Mastering Machine Learning With Scikit Learn Hackeling Gavin

BUY NOW (Will soon return to 20.59) ******Free eBook for customers who purchase the print book from Amazon Are you thinking of learning more about Machine Learning using Python? This book would seek to explain common terms and algorithms in an intuitive way. The author used a progressive approach whereby we start out slowly and improve on the complexity of our solutions. 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 a hands on approach which would lead to better mental representations. Step By Step Guide and Visual Illustrations and Examples This book and the accompanying examples, you would be well suited to tackle problems which pique your interests using machine learning. Instead of tough math formulas, this book contains several graphs and images which detail all important Machine Learning concepts and their applications. Target Users The book designed for a variety of target audiences. The most suitable users would include: Anyone who is intrigued by how algorithms arrive at predictions but has no previous knowledge of the field. Software developers and engineers with a strong programming background but seeking to break into the field of machine learning. Seasoned professionals in the field of artificial intelligence and machine learning who desire a bird's eye view of current techniques and approaches. What's Inside This Book? 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 A Regression Example: Predicting Boston Housing Prices Import Libraries: How to forecast and Predict Popular Classification Algorithms Introduction to K Nearest Neighbors Introduction to Support Vector Machine Example of Clustering Running K-means with Scikit-Learn Introduction to Deep Learning using TensorFlow Deep Learning Compared to Other Machine Learning Approaches Applications of Deep Learning How to run the Neural Network using TensorFlow Cases of Study with Real Data Sources & References Frequently Asked Questions Q: Is this book for me and do I need programming experience? A: If you want to smash Machine Learning from scratch, this book is for you. 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 Machine Learning expert? A: Unfortunately, no. This book is designed for readers taking their first steps in Machine Learning and further learning will be required beyond this book to master all aspects of Machine Learning. 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. 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 the data scientist Alain Kaufmann at http: //aisciences.net/free-books/

?? Buy the Paperback Version of this Book and get the Kindle Book Version for FREE ?? Discover the incredible world of Machine Learning with this amazing guide Do you want to understand machine learning, but it all looks too daunting and complex? Afraid to open the 'pandora's box' and waste hours searching for answers? Then keep reading Written with the beginner in mind, this powerful guide breaks down everything you need to know about machine learning and Python in a simple, easy-to-understand way. So many other books make machine learning look impossible to understand and even harder to master - but now you can familiarize yourself with this incredible technology like never before! With a detailed and concise overview of the fundamentals, along with the challenges and limitations currently being tackled by the pros, inside this comprehensive guide you will: Learn the Fundamentals of Machine Learning which Are Being Developed and Advanced with Python Master the Nuances of 12 of the Most Popular and Widely-Used Machine Learning Algorithms, in a Language that Requires No Prior Background in Python Discover the Details of the Supervised, Unsupervised, and Reinforcement Algorithms, which Serve as the Skeleton of Hundreds of Machine Learning Algorithms Being Developed Every Day Become Familiar with Data Science Technology, an Umbrella Term Used for the Cutting-Edge Technologies of Today Dive Into the Functioning of Scikit-Learn Library and Develop Machine Learning Models, with a Detailed Walkthrough and Open Source Database using Illustrations and actual Python Code Understand the Entire Process of Creating Neural Network Models on TensorFlow, Using Open Source Data Sets and real Python Code Uncover the Secrets of the Most Critical Aspect of Developing a Machine Learning Model - Data Pre-Processing and Training/Testing Subsets And So Much More! With a wealth of tips and tricks, along with invaluable advice guaranteed to help you with your machine learning journey, this book is a powerful and revolutionary tool for creating, developing, and using machine learning. From understanding the Python language to creating data sets and building neural networks, now you can become the master of machine learning with this incredible guide! So what are you waiting for? Buy now and join the millions of people using machine learning today! Scroll Up and Click the "Buy now" Button!

Have you always wanted to learn deep learning but are afraid it'll be too difficult for you? This book is for you.Deep learning is a form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts. Because the computer gathers knowledge from experience, there is no need for a human computer operator to formally specify all the knowledge that the computer needs. The hierarchy of concepts allows the computer to learn complicated concepts by building them out of simpler ones; a graph of these hierarchies

would be many layers deep. This book introduces a broad range of topics in deep learning.Book DescriptionPython Machine Learning, is a comprehensive guide to machine learning and deep learning with Python. It acts as both a step-by-step tutorial, and a reference you'll keep coming back to as you build your machine learning systems.Packed with clear explanations, visualizations, and working examples, the book covers most of the essential machine learning techniques in depth. While some books teach you only to follow instructions, with this machine learning book, this tutorial book teaches the principles behind machine learning, allowing you to build models and applications for yourself. Updated for TensorFlow, skit-learn, Keras, and theano, this edition introduces readers to its new Keras API features, as well as the latest additions to scikit-learn. It's also expanded to cover cutting-edge reinforcement learning techniques based on deep learning, as well as an introduction to GANs. Finally, this book also explores analysis by giving some examples, helping you learn how to use machine learning algorithms to classify or predict documents output.This book is your companion to machine learning with Python, whether you're a Python developer new to machine learning or want to deepen your knowledge of the latest developments.What you will learn-Master the frameworks, models, and techniques that enable machines to 'learn' from data-Use scikit-learn for machine learning and TensorFlow for deep learning-Apply machine learning to classification, predict predict customer churning, and more-Build and train neural networks, GANs, CNN, and other models-Discover best practices for evaluating and tuning models-Predict target outcomes using optimization algorithm such as Gradient Descent algorithm analysis-Overcome challenges in deep learning algorithms by using dropout, regulation-Who This Book Is ForIf you know some Python and you want to use machine learning and deep learning, pick up this book. Whether you want to start from scratch or extend your machine learning knowledge, this is an essential resource. Written for developers and data scientists who want to create practical machine learning and deep learning code, this book is ideal for anyone who wants to teach computers how to learn from data.Table of Contents1.Giving Computers the Ability to Learn from Data2.Training Simple ML Algorithms for Classification3.ML Classifiers Using scikit-learn4.Building Good Training Datasets - Data Preprocessing5.Compressing Data via Dimensionality Reduction6.Best Practices for Model Evaluation and Hyperparameter Tuning7.Combining Different Models for Ensemble Learning8.Predicting Continuous Target Variables with supversized learning 9.Implementing Multilayer Artificial Neural Networks10.Modeling Sequential Data Using Recurrent Neural Networks11.GANs for Synthesizing New Data...and so much more....In every chapter, you can edit the examples online

Deploy supervised and unsupervised machine learning algorithms using scikit-learn to perform classification, regression, and clustering. Key Features Build your first machine learning model using scikit-learn Train supervised and unsupervised models using popular techniques such as classification, regression and clustering Understand how scikit-

learn can be applied to different types of machine learning problems Book Description Scikit-learn is a robust machine learning library for the Python programming language. It provides a set of supervised and unsupervised learning algorithms. This book is the easiest way to learn how to deploy, optimize, and evaluate all of the important machine learning algorithms that scikit-learn provides. This book teaches you how to use scikit-learn for machine learning. You will start by setting up and configuring your machine learning environment with scikit-learn. To put scikit-learn to use, you will learn how to implement various supervised and unsupervised machine learning models. You will learn classification, regression, and clustering techniques to work with different types of datasets and train your models. Finally, you will learn about an effective pipeline to help you build a machine learning project from scratch. By the end of this book, you will be confident in building your own machine learning models for accurate predictions. What you will learn Learn how to work with all scikit-learn's machine learning algorithms Install and set up scikit-learn to build your first machine learning model Employ Unsupervised Machine Learning Algorithms to cluster unlabelled data into groups Perform classification and regression machine learning Use an effective pipeline to build a machine learning project from scratch Who this book is for This book is for aspiring machine learning developers who want to get started with scikit-learn. Intermediate knowledge of Python programming and some fundamental knowledge of linear algebra and probability will help.

This book is intended for software developers, system architects and analysts, big data project managers, and data scientists who wish to deploy big data solutions using the Cascading framework. You must have a basic understanding of the big data paradigm and should be familiar with Java development techniques.

If you are a software developer who wants to learn how machine learning models work and how to apply them effectively, this book is for you. Familiarity with machine learning fundamentals and Python will be helpful, but is not essential.

Python Machine Learning A Beginner's Guide to Python Programming for Machine Learning Learn the essential tools every beginner should know about Python. Get the methods that will help you complete your projects successfully like the pros. This is the book every aspiring programmer needs to have. Learn how to try fresh ideas and learn problem-solving, improve your programming skills, but above all, boost your confidence. Imagination and creativity will open the door to new projects you never thought possible. Here's what you will love about this book: What is Python Machine Learning, anyway? Here's how to get started. Find out the "Whys" and "Hows" of Python The One Proven Way for Effective Implementation of Machine Learning Algorithms Find Out the EASIEST Way for Mastering Machine Learning with Python. Learn Importance of Learning Data Analysis in Python. The truth about Deep Learning vs Machine Learning The Secret to Machine Learning with Scikit-Learn Discover Deep Learning with TensorFlow. The Essential Key Tips & Tricks for Deep Learning with PyTorch and Keras. Find out The Role of Machine Learning in the Internet of Things (IoT)

Looking to the Future with Machine Learning. The Business Angle. A beginners' friendly book with easy-to-follow tips. And much more, this is truly a must-have guide! Download Your Copy Now...

This book provides a framework for robust and novel biometric techniques, along with implementation and design strategies. The theory, principles, pragmatic and modern methods, and future directions of biometrics are presented, along with in-depth coverage of biometric applications in driverless cars, automated and AI-based systems, IoT, and wearable devices. Additional coverage includes computer vision and pattern recognition, cybersecurity, cognitive computing, soft biometrics, and the social impact of biometric technology. The book will be a valuable reference for researchers, faculty, and practicing professionals working in biometrics and related fields, such as image processing, computer vision, and artificial intelligence. Highlights robust and novel biometrics techniques Provides implementation strategies and future research directions in the field of biometrics Includes case studies and emerging applications

Aspiring data science professionals can learn the Scikit-Learn library along with the fundamentals of machine learning with this book. The book combines the Anaconda Python distribution with the popular Scikit-Learn library to demonstrate a wide range of supervised and unsupervised machine learning algorithms. Care is taken to walk you through the principles of machine learning through clear examples written in Python that you can try out and experiment with at home on your own machine. All applied math and programming skills required to master the content are covered in this book. In-depth knowledge of object-oriented programming is not required as working and complete examples are provided and explained. Coding examples are in-depth and complex when necessary. They are also concise, accurate, and complete, and complement the machine learning concepts introduced. Working the examples helps to build the skills necessary to understand and apply complex machine learning algorithms. Hands-on Scikit-Learn for Machine Learning Applications is an excellent starting point for those pursuing a career in machine learning. Students of this book will learn the fundamentals that are a prerequisite to competency. Readers will be exposed to the Anaconda distribution of Python that is designed specifically for data science professionals, and will build skills in the popular Scikit-Learn library that underlies many machine learning applications in the world of Python. What You'll Learn Work with simple and complex datasets common to Scikit-Learn Manipulate data into vectors and matrices for algorithmic processing Become familiar with the Anaconda distribution used in data science Apply machine learning with Classifiers, Regressors, and Dimensionality Reduction Tune algorithms and find the best algorithms for each dataset Load data from and save to CSV, JSON, Numpy, and Pandas formats Who This Book Is For The aspiring data scientist yearning to break into machine learning through mastering the underlying fundamentals that are sometimes skipped over in the rush to be productive. Some knowledge of object-oriented programming and very basic applied linear algebra will make learning easier, although anyone can benefit from this book.

What is machine learning and why would a programmer want to learn how to use it? Is artificial intelligence the same as working with machine learning? Are you interested in becoming a machine learning expert but don't know where to start from? Keep reading... The future of our world is evolving towards an era where interaction with machines form the foundation of most tasks we perform. In light of this, it is important to gain actionable knowledge in machine learning technologies and skills. These skills will be useful in the near future as you maneuver through different career paths. Today data is driving many business processes, and without data, it is impossible to imagine where

many of the top businesses would be. Imagine how you used to struggle with search results online back in the day, and how easy it is to look for something online today and get the right results. All this is possible through machine learning models. What you need is a foundational approach to learning the basics of machine learning. You can use this knowledge to build your expertise in machine learning over time. While this is an introductory level book, it introduces you to vast concepts in machine learning that will be important to your career. By the end of the book, you will have learned so much about machine learning and the respective python libraries that you will use when building models all the time. An important aspect of machine learning that we must stress even at this juncture is data analysis. Data is key to the success of machine learning and deep learning models. When implemented properly, the kind of data you have will make a big difference in whether your model succeeds or not. Since we are discussing machine learning and the future of computing as we know it, we will also dedicate some time to discussing the current trends in the world, and how they affect our ability to perform some tasks. In this case, we will look at the Internet of Things (IoT) and how we can use different approaches to integrate machine learning and IoT models. Throughout these pages, you will learn: The Fundamentals of Python for Machine Learning Data Analysis in Python Comparing Deep Learning and Machine Learning Machine Learning with Scikit-Learn Deep Learning with TensorFlow Deep Learning with PyTorch and Keras The Role of Machine Learning in the Internet of Things (IoT) Looking to the Future with Machine Learning And much more... Even if you don't have any background in machine learning and Python programming, this book will give you the tools to develop machine learning models. Arm yourself with all this knowledge! Scroll up and click the BUY NOW BUTTON!

Unlock the complexities of machine learning algorithms in Spark to generate useful data insights through this data analysis tutorial About This Book Process and analyze big data in a distributed and scalable way Write sophisticated Spark pipelines that incorporate elaborate extraction Build and use regression models to predict flight delays Who This Book Is For Are you a developer with a background in machine learning and statistics who is feeling limited by the current slow and “small data” machine learning tools? Then this is the book for you! In this book, you will create scalable machine learning applications to power a modern data-driven business using Spark. We assume that you already know the machine learning concepts and algorithms and have Spark up and running (whether on a cluster or locally) and have a basic knowledge of the various libraries contained in Spark. What You Will Learn Use Spark streams to cluster tweets online Run the PageRank algorithm to compute user influence Perform complex manipulation of DataFrames using Spark Define Spark pipelines to compose individual data transformations Utilize generated models for off-line/on-line prediction Transfer the learning from an ensemble to a simpler Neural Network Understand basic graph properties and important graph operations Use GraphFrames, an extension of DataFrames to graphs, to study graphs using an elegant query language Use K-means algorithm to cluster movie reviews dataset In Detail The purpose of machine learning is to build systems that learn from data. Being able to understand trends and patterns in complex data is critical to success; it is one of the key strategies to unlock growth in the challenging contemporary marketplace today. With the meteoric rise of machine learning, developers are now keen on finding out how can they make their Spark applications smarter. This book gives you access to transform data into actionable knowledge. The book commences by defining machine learning primitives by the MLlib and H2O libraries. You will learn how to use Binary classification to detect the Higgs Boson particle in the huge amount of data produced by CERN particle collider and classify daily health activities using ensemble Methods for Multi-Class Classification. Next, you will solve a typical regression problem involving flight delay predictions and write sophisticated Spark pipelines. You will analyze Twitter data with help of the doc2vec algorithm and K-means clustering. Finally, you will build different pattern mining models using MLlib, perform complex manipulation of DataFrames using Spark and

Spark SQL, and deploy your app in a Spark streaming environment. Style and approach This book takes a practical approach to help you get to grips with using Spark for analytics and to implement machine learning algorithms. We'll teach you about advanced applications of machine learning through illustrative examples. These examples will equip you to harness the potential of machine learning, through Spark, in a variety of enterprise-grade systems.

Updated and revised second edition of the bestselling guide to exploring and mastering the most important algorithms for solving complex machine learning problems Key Features Updated to include new algorithms and techniques Code updated to Python 3.8 & TensorFlow 2.x New coverage of regression analysis, time series analysis, deep learning models, and cutting-edge applications Book Description Mastering Machine Learning Algorithms, Second Edition helps you harness the real power of machine learning algorithms in order to implement smarter ways of meeting today's overwhelming data needs. This newly updated and revised guide will help you master algorithms used widely in semi-supervised learning, reinforcement learning, supervised learning, and unsupervised learning domains. You will use all the modern libraries from the Python ecosystem - including NumPy and Keras - to extract features from varied complexities of data. Ranging from Bayesian models to the Markov chain Monte Carlo algorithm to Hidden Markov models, this machine learning book teaches you how to extract features from your dataset, perform complex dimensionality reduction, and train supervised and semi-supervised models by making use of Python-based libraries such as scikit-learn. You will also discover practical applications for complex techniques such as maximum likelihood estimation, Hebbian learning, and ensemble learning, and how to use TensorFlow 2.x to train effective deep neural networks. By the end of this book, you will be ready to implement and solve end-to-end machine learning problems and use case scenarios. What you will learn Understand the characteristics of a machine learning algorithm Implement algorithms from supervised, semi-supervised, unsupervised, and RL domains Learn how regression works in time-series analysis and risk prediction Create, model, and train complex probabilistic models Cluster high-dimensional data and evaluate model accuracy Discover how artificial neural networks work - train, optimize, and validate them Work with autoencoders, Hebbian networks, and GANs Who this book is for This book is for data science professionals who want to delve into complex ML algorithms to understand how various machine learning models can be built. Knowledge of Python programming is required.

Are you a novice programmer who wants to learn Python Machine Learning? Are you worried about how to translate what you already know into Python? This book will help you overcome those problems! As machines get ever more complex and perform more and more tasks to free up our time, so it is that new ideas are developed to help us continually improve their speed and abilities. One of these is Python and in Python Machine Learning: 3 books in 1 - The Ultimate Beginner's Guide to Learn Python Machine Learning Step by Step using Scikit-Learn and Tensorflow, you will discover information and advice on: Book 1 • What machine learning is • The history of machine learning • Approaches to machine learning • Support vector machines • Machine learning and neural networks • The Internet of Things (IoT) • The future of machine learning • And more… Book 2 • The principles surrounding Python • Different types of networks so you can choose what works best for you • Features of the system • Real world feature engineering • Understanding the techniques of semi-supervised learning • And more… Book 3 • How advanced tensorflow can be used • Neural network models and how to get the most from them • Machine learning with Generative Adversarial Networks • Translating images with cross domain GANs • TF clusters and how to use them • How to debug TF models • And more… This book has been written specifically for beginners and the simple, step by step instructions and plain language make it an ideal place to start for anyone who has a passing interest in this fascinating subject. Python really is an amazing system and can provide you with endless possibilities when you start learning about it. Get a copy of Python Machine Learning today and see where the future lies.

Python Machine Learning By Example, Third Edition serves as a comprehensive gateway into the world of machine learning (ML). With six new chapters, on topics including movie recommendation engine development with Naïve Bayes, recognizing faces with support vector machine, predicting stock prices with artificial neural networks, categorizing images of clothing with convolutional neural networks, predicting with sequences using recurring neural networks, and leveraging reinforcement learning for making decisions, the book has been considerably updated for the latest enterprise requirements. At the same time, this book provides actionable insights on the key fundamentals of ML with Python programming. Hayden applies his expertise to demonstrate implementations of algorithms in Python, both from scratch and with libraries. Each chapter walks through an industry-adopted application. With the help of realistic examples, you will gain an understanding of the mechanics of ML techniques in areas such as exploratory data analysis, feature engineering, classification, regression, clustering, and NLP. By the end of this ML Python book, you will have gained a broad picture of the ML ecosystem and will be well-versed in the best practices of applying ML techniques to solve problems.

Implement scikit-learn into every step of the data science pipeline About This Book Use Python and scikit-learn to create intelligent applications Discover how to apply algorithms in a variety of situations to tackle common and not-so common challenges in the machine learning domain A practical, example-based guide to help you gain expertise in implementing and evaluating machine learning systems using scikit-learn Who This Book Is For If you are a programmer and want to explore machine learning and data-based methods to build intelligent applications and enhance your programming skills, this is the course for you. No previous experience with machine-learning algorithms is required. What You Will Learn Review fundamental concepts including supervised and unsupervised experiences, common tasks, and performance metrics Classify objects (from documents to human faces and flower species) based on some of their features, using a variety of methods from Support Vector Machines to Naive Bayes Use Decision Trees to explain the main causes of certain phenomena such as passenger survival on the Titanic Evaluate the performance of machine learning systems in common tasks Master algorithms of various levels of complexity and learn how to analyze data at the same time Learn just enough math to think about the connections between various algorithms Customize machine learning algorithms to fit your problem, and learn how to modify them when the situation calls for it Incorporate other packages from the Python ecosystem to munge and visualize your dataset Improve the way you build your models using parallelization techniques In Detail Machine learning, the art of creating applications that learn from experience and data, has been around for many years. Python is quickly becoming the go-to language for analysts and data scientists due to its simplicity and flexibility; moreover, within the Python data space, scikit-learn is the unequivocal choice for machine learning. The course combines an introduction to some of the main concepts and methods in machine learning with practical, hands-on examples of real-world problems. The course starts by walking through different methods to prepare your data—be it a dataset with missing values or text columns that require the categories to be turned into indicator variables. After the data is ready, you'll learn different techniques aligned with different objectives—be it a dataset with known outcomes such as sales by state, or more complicated problems such as clustering similar customers. Finally, you'll learn how to polish your algorithm to ensure that it's both accurate and resilient to new datasets. You will learn to incorporate machine learning in your applications. Ranging from handwritten digit recognition to document classification, examples are solved step-by-step using scikit-learn and Python. By the end of this course you will have learned how to build applications that learn from experience, by applying the main concepts and techniques of machine learning. Style and Approach Implement scikit-learn using engaging examples and fun exercises, and with a gentle and friendly but comprehensive "learn-by-doing" approach. This is a practical course, which analyzes compelling data about life, health, and death with the

help of tutorials. It offers you a useful way of interpreting the data that's specific to this course, but that can also be applied to any other data. This course is designed to be both a guide and a reference for moving beyond the basics of scikit-learn.

Can Machines Really Learn?Machine learning (ML) is a type of artificial intelligence (AI) that provides computers with the ability to learn without being explicitly programmed. Machine learning has become an essential pillar of IT in all aspects, even though it has been hidden in the recent past. We are increasingly being surrounded by several machine learning-based apps across a broad spectrum of industries. From search engines to anti-spam filters to credit card fraud detection systems, list of machine learning applications is ever-expanding in scope and applications. The goal of this book is to provide you with a hands-on, project-based overview of machine learning systems and how they are applied over a vast spectrum of applications that underpins AI technology from Absolute Beginners to Experts.This book is a fast-paced, thorough introduction to Machine Learning that will have you writing programs, solving problems, and making things that work in no time.This book presents algorithms and approaches in such a way that grounds them in larger systems as you learn about a variety of topics, including: Supervised and Unsupervised learning methods Artificial Neural Networks Hands-on projects based on Real-world applications Bayesian learning method Reinforcement learning And much more By the end of this book, you should have a strong understanding of machine learning so that you can pursue any further and more advanced learning. Learning Outcomes: By the end of this book, you will be able to: Identify potential applications of machine learning in practice Describe the core differences in analyses enabled by regression, classification, and clustering Select the appropriate machine learning task for a potential application Apply regression, classification, and clustering Represent your data as features to serve as input to machine learning models Utilize a dataset to fit a model to analyze new data Build an end-to-end application that uses machine learning at its core Implement these techniques in Python If you've been thinking seriously about digging into ML, this book will get you up to speed. Why wait any longer?

Discover a project-based approach to mastering machine learning concepts by applying them to everyday problems using libraries such as scikit-learn, TensorFlow, and Keras Key Features Get to grips with Python's machine learning libraries including scikit-learn, TensorFlow, and Keras Implement advanced concepts and popular machine learning algorithms in real-world projects Build analytics, computer vision, and neural network projects Book Description Machine learning is transforming the way we understand and interact with the world around us. This book is the perfect guide for you to put your knowledge and skills into practice and use the Python ecosystem to cover key domains in machine learning. This second edition covers a range of libraries from the Python ecosystem, including TensorFlow and Keras, to help you implement real-world machine learning projects. The book begins by giving you an overview of machine learning with Python. With the help of complex datasets and optimized techniques, you'll go on to understand how to apply advanced concepts and popular machine learning algorithms to real-world projects. Next, you'll cover projects from domains such as predictive analytics to analyze the stock market and recommendation systems for GitHub repositories. In addition to this, you'll also work on projects from the NLP domain to create a custom news feed using frameworks such as scikit-learn, TensorFlow, and Keras. Following this, you'll learn how to build an advanced chatbot, and scale things up

using PySpark. In the concluding chapters, you can look forward to exciting insights into deep learning and you'll even create an application using computer vision and neural networks. By the end of this book, you'll be able to analyze data seamlessly and make a powerful impact through your projects. What you will learn Understand the Python data science stack and commonly used algorithms Build a model to forecast the performance of an Initial Public Offering (IPO) over an initial discrete trading window Understand NLP concepts by creating a custom news feed Create applications that will recommend GitHub repositories based on ones you've starred, watched, or forked Gain the skills to build a chatbot from scratch using PySpark Develop a market-prediction app using stock data Delve into advanced concepts such as computer vision, neural networks, and deep learning Who this book is for This book is for machine learning practitioners, data scientists, and deep learning enthusiasts who want to take their machine learning skills to the next level by building real-world projects. The intermediate-level guide will help you to implement libraries from the Python ecosystem to build a variety of projects addressing various machine learning domains. Knowledge of Python programming and machine learning concepts will be helpful.

Explore and master the most important algorithms for solving complex machine learning problems. Key Features Discover high-performing machine learning algorithms and understand how they work in depth. One-stop solution to mastering supervised, unsupervised, and semi-supervised machine learning algorithms and their implementation. Master concepts related to algorithm tuning, parameter optimization, and more Book Description Machine learning is a subset of AI that aims to make modern-day computer systems smarter and more intelligent. The real power of machine learning resides in its algorithms, which make even the most difficult things capable of being handled by machines. However, with the advancement in the technology and requirements of data, machines will have to be smarter than they are today to meet the overwhelming data needs; mastering these algorithms and using them optimally is the need of the hour. Mastering Machine Learning Algorithms is your complete guide to quickly getting to grips with popular machine learning algorithms. You will be introduced to the most widely used algorithms in supervised, unsupervised, and semi-supervised machine learning, and will learn how to use them in the best possible manner. Ranging from Bayesian models to the MCMC algorithm to Hidden Markov models, this book will teach you how to extract features from your dataset and perform dimensionality reduction by making use of Python-based libraries such as scikit-learn. You will also learn how to use Keras and TensorFlow to train effective neural networks. If you are looking for a single resource to study, implement, and solve end-to-end machine learning problems and use-cases, this is the book you need. What you will learn Explore how a ML model can be trained, optimized, and evaluated Understand how to create and learn static and dynamic probabilistic models Successfully cluster high-dimensional data and evaluate model accuracy Discover how artificial

neural networks work and how to train, optimize, and validate them Work with Autoencoders and Generative Adversarial Networks Apply label spreading and propagation to large datasets Explore the most important Reinforcement Learning techniques Who this book is for This book is an ideal and relevant source of content for data science professionals who want to delve into complex machine learning algorithms, calibrate models, and improve the predictions of the trained model. A basic knowledge of machine learning is preferred to get the best out of this guide.

Build Machine Learning models with a sound statistical understanding. About This Book Learn about the statistics behind powerful predictive models with p-value, ANOVA, and F- statistics. Implement statistical computations programmatically for supervised and unsupervised learning through K-means clustering. Master the statistical aspect of Machine Learning with the help of this example-rich guide to R and Python. Who This Book Is For This book is intended for developers with little to no background in statistics, who want to implement Machine Learning in their systems. Some programming knowledge in R or Python will be useful. What You Will Learn Understand the Statistical and Machine Learning fundamentals necessary to build models Understand the major differences and parallels between the statistical way and the Machine Learning way to solve problems Learn how to prepare data and feed models by using the appropriate Machine Learning algorithms from the more-than-adequate R and Python packages Analyze the results and tune the model appropriately to your own predictive goals Understand the concepts of required statistics for Machine Learning Introduce yourself to necessary fundamentals required for building supervised & unsupervised deep learning models Learn reinforcement learning and its application in the field of artificial intelligence domain In Detail Complex statistics in Machine Learning worry a lot of developers. Knowing statistics helps you build strong Machine Learning models that are optimized for a given problem statement. This book will teach you all it takes to perform complex statistical computations required for Machine Learning. You will gain information on statistics behind supervised learning, unsupervised learning, reinforcement learning, and more. Understand the real-world examples that discuss the statistical side of Machine Learning and familiarize yourself with it. You will also design programs for performing tasks such as model, parameter fitting, regression, classification, density collection, and more. By the end of the book, you will have mastered the required statistics for Machine Learning and will be able to apply your new skills to any sort of industry problem. Style and approach This practical, step-by-step guide will give you an understanding of the Statistical and Machine Learning fundamentals you'll need to build models.

Equipped with the latest updates, this third edition of Python Machine Learning By Example provides a comprehensive course for ML enthusiasts to strengthen their command of ML concepts, techniques, and algorithms.

Unlock modern machine learning and deep learning techniques with Python by using the latest cutting-edge open source

Python libraries. About This Book Second edition of the bestselling book on Machine Learning A practical approach to key frameworks in data science, machine learning, and deep learning Use the most powerful Python libraries to implement machine learning and deep learning Get to know the best practices to improve and optimize your machine learning systems and algorithms Who This Book Is For If you know some Python and you want to use machine learning and deep learning, pick up this book. Whether you want to start from scratch or extend your machine learning knowledge, this is an essential and unmissable resource. Written for developers and data scientists who want to create practical machine learning and deep learning code, this book is ideal for developers and data scientists who want to teach computers how to learn from data. What You Will Learn Understand the key frameworks in data science, machine learning, and deep learning Harness the power of the latest Python open source libraries in machine learning Explore machine learning techniques using challenging real-world data Master deep neural network implementation using the TensorFlow library Learn the mechanics of classification algorithms to implement the best tool for the job Predict continuous target outcomes using regression analysis Uncover hidden patterns and structures in data with clustering Delve deeper into textual and social media data using sentiment analysis In Detail Machine learning is eating the software world, and now deep learning is extending machine learning. Understand and work at the cutting edge of machine learning, neural networks, and deep learning with this second edition of Sebastian Raschka's bestselling book, Python Machine Learning. Thoroughly updated using the latest Python open source libraries, this book offers the practical knowledge and techniques you need to create and contribute to machine learning, deep learning, and modern data analysis. Fully extended and modernized, Python Machine Learning Second Edition now includes the popular TensorFlow deep learning library. The scikit-learn code has also been fully updated to include recent improvements and additions to this versatile machine learning library. Sebastian Raschka and Vahid Mirjalili's unique insight and expertise introduce you to machine learning and deep learning algorithms from s ...

Graphics in this book are printed in black and white. This book includes: Excel VBA: A Step-By-Step Tutorial For Beginners To Learn Excel VBA Programming From Scratch Excel VBA: Intermediate Lessons in Excel VBA Programming for Professional Advancement Excel VBA: A Step-By-Step Comprehensive Guide on Advanced Excel VBA Programming Techniques and Strategies ExcEL VBA: A Comprehensive, Step-By-Step Guide On Excel VBA Finance For Data Reporting And Business Analysis Excel VBA: A Step-by-Step Comprehensive Guide on Excel VBA Programming Tips and Tricks for Effective Strategies Machine Learning For Beginners: A Comprehensive, Step-by-Step Guide to Learning and Understanding Machine Learning Concepts, Technology and Principles for Beginners Machine Learning: A Comprehensive, Step-by-Step Guide to Intermediate Concepts and Techniques in Machine Learning

Machine Learning: A Comprehensive, Step-by-Step Guide to Learning and Applying Advanced Concepts and Techniques in Machine Learning Machine Learning: A Complete Exploration of Highly Advanced Machine Learning Concepts, Best Practices and Techniques Excel VBA One of the few things that look difficult is learning seemingly technical things from scratch. The truth is so many have given up on learning new things due to the vagueness and abstractness they encounter at the inception. This won't be so for Excel VBA when you make this book your guide. The Ultimate Excel VBA master is a complete step-by-step guide to becoming Excel VBA programming from scratch. It uncovers the basics and rudiments of Excel VBA, with this book you can be self thought from not having an idea to being an expert. You will learn the use of charts, spreadsheet, data reporting, business analysis and a lot more. This book is a quintessential material painstakingly compiled to help you master Tips and tricks of Excel VBA programming for effective strategies. It aids your professionalism and bails you out of the stress in computing bundle of data. This isn't gainsaying, but a decision to pick this book will positively increase your productivity. Machine Learning Machines are created to make work easier for us, but so many have seen machines as a major barrier due to their supposed technicality of machines. Are you a novice trying to understand the basics of machine? Do you have prior knowledge and you wish to acquire further understanding about tensorFlow, scikit- learn, algorithms, decision trees, random forest, deep learning or neural networks? Are you even a pro and you wish to add to your knowledge? This book is all you need. This painstakingly compiled manuscript unravels the rudiments and generality of machine learning. It is total and all encompassing with accurate and concise principles of machine learning. This quintessential book comprises modules that cut across various level of knowledge in machine learning. It is an exquisite material that grants you practical knowledge in machines. It weighs more than mere words, it is gold in manuscript. You might not know how much you know or how much you need to know until you avail yourself with essential materials. This book is not one of all you need to understand machine learning; it is all you need to uncover the full scope of learning machines. Technicality is very relative when you have the right knowledge. Stay ahead; make a choice that will last. So What are You Waiting For? Grab a copy of this book Now ! To learn and master Excel VBA programming and Machine Learning.

Use scikit-learn to apply machine learning to real-world problems About This Book Master popular machine learning models including k-nearest neighbors, random forests, logistic regression, k-means, naive Bayes, and artificial neural networks Learn how to build and evaluate performance of efficient models using scikit-learn Practical guide to master your basics and learn from real life applications of machine learning Who This Book Is For This book is intended for software engineers who want to understand how common machine learning algorithms work and develop an intuition for how to use them, and for data scientists who want to learn about the scikit-learn API. Familiarity with machine learning

fundamentals and Python are helpful, but not required. What You Will Learn Review fundamental concepts such as bias and variance Extract features from categorical variables, text, and images Predict the values of continuous variables using linear regression and K Nearest Neighbors Classify documents and images using logistic regression and support vector machines Create ensembles of estimators using bagging and boosting techniques Discover hidden structures in data using K-Means clustering Evaluate the performance of machine learning systems in common tasks In Detail Machine learning is the buzzword bringing computer science and statistics together to build smart and efficient models. Using powerful algorithms and techniques offered by machine learning you can automate any analytical model. This book examines a variety of machine learning models including popular machine learning algorithms such as k-nearest neighbors, logistic regression, naive Bayes, k-means, decision trees, and artificial neural networks. It discusses data preprocessing, hyperparameter optimization, and ensemble methods. You will build systems that classify documents, recognize images, detect ads, and more. You will learn to use scikit-learn's API to extract features from categorical variables, text and images; evaluate model performance, and develop an intuition for how to improve your model's performance. By the end of this book, you will master all required concepts of scikit-learn to build efficient models at work to carry out advanced tasks with the practical approach. Style and approach This book is motivated by the belief that you do not understand something until you can describe it simply. Work through toy problems to develop your understanding of the learning algorithms and models, then apply your learnings to real-life problems.

Are you a new business owner? Or an entrepreneur looking to catch up to the big companies in your industrial sector? Do you want to find new solutions for complex decisions and maybe automate the entire process? Don't worry: background in coding language is not required! This is the book you need to understand and master the fundamentals and importance of data science technologies to kick start your business or take it to the next level. Thanks to the smart and savvy customers of today, the competition to gain new customers while retaining existing customers is fierce. As a result, companies are increasingly relying upon cutting edge technologies such as big data analytics, data mining technology, machine learning, and artificial intelligence technology to gain an edge over the competition Today machine learning and artificial intelligence have given rise to sophisticated machines that can study human behavior and activity to identify underlying human behavioral patterns and precisely predict what products and services consumers are interested in. Businesses with an eye on the future are gradually turning into technology companies under the façade of their intended business model. It is getting increasingly challenging for traditional businesses to retain their customers without adopting one or more of the cutting-edge technology explained in this book. Those entrepreneurs and business executives who have a sound understanding of the current challenges and status of their business will be primed to make

informed decisions to meet the challenges head-on and improve their bottom line. This is where the treasure trove of knowledge from this book will help you take an exciting new turn on your business journey and compete with the titans of the Silicon Valley. Do you found only complicated books? Don't worry You will find an easy-to-follow guide with the complex concepts explained easily. Some of the highlights of the book include: Learn the nuances of "12 of the most popular machine learning algorithms", in a very easy to understand language that requires no background in Python coding language Learn about the foundational machine learning algorithms namely, supervised, unsupervised, semi-supervised, and reinforcement machine learning algorithms Explicit list of all built-in Python functions, methods, and keywords that can be used to easily develop and run advanced codes Learn how Python programming is being used in the development and testing of software programs and machine learning algorithms to solve real-world problems Learn all about big data right from the historical development to the current explosion in this field Dig deep into the data mining process, the benefits of using data mining technology, the challenges facing the data mining technology Deep dive into the functioning of Scikit-Learn library along with the pre-requisites required to develop a machine learning model using the Scikit-Learn library and many more... This book is filled with real-life examples to help you understand the nitty-gritty of all the concepts as well as names and descriptions of multiple tools that you can further explore and selectively implement in your business to reap the benefits of these cutting-edge technologies. Remember knowledge is power, and with the great power you will gather from this book, you will be armed to make sound personal and professional technological choices. This is a must-have Python guide, and with this book, you can boost your knowledge and master big data and analytics with this easy-to-follow technique. Scroll up and hit that BUY BUTTON!

Numerical Python by Robert Johansson shows you how to leverage the numerical and mathematical modules in Python and its Standard Library as well as popular open source numerical Python packages like NumPy, FiPy, matplotlib and more to numerically compute solutions and mathematically model applications in a number of areas like big data, cloud computing, financial engineering, business management and more. After reading and using this book, you'll get some takeaway case study examples of applications that can be found in areas like business management, big data/cloud computing, financial engineering (i.e., options trading investment alternatives), and even games. Up until very recently, Python was mostly regarded as just a web scripting language. Well, computational scientists and engineers have recently discovered the flexibility and power of Python to do more. Big data analytics and cloud computing programmers are seeing Python's immense use. Financial engineers are also now employing Python in their work. Python seems to be evolving as a language that can even rival C++, Fortran, and Pascal/Delphi for numerical and mathematical computations.

Unlock your potential as an AI and ML professional! This book covers basic to advanced level topics required to master the Machine Learning concepts. There are lot of programs implemented which goes with the explaination - thats why we call it Learn

and Practice. Book uses Scikit-learn (formerly scikits.learn and also known as sklearn) is the most popular package and also a free software machine learning library for the Python programming language. It features various classification, regression and clustering algorithms including support vector machines, random forests, gradient boosting, k-means and DBSCAN, and is designed to interoperate with the Python numerical and scientific libraries NumPy and SciPy.Happy Coding in Python

Machine learning (ML) is changing virtually every aspect of our lives. Today ML algorithms accomplish tasks that until recently only expert humans could perform. As it relates to finance, this is the most exciting time to adopt a disruptive technology that will transform how everyone invests for generations. Readers will learn how to structure Big data in a way that is amenable to ML algorithms; how to conduct research with ML algorithms on that data; how to use supercomputing methods; how to backtest your discoveries while avoiding false positives. The book addresses real-life problems faced by practitioners on a daily basis, and explains scientifically sound solutions using math, supported by code and examples. Readers become active users who can test the proposed solutions in their particular setting. Written by a recognized expert and portfolio manager, this book will equip investment professionals with the groundbreaking tools needed to succeed in modern finance.

The book adopts a tutorial-based approach to introduce the user to Scikit-learn.If you are a programmer who wants to explore machine learning and data-based methods to build intelligent applications and enhance your programming skills, this the book for you. No previous experience with machine-learning algorithms is required.

***** BUY NOW (will soon return to 25.89 $)******Free eBook for customers who purchase the print book from Amazon****** Are you thinking of learning more about Machine Learning using Python? (For Beginners) This book would seek to explain common terms and algorithms in an intuitive way. The author used a progressive approach whereby we start out slowly and improve on the complexity of our solutions. 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 a hands on approach which would lead to better mental representations. Step By Step Guide and Visual Illustrations and Examples This book and the accompanying examples, you would be well suited to tackle problems which pique your interests using machine learning.Instead of tough math formulas, this book contains several graphs and images which detail all important Machine Learning concepts and their applications. Target Users The book designed for a variety of target audiences. The most suitable users would include: Anyone who is intrigued by how algorithms arrive at predictions but has no previous knowledge of the field. Software developers and engineers with a strong programming background but seeking to break into the field of machine learning. Seasoned professionals in the field of artificial intelligence and machine learning who desire a bird's eye view of current techniques and approaches. What's Inside This Book? 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 A Regression Example: Predicting Boston Housing Prices Import Libraries: How to

forecast and Predict Popular Classification Algorithms Introduction to K Nearest Neighbors Introduction to Support Vector Machine Example of Clustering Running K-means with Scikit-Learn Introduction to Deep Learning using TensorFlow Deep Learning Compared to Other Machine Learning Approaches Applications of Deep Learning How to run the Neural Network using TensorFlow Cases of Study with Real Data Sources & References Frequently Asked Questions Q: Is this book for me and do I need programming experience?A: If you want to smash Machine Learning from scratch, this book is for you. 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 Machine Learning expert?A: Unfortunately, no. This book is designed for readers taking their first steps in Machine Learning and further learning will be required beyond this book to master all aspects of Machine Learning.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/

Unlock deeper insights into Machine Leaning with this vital guide to cutting-edge predictive analytics About This Book Leverage Python's most powerful open-source libraries for deep learning, data wrangling, and data visualization Learn effective strategies and best practices to improve and optimize machine learning systems and algorithms Ask – and answer – tough questions of your data with robust statistical models, built for a range of datasets Who This Book Is For If you want to find out how to use Python to start answering critical questions of your data, pick up Python Machine Learning – whether you want to get started from scratch or want to extend your data science knowledge, this is an essential and unmissable resource. What You Will Learn Explore how to use different machine learning models to ask different questions of your data Learn how to build neural networks using Keras and Theano Find out how to write clean and elegant Python code that will optimize the strength of your algorithms Discover how to embed your machine learning model in a web application for increased accessibility Predict continuous target outcomes using regression analysis Uncover hidden patterns and structures in data with clustering Organize data using effective pre-processing techniques Get to grips with sentiment analysis to delve deeper into textual and social media data In Detail Machine learning and predictive analytics are transforming the way businesses and other organizations operate. Being able to understand trends and patterns in complex data is critical to success, becoming one of the key strategies for unlocking growth in a challenging contemporary marketplace. Python can help you deliver key insights into your data – its unique capabilities as a language let you build sophisticated algorithms and statistical models that can reveal new perspectives and answer key questions that are vital for success. Python Machine Learning gives you access to the world of predictive analytics and demonstrates why Python is one of the world's leading data science languages. If you want to ask better questions of data, or need to improve and extend the capabilities of your machine learning systems, this practical data science book is invaluable. Covering a wide range of powerful Python libraries, including scikit-learn, Theano, and Keras, and featuring guidance and tips on everything from sentiment analysis to neural networks, you'll soon be able to answer some of the most important questions facing you and your organization. Style

and approach Python Machine Learning connects the fundamental theoretical principles behind machine learning to their practical application in a way that focuses you on asking and answering the right questions. It walks you through the key elements of Python and its powerful machine learning libraries, while demonstrating how to get to grips with a range of statistical models. 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

Are you looking for a guide that will teach you all you need to know about Machine Learning? Are you looking for a way to learn how to write algorithms from scratch? This 3 book bundle will help you to master Machine Learning with Python.Manuscript - 1Before you get into the world of machine learning, you have to start at the very basics if you are just getting started with programming. Python is one of the best platforms to start with as it serves as a core of modern computing techniques such as deep learning, machine learning and neural networks. In this book, you will learn exactly what advantages Python has over other languages. You will also learn how to set up Python in your system and code and run basic programs all with the aid of sample codes provided throughout the book.From syntax to functions to data types to conditional statements, Machine Learning with Python is well-rounded to assist you in your coding journey.Manuscript - 2Artificial intelligence is a common part of our lives, and we use it daily. Machine learning is one application of artificial intelligence and is where software, computers and devices use cognition to learn. If you use Siri on an iPhone, Cortana on your Windows PC, or Alexa, you are already making use of machine learning, especially when they provide you with traffic news, weather predictions, search results, and more. With this guide, you will learn the machine learning basics, using real code and open-source data sets.You will learn: -An overview of the Python language-Popular machine learning algorithms-Basics of machine learning-Machine learning terminology-How to preprocess data-How to create data sets-How to use Scikit-learn to build models-Using TensorFlow to build neural networks-And much moreI even provide you with a multiple choice quiz, complete with answers, to help you test your knowledge.Manuscript - 3This book focuses on advanced sub-domains of machine learning, such as Class Imbalance strategies, Hidden Markov Models, HMM, Reinforcement Learning, RNN, and LSTM, along with a few more advanced level topics. With its high power and ease of use, we

will use the Scikit Machine Learning Library in Python.Unlike statistics, where models are used to understand data, different modeling in machine learning focuses on developing models that make more accurate predictions. Unlike the broader area of machine learning that can be used with data of any format, Hidden Markov models focus on robotics (e.g., controlling the robots by programming). This book is designed to introduce you to the most important and powerful methods of machine learning used by leading computer experts. It contains clear examples and detailed code samples to demonstrate deep learning, semi-directed learning, and other techniques. The methods discussed in this book will help you get started in this profitable and growing industry.-Compete with the best data professionals and gain practical and theoretical insight into the latest in-depth training algorithms.-Use your new skills to solve real-world problems-Automation of large and complex data sets and overcoming complex and time-consuming practices.-Increase the accuracy of existing models and their input using object design methods.-Sharing of different training methods to improve the consistency of results.-Understand the hidden structure of documents using various unmanaged methods-To further improve the effectiveness of training models by using consistent methods to combine different models.In addition, the book is designed in such a way that any student, researcher, or technologist who conducts various experiments using large data sets and combines them into a predictive output can use a variety of machine learning tools offered by the programming language.Grab this 3 book bundle today and start learning how to code your very own machine learning algorithms!

This book primarily targets Python developers who want to learn and use Python's machine learning capabilities and gain valuable insights from data to develop effective solutions for business problems.

Master machine learning with Python in six steps and explore fundamental to advanced topics, all designed to make you a worthy practitioner. This book’s approach is based on the “Six degrees of separation” theory, which states that everyone and everything is a maximum of six steps away. Mastering Machine Learning with Python in Six Steps presents each topic in two parts: theoretical concepts and practical implementation using suitable Python packages. You’ll learn the fundamentals of Python programming language, machine learning history, evolution, and the system development frameworks. Key data mining/analysis concepts, such as feature dimension reduction, regression, time series forecasting and their efficient implementation in Scikit-learn are also covered. Finally, you’ll explore advanced text mining techniques, neural networks and deep learning techniques, and their implementation. All the code presented in the book will be available in the form of iPython notebooks to enable you to try out these examples and extend them to your advantage. What You'll Learn Examine the fundamentals of Python programming language Review machine Learning history and evolution Understand machine learning system development frameworks Implement supervised/unsupervised/reinforcement learning techniques with examples Explore fundamental to advanced text mining techniques Implement various deep learning frameworks Who This Book Is For Python developers or data engineers looking to expand their knowledge or career into machine learning area. Non-Python (R, SAS, SPSS, Matlab or any other language) machine learning practitioners looking to expand their implementation skills in Python. Novice machine learning practitioners looking to learn advanced topics, such as hyperparameter tuning, various ensemble techniques, natural language processing (NLP), deep learning, and basics of reinforcement learning.

"Master scikit-learn through a combination of lecture and hands-on (via Jupyter) in this eight-part video series: Scikit-learn Overview; Installing Scikit-learn; Loading Data Sets using Scikit-learn; Pre-processing Data using Scikit-learn; Splitting Data into Train Sets and Test Sets in Scikit-learn; Linear Regression using Scikit-learn; Naïve Bayes using Scikit-learn; SVM using Scikit-learn."--Resource description page.
??????????????????????????????????Python???Scikit-learn?NLTK?Pandas?gensim?XGBoost?Google Tensorflow?? ????4???1??????????????Python??????2???????????Scikit-learn????????????3?????????????????????????????????????4??????Kaggle??????????????????????????????????????
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 Aurlien Gron 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 Apply practical code examples without acquiring excessive machine learning theory or algorithm details