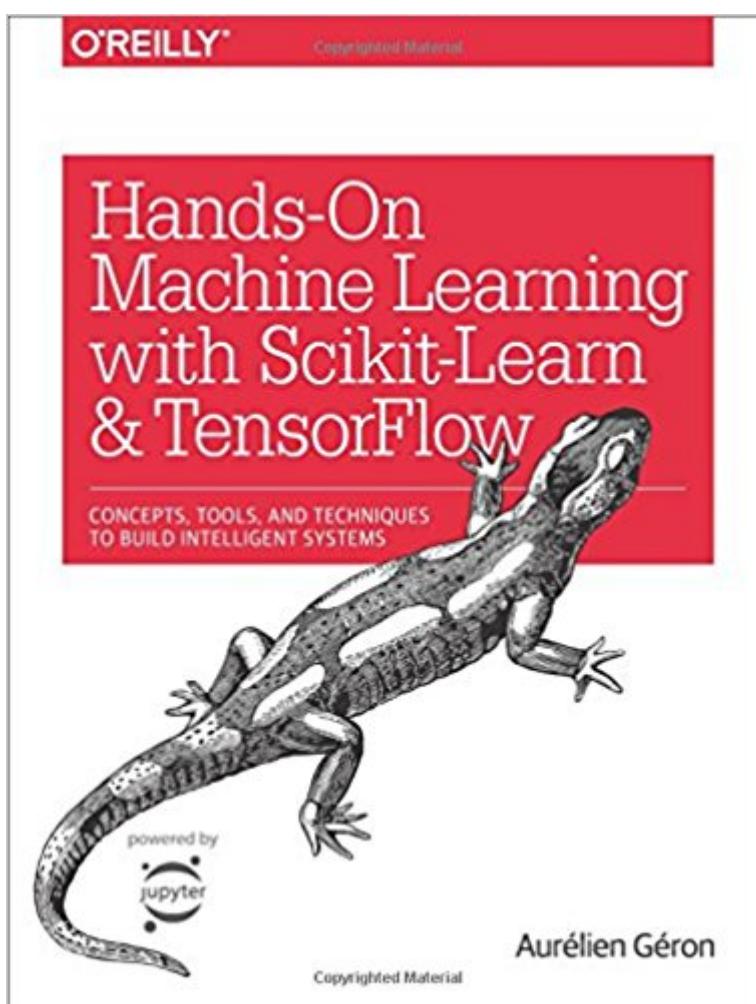The book was found

Hands-On Machine Learning With Scikit-Learn And TensorFlow: Concepts, Tools, And Techniques To Build Intelligent Systems

Synopsis

Graphics in this book are printed in black and white.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 frameworksâ ”scikit-learn and TensorFlowâ ”author AurÃ©lien GÃ©ron helps you gain an intuitive understanding of the concepts and tools for building intelligent systems. Youâ ™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 youâ ™ve learned, all you need is programming experience to get started.Explore the machine learning landscape, particularly neural netsUse scikit-learn to track an example machine-learning project end-to-endExplore several training models, including support vector machines, decision trees, random forests, and ensemble methodsUse the TensorFlow library to build and train neural netsDive into neural net architectures, including convolutional nets, recurrent nets, and deep reinforcement learningLearn techniques for training and scaling deep neural netsApply practical code examples without acquiring excessive machine learning theory or algorithm details

Book Information

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Customer Reviews

View larger   Prerequisites   This book assumes that you have some Python programming experience and that you are familiar with PythonÃ¢Â Â™s main scientific libraries, in particular

NumPy, Pandas, and Matplotlib.   Also, if you care about what's under the hood you should have a reasonable understanding of college-level math as well (calculus, linear algebra, probabilities, and statistics).   More about this book   Machine Learning in Your Projects   Naturally you are excited about Machine Learning and you would love to join the party!   Perhaps you would like to give your homemade robot a brain of its own? Make it recognize faces? Or learn to walk around? Or maybe your company has tons of data (user logs, financial data, production data, machine sensor data, hotline stats, HR reports, etc.), and more than likely you could unearth some hidden gems if you just knew where to look.   For example: Segment customers and find the best marketing strategy for each group   Recommend products for each client based on what similar clients bought   Detect which transactions are likely to be fraudulent   Predict next year's revenue   And more!

Objective and Approach   This book assumes that you know close to nothing about Machine Learning. Its goal is to give you the concepts, the intuitions, and the tools you need to actually implement programs capable of learning from data.   We will cover a large number of techniques, from the simplest and most commonly used (such as linear regression) to some of the Deep Learning techniques that regularly win competitions.   Rather than implementing our own toy versions of each algorithm, we will be using actual production-ready Python frameworks: Scikit-Learn   Scikit-Learn is very easy to use, yet it implements many Machine Learning algorithms efficiently, so it makes for a great entry point to learn Machine Learning.   TensorFlow   TensorFlow is a more complex library for distributed numerical computation using data flow graphs. It makes it possible to train and run very large neural networks efficiently by distributing the computations across potentially thousands of multi-GPU servers. TensorFlow was created at Google and supports many of their large-scale Machine Learning applications. It was open-sourced in November 2015.

Aurélien Géron is a Machine Learning consultant. A former Googler, he led the YouTube video classification team from 2013 to 2016. He was also a founder and CTO of Wifirst from 2002 to 2012, a leading Wireless ISP in France, and a founder and CTO of Polyconseil in 2001, the firm that now manages the electric car sharing service Autolib'.Before this he worked as an engineer in a variety of domains: finance (JP Morgan and Société Générale), defense (Canada's DOD), and healthcare (blood transfusion). He published a few technical books (on C++, WiFi, and Internet architectures), and was a Computer Science lecturer in a French engineering school.A few fun

facts: he taught his 3 children to count in binary with their fingers (up to 1023), he studied microbiology and evolutionary genetics before going into software engineering, and his parachute didn't open on the 2nd jump.

I have been a collector of books and classes of machine learning and deep learning for the last few years. Even though I come from a strong theoretical background, I have to say one must do hands on tinkering to be able to solve one's own problem successfully. Then for deep learning one must work with Tensorflow or Theano. However, I have been searching for a good hands-on book on tensorflow and had found none until this book.I purchased the kindle version so I can dive into this book early before the book comes out. I am not disappointed. It gives you the code on the familiar Python notebook to work on. The author really knows about Tensorflow and machine learning, and his teaching shows. There are pieces of information hard to find somewhere else, and I have spent hundreds to thousands to attend workshops.Needless to say, I have not done all the exercises yet. But I like this book enough that I will work on all the problems I am interested in.One disappointment though. I was hoping Keras, a high level api that enables fast experiments, is covered. It is not in this version. Sure hope it will be covered in the updated version.

An amazing reference which packs up all what I needed to know about Machine Learning starting from simple linear regression till complex deep learning neural networks. It offers a lot of practical exercises with their answers published on github. It also relates the machine learning tasks to real life business domains.

Very useful, and well written. The code is on github as iPython notebooks.

The book itself is excellent and very hand-on indeed. However, the book I purchased and filled by has the entire Table of content and preface missing. I couldn't believe it and obviously saw the TOC from the "look inside" feature. Very disappointed from whatever the publisher and fulfillment! I expected the slightly higher price paid for books filled by would have higher quality.

Really well written book. Clear explanations of all the concepts followed by working code written (1) fully, to show the building blocks, and (2) shortcuts using Tensorflow built-in methods. Very happy with this purchase.

I am admired by the quality of the contents of this book. I appreciate the hard work of the author put in making this quality work. All the very best sir.

Great Book! I recommend to buy it if you want to know practical guide on Machine Learning and Deep Learning like me.

Started from the basics and covered everything very thoroughly, step by step with great explanations.

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