeply understand every concept and become more confident in what you want to achieve next. Data Science from Scratch has been written thinking of your needs and how to help you get started. The more you wait, the harder it gets. What are you waiting for? Scroll to the top and select on the right the BUY NOW with 1-Clickbutton.

Data Analysis from Scratch with Python

??Buy the Paperback Version of this Book and get the Kindle Book version for FREE ??Data Science is present in our lives: newspapers talk about viral news, companies look for data scientists, businesses offer us personalized offers based on our customs and we grease the system by offering free personal information from our social networks, Internet searches and even from smart devices to control our daily physical activity.This book presents the knowledge and technologies that will allow us to participate in this new era of information, governed by Big Data and machine learning, the life of the data is analyzed step by step, showing how to obtain it, store it, process it, visualize it, and draw conclusions from it: that is, show the data analysis as it is: a fascinating area, It requires many hours of careful work. Likewise, the Python programming language is analyzed, the most used in data Science due to the multitude of libraries that it facilitates, but is not limited to the standard, but presents current technologies that, with Python as an interface, will allow scaling the size of the data to the maximum. Therefore, our journey with the data will take us, for example, to know the Mongo DB database and the Spark processing environment.In this book, you will discover: What is a data scientist?What languages should be learned?The three musketeers of Data SciencePython introductionLanguages do you need to learn for data scienceThese are some of the topics covered in this book: Machine Learning AlgorithmsK NN - Nearest Neighbor MethodSVC - Support vector machineMathematics for Data AnalysisWorking with Threads in PythonWorking with processes in PythonThe book contains detailed examples of how to perform the different tasks in Python; and in addition, for the convenience of the reader of the included fragments, the access of the readers to a repository where they will find the code ready to be executed is facilitated. Also each chapter presents recommended readings to be able to deepen in those aspects that are more interesting. We invite you to immerse yourself in the exciting world of data Science in Python and explore the mysteries of Big Data and machine learning!Get fit, happy, and stress-free life by ordering your copy right away! also, Don't miss out on this Data Science from Scratch with Python!Just Scroll Up and Click the Buy Now Butto

R for Data Science

??Buy the Paperback Version of this Book and get the Kindle Book version for FREE ?? Natural Language Processing with Python Offers an introduction to Natural Language Processing, the field that underpins a variety of language technologies, ranging from predictive text and email filtering to automatic summarization and translation, this book helps you learn how to write Python programs to work with large collections of unstructured text. An ideal book to snake step by step in the world of programming in Python This book will allow all beginner to expert programmers or computer science students-experts to discover the basics of programming in Python, a language that can be used alone or with another language. In this book, you will discover: Method and Technique Machine Learning Techniques Intel NLP Architect: Open Source Natural Language Processing Model LibraryHow To Solve NLP Tasks: A Walkthrough On Natural Language Processing A look at the importance of Natural Language Processing NLP: How to Become a Natural Language Processing Specialist Programming Interview Questions Software for The Application Of Automatic Learning Techniques For Medical Diagnosis Machine learning techniques at the service of Energy Efficiency in the digital home 5 natural language processing methods that are rapidly changing the world around us And more.. Stop wasting to gather partial or false information when you can get everything you require to REACH YOUR GOALS by reading this wonderful guide!!! Get fit, happy, and stress-free life by ordering your copy right away! also, Don't miss out on this Data Analysis from Scratch with Python! Just Scroll Up and Click the Buy Now Button!