New edition of the bestselling guide to artificial intelligence with Python, updated to Python 3.x, with seven new chapters that cover RNNs, AI and Big Data, fundamental use cases, chatbots, and more. Key Features Completely updated and revised to Python 3.x New chapters for AI on the cloud, recurrent neural networks, deep learning models, and feature selection and engineering Learn more about deep learning algorithms, machine learning data pipelines, and chatbots Book Description Artificial Intelligence with Python, Second Edition is an updated and expanded version of the bestselling guide to artificial intelligence using the latest version of Python 3.x. Not only does it provide you an introduction to artificial intelligence, this new edition goes further by giving you the tools you need to explore the amazing world of intelligent apps and create your own applications. This edition also includes seven new chapters on more advanced concepts of Artificial Intelligence, including fundamental use cases of AI; machine learning data pipelines; feature selection and feature engineering; AI on the cloud; the basics of chatbots; RNNs and DL models; and AI and Big Data. Finally, this new edition explores various real-world scenarios and teaches you how to apply relevant AI algorithms to a wide swath of problems, starting with the most basic AI concepts and progressively building from there to solve more difficult challenges so that by the end, you will have gained a solid understanding of, and when best to use, these many artificial intelligence techniques. What you will learn Understand what artificial intelligence, machine learning, and data science are Explore the most
common artificial intelligence use cases. Learn how to build a machine learning pipeline. Assemble the basics of feature selection and feature engineering. Identify the differences between supervised and unsupervised learning. Discover the most recent advances and tools offered for AI development in the cloud. Develop automatic speech recognition systems and chatbots. Apply AI algorithms to time series data. Who this book is for: The intended audience for this book is Python developers who want to build real-world Artificial Intelligence applications. Basic Python programming experience and awareness of machine learning concepts and techniques is mandatory.

Learn, understand, and implement deep neural networks in a math- and programming-friendly approach using Keras and Python. The book focuses on an end-to-end approach to developing supervised learning algorithms in regression and classification with practical business-centric use-cases implemented in Keras. The overall book comprises three sections with two chapters in each section. The first section prepares you with all the necessary basics to get started in deep learning. Chapter 1 introduces you to the world of deep learning and its difference from machine learning, the choices of frameworks for deep learning, and the Keras ecosystem. You will cover a real-life business problem that can be solved by supervised learning algorithms with deep neural networks. You'll tackle one use case for regression and another for classification leveraging popular Kaggle datasets. Later, you will see an interesting and challenging part of deep learning: hyperparameter tuning; helping you further improve your models when building robust deep learning applications. Finally, you'll further hone your skills in deep learning and cover areas of active development and research in deep learning. At the end of Learn Keras for Deep Neural Networks, you will have a thorough understanding of deep learning principles and have practical hands-on experience in developing enterprise-grade deep learning solutions in Keras. What you'll learn: Master fast-paced practical deep learning concepts with math- and programming-friendly abstractions. Design, develop, train, validate, and deploy deep neural networks using the Keras framework. Use best practices for debugging and validating deep learning models. Deploy and integrate deep learning as a service into a larger software service or product. Extend deep learning principles into other popular frameworks. Who this book is for: Software engineers and data engineers with basic programming skills in any language and who are keen on exploring deep learning for a career move or an enterprise project.

Convolutional Neural Networks in Python: This book covers the basics behind Convolutional Neural Networks by introducing you to this complex world of deep learning and artificial neural networks in a simple and easy to understand way. It is perfect for any beginner out there looking forward to learning more about this machine learning field. This book is all about how to use convolutional neural networks for various image, object and other common classification problems in Python. Here, we also take a deeper look into various Keras layers used for building CNNs; we take a look at different activation functions and much more, which will eventually lead you to creating highly accurate models able of performing great task results on various image classification, object classification and other problems. Therefore, at the end of the book, you will have a better insight into this world, thus you will be more than prepared to deal with more complex and challenging tasks on your own. Here is a preview of what you'll learn in...
This Book Convolutional neural networks structure How convolutional neural networks actually work Convolutional neural networks applications The importance of convolution operator Different convolutional neural networks layers and their importance A rearrangement of spatial parameters How and when to use stride and zero-padding Method of parameter sharing Matrix multiplication and its importance Pooling and dense layers Introducing non-linearity relu activation function How to train your convolutional neural network models using backpropagation How and why to apply dropout CNN model training process How to build a convolutional neural network Generating predictions and calculating loss functions How to train and evaluate your MNIST classifier How to build a simple image classification CNN and much, much more!

Practical Deep Learning teaches total beginners how to build the datasets and models needed to train neural networks for your own DL projects. If you’ve been curious about machine learning but didn’t know where to start, this is the book you’ve been waiting for. Focusing on the subfield of machine learning known as deep learning, it explains core concepts and gives you the foundation you need to start building your own models. Rather than simply outlining recipes for using existing toolkits, Practical Deep Learning teaches you the why of deep learning and will inspire you to explore further. All you need is basic familiarity with computer programming and high school math—the book will cover the rest. After an introduction to Python, you’ll move through key topics like how to build a good training dataset, work with the scikit-learn and Keras libraries, and evaluate your models’ performance. You’ll also learn: • How to use classic machine learning models like k-Nearest Neighbors, Random Forests, and Support Vector Machines • How neural networks work and how they’re trained • How to use convolutional neural networks • How to develop a successful deep learning model from scratch You’ll conduct experiments along the way, building to a final case study that incorporates everything you’ve learned. The perfect introduction to this dynamic, ever-expanding field, Practical Deep Learning will give you the skills and confidence to dive into your own machine learning projects.

Data Analytics - 7 BOOK BUNDLE!! Book 1: Data Analytics For Beginners In this book you will learn: What is Data Analytics Types of Data Analytics Evolution of Data Analytics Big Data Defined Data Mining Data Visualization Cluster Analysis And of course much more! Book 2: Deep Learning With Keras In this book you will learn: Deep Neural Network Neural Network Elements Keras Models Sequential Model Functional API Model Keras Layers Core Keras Layers Convolutional Keras Layers Recurrent Keras Layers Deep Learning Algorithms Supervised Learning Algorithms Applications of Deep Learning Models Automatic Speech and Image Recognition Natural Language Processing And of course much more! Book 3: Analyzing Data With Power BI In this book you will learn: Basics of data analysis processes Fundamental data analysis algorithms Basic of data and text mining, data visualization, and business intelligence Techniques used for analysing quantitative data Basic data analysis tasks Conceptual, logical, and physical data models Power BI service and data modelling Creating reports and visualizations in Power BI And of course much more! Book 4: Reinforcement Learning With Python In this book you will learn: Types of fundamental machine learning algorithms in comparison to reinforcement learning Essentials of reinforcement learning process Marko decision processes and basic parameters How to integrate reinforcement learning algorithm using OpenAI Gym How to integrate Monte Carlo methods for
prediction Monte Carlo tree search And much, much more Book 5: Artificial Intelligence Python In this book you will learn: Different artificial intelligence approaches and goals How to define AI system Basic AI techniques Reinforcement learning And much, much more Book 6: Text Analytics With Python In this book you will learn: Text analytics process How to build a corpus and analyze sentiment Named entity extraction with Groningen meaning bank corpus How to train your system Getting started with NLTK How to search syntax and tokenize sentences Automatic text summarization Stemming word and topic modeling with NLTK And much, much more Book 7: Convolutional Neural Networks In Python In this book you will learn: Architecture of convolutional neural networks Solving computer vision tasks using convolutional neural networks Python and computer vision Automatic image and speech recognition Theano and TensorFlow image recognition And of course much more! Download this book bundle NOW and SAVE money!!

Convolutional Neural Networks in Python This book covers the basics behind Convolutional Neural Networks by introducing you to this complex world of deep learning and artificial neural networks in a simple and easy to understand way. It is perfect for any beginner out there looking forward to learning more about this machine learning field. This book is all about how to use convolutional neural networks for various image, object and other common classification problems in Python. Here, we also take a deeper look into various Keras layer used for building CNNs we take a look at different activation functions and much more, which will eventually lead you to creating highly accurate models able of performing great task results on various image classification, object classification and other problems. Therefore, at the end of the book, you will have a better insight into this world, thus you will be more than prepared to deal with more complex and challenging tasks on your own. Here Is a Preview of What You’ll Learn In This Book... Convolutional neural networks structure How convolutional neural networks actually work Convolutional neural networks applications The importance of convolution operator Different convolutional neural networks layers and their importance Arrangement of spatial parameters How and when to use stride and zero-padding Method of parameter sharing Matrix multiplication and its importance Pooling and dense layers Introducing non-linearity relu activation function How to train your convolutional neural network models using backpropagation How and why to apply dropout CNN model training process How to build a convolutional neural network Generating predictions and calculating loss functions How to train and evaluate your MNIST classifier How to build a simple image classification CNN And much, much, much more! Get this book NOW and learn more about Convolutional Neural Networks in Python!

Deep learning methods offer a lot of promise for time series forecasting, such as the automatic learning of temporal dependence and the automatic handling of temporal structures like trends and seasonality. With clear explanations, standard Python libraries, and step-by-step tutorial lessons you’ll discover how to develop deep learning models for your own time series forecasting projects.

Step-by-step tutorials on deep learning neural networks for computer vision in python with Keras.
The purpose of this book is two-fold, we focus on detailed coverage of deep learning and transfer learning, comparing and contrasting the two with easy-to-follow concepts and examples. The second area of focus is on real-world examples and research problems using TensorFlow, Keras and Python ecosystem with hands-on examples.

Build your Machine Learning portfolio by creating 6 cutting-edge Artificial Intelligence projects using neural networks in Python. Key Features Discover neural network architectures (like CNN and LSTM) that are driving recent advancements in AI. Build expert neural networks in Python using popular libraries such as Keras. Includes projects such as object detection, face identification, sentiment analysis, and more. Book Description Neural networks are at the core of recent AI advances, providing some of the best resolutions to many real-world problems, including image recognition, medical diagnosis, text analysis, and more. This book goes through some basic neural network and deep learning concepts, as well as some popular libraries in Python for implementing them. It contains practical demonstrations of neural networks in domains such as fare prediction, image classification, sentiment analysis, and more. In each case, the book provides a problem statement, the specific neural network architecture required to tackle that problem, the reasoning behind the algorithm used, and the associated Python code to implement the solution from scratch. In the process, you will gain hands-on experience with using popular Python libraries such as Keras to build and train your own neural networks from scratch. By the end of this book, you will have mastered the different neural network architectures and created cutting-edge AI projects in Python that will immediately strengthen your machine learning portfolio. What you will learn Learn various neural network architectures and its advancements in AI. Master deep learning in Python by building and training neural network models. Neural networks for regression and classification. Discover convolutional neural networks for image recognition. Learn sentiment analysis on textual data using Long Short-Term Memory. Build and train a highly accurate facial recognition security system. Who this book is for This book is a perfect match for data scientists, machine learning engineers, and deep learning enthusiasts who wish to create practical neural network projects in Python. Readers should already have some basic knowledge of machine learning and neural networks.

Summary Deep Learning with Python introduces the field of deep learning using the Python language and the powerful Keras library. Written by Keras creator and Google AI researcher François Chollet, this book builds your understanding through intuitive explanations and practical examples. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Machine learning has made remarkable progress in recent years. We went from near-unusable speech and image recognition, to near-human accuracy. We went from machines that couldn't beat a serious Go player, to defeating a world champion. Behind this progress is deep learning—a combination of engineering advances, best practices, and theory that enables a wealth of previously impossible smart applications. About the Book Deep Learning with Python introduces the field of deep learning using the Python language and the powerful Keras library. Written by Keras creator and Google AI researcher François Chollet, this book builds your understanding through intuitive explanations and practical examples. You'll explore challenging concepts and practice with applications in computer vision, natural-language processing, and generative models.
the time you finish, you'll have the knowledge and hands-on skills to apply deep learning in your own projects. What's Inside Deep learning from first principles Setting up your own deep-learning environment Image-classification models Deep learning for text and sequences Neural style transfer, text generation, and image generation About the Reader Readers need intermediate Python skills. No previous experience with Keras, TensorFlow, or machine learning is required. About the Author François Chollet works on deep learning at Google in Mountain View, CA. He is the creator of the Keras deep-learning library, as well as a contributor to the TensorFlow machine-learning framework. He also does deep-learning research, with a focus on computer vision and the application of machine learning to formal reasoning. His papers have been published at major conferences in the field, including the Conference on Computer Vision and Pattern Recognition (CVPR), the Conference and Workshop on Neural Information Processing Systems (NIPS), the International Conference on Learning Representations (ICLR), and others. Table of Contents PART 1 - FUNDAMENTALS OF DEEP LEARNING What is deep learning? Before we begin: the mathematical building blocks of neural networks Getting started with neural networks Fundamentals of machine learning PART 2 - DEEP LEARNING IN PRACTICE Deep learning for computer vision Deep learning for text and sequences Advanced deep-learning best practices Generative deep learning Conclusions appendix A - Installing Keras and its dependencies on Ubuntu appendix B - Running Jupyter notebooks on an EC2 GPU instance Use Java and Deeplearning4j to build robust, scalable, and highly accurate AI models from scratch Key Features Install and configure Deeplearning4j to implement deep learning models from scratch Explore recipes for developing, training, and fine-tuning your neural network models in Java Model neural networks using datasets containing images, text, and time-series data Book Description Java is one of the most widely used programming languages in the world. With this book, you will see how to perform deep learning using Deeplearning4j (DL4J) – the most popular Java library for training neural networks efficiently. This book starts by showing you how to install and configure Java and DL4J on your system. You will then gain insights into deep learning basics and use your knowledge to create a deep neural network for binary classification from scratch. As you progress, you will discover how to build a convolutional neural network (CNN) in DL4J, and understand how to construct numeric vectors from text. This deep learning book will also guide you through performing anomaly detection on unsupervised data and help you set up neural networks in distributed systems effectively. In addition to this, you will learn how to import models from Keras and change the configuration in a pre-trained DL4J model. Finally, you will explore benchmarking in DL4J and optimize neural networks for optimal results. By the end of this book, you will have a clear understanding of how you can use DL4J to build robust deep learning applications in Java. What you will learn Perform data normalization and wrangling using DL4J Build deep neural networks using DL4J Implement CNNs to solve image classification problems Train autoencoders to solve anomaly detection problems using DL4J Perform benchmarking and optimization to improve your model's performance Leverage the capabilities of DL4J in distributed systems Who this book is for If you are a data scientist, machine learning developer, or a deep learning enthusiast who wants to implement deep learning models in Java, this book is for you. Basic understanding of Java programming as well as some experience with machine learning and neural networks is required to get the most out of this
We finally have the definitive treatise on PyTorch! It covers the basics and abstractions in great detail. I hope this book becomes your extended reference document.” — Soumith Chintala, co-creator of PyTorch

Key Features
- Written by PyTorch's creator and key contributors
- Develop deep learning models in a familiar Pythonic way
- Use PyTorch to build an image classifier for cancer detection
- Diagnose problems with your neural network and improve training with data augmentation
- Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

About The Book
Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands. Instantly familiar to anyone who knows Python data tools like NumPy and Scikit-learn, PyTorch simplifies deep learning without sacrificing advanced features. It's great for building quick models, and it scales smoothly from laptop to enterprise. Deep Learning with PyTorch teaches you to create deep learning and neural network systems with PyTorch. This practical book gets you to work right away building a tumor image classifier from scratch. After covering the basics, you'll learn best practices for the entire deep learning pipeline, tackling advanced projects as your PyTorch skills become more sophisticated. All code samples are easy to explore in downloadable Jupyter notebooks.

What You Will Learn
- Understanding deep learning data structures such as tensors and neural networks
- Best practices for the PyTorch Tensor API, loading data in Python, and visualizing results
- Implementing modules and loss functions
- Utilizing pretrained models from PyTorch Hub
- Methods for training networks with limited inputs
- Sifting through unreliable results to diagnose and fix problems in your neural network
- Improve your results with augmented data, better model architecture, and fine tuning

This Book Is Written For
- Python programmers with an interest in machine learning. No experience with PyTorch or other deep learning frameworks is required.

About The Authors
Eli Stevens has worked in Silicon Valley for the past 15 years as a software engineer, and the past 7 years as Chief Technical Officer of a startup making medical device software. Luca Antiga is co-founder and CEO of an AI engineering company located in Bergamo, Italy, and a regular contributor to PyTorch. Thomas Viehmann is a Machine Learning and PyTorch speciality trainer and consultant based in Munich, Germany and a PyTorch core developer.

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Big Data - 4 book BUNDLE!! Data Analytics for Beginners
In this book you will learn: Putting Data Analytics to Work
The Rise of Data Analytics
Big Data Defined
Cluster Analysis
Applications of Cluster Analysis
Commonly Graphed Information
Data Visualization
Four Important Features of Data Visualization Software
Big Data Impact Envisaged by 2020
of course much more! Deep Learning with Keras In this book you will learn: Deep Neural Network Neural Network Elements Keras Models Sequential Model Functional API Model Keras Layers Core Keras Layers Convolutional Keras Layers Recurrent Keras Layers Deep Learning Algorithms Supervised Learning Algorithms Applications of Deep Learning Models Automatic Speech and Image Recognition Natural Language Processing Video Game Development Real World Applications And of course much more! Analyzing Data with Power BI In this book you will learn: Basics of data analysis processes Fundamental data analysis algorithms Basic of data and text mining, data visualization and business intelligence Techniques used for analysing quantitative data Basic data analysis tasks Conceptual, logical and physical data models Power BI service and data modelling Creating reports and visualizations in Power BI Data transformation and data cleaning in Power BI Real world applications of data analysis Convolutional Neural Networks In Python In this book you will learn: A architecture of convolutional neural networks Solving computer vision tasks using convolutional neural networks Python and computer vision Automatic image and speech recognition Theano and TensorFlow image recognition How to use MNIST vision dataset What are commonly used convolutional filters Download this book bundle NOW and SAVE money!!

Deep Learning - 2 BOOK BUNDLE!! Deep Learning with Keras This book will introduce you to various supervised and unsupervised deep learning algorithms like the multilayer perceptron, linear regression and other more advanced deep convolutional and recurrent neural networks. You will also learn about image processing, handwritten recognition, object recognition and much more. Furthermore, you will get familiar with recurrent neural networks like LSTM and GAN as you explore processing sequence data like time series, text, and audio. The book will definitely be your best companion on this great deep learning journey with Keras introducing you to the basics you need to know in order to take next steps and learn more advanced deep neural networks. Here is a Preview of What You’ll Learn Here... The difference between deep learning and machine learning Deep neural networks Convolutional neural networks Building deep learning models with Keras Multi-layer perceptron network models Activation functions Handwritten recognition using MNIST Solving multi-class classification problems Recurrent neural networks and sequence classification And much more Convolutional Neural Networks in Python This book covers the basics behind Convolutional Neural Networks by introducing you to this complex world of deep learning and artificial neural networks in a simple and easy to understand way. It is perfect for any beginner out there looking forward to learning more about this machine learning field. This book is all about how to use convolutional neural networks for various image, object and other common classification problems in Python. Here, we also take a deeper look into various Keras layers used for building CNNs we take a look at different activation functions and much more, which will eventually lead you to creating highly accurate models able of performing great task results on various image classification, object classification and other problems. Therefore, at the end of the book, you will have a better insight into this world, thus you will be more than prepared to deal with more complex and challenging tasks on your own. Here is a Preview of What You’ll Learn In This Book... Convolutional neural networks structure How convolutional neural networks actually work Convolutional neural networks applications The importance of convolution operator Different convolutional neural networks layers and their importance An arrangement of spatial parameters How and when to use stride and zero-padding Method of...
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parameter sharing Matrix multiplication and its importance Pooling and dense layers Introducing non-linearity relu activation function How to train your convolutional neural network models using backpropagation How and why to apply dropout CNN model training process How to build a convolutional neural network Generating predictions and calculating loss functions How to train and evaluate your MNIST classifier How to build a simple image classification CNN And much, much more! Get this book bundle NOW and SAVE money!

Learn how to develop intelligent applications with sequential learning and apply modern methods for language modeling with neural network architectures for deep learning with Python's most popular TensorFlow framework. Key Features Train and deploy Recurrent Neural Networks using the popular TensorFlow library Apply long short-term memory units Expand your skills in complex neural network and deep learning topics. Book Description Developers struggle to find an easy-to-follow learning resource for implementing Recurrent Neural Network (RNN) models. RNNs are the state-of-the-art model in deep learning for dealing with sequential data. From language translation to generating captions for an image, RNNs are used to continuously improve results. This book will teach you the fundamentals of RNNs, with example applications in Python and the TensorFlow library. The examples are accompanied by the right combination of theoretical knowledge and real-world implementations of concepts to build a solid foundation of neural network modeling. Your journey starts with the simplest RNN model, where you can grasp the fundamentals. The book then builds on this by proposing more advanced and complex algorithms. We use them to explain how a typical state-of-the-art RNN model works. From generating text to building a language translator, we show how some of today's most powerful AI applications work under the hood. After reading the book, you will be confident with the fundamentals of RNNs, and be ready to pursue further study, along with developing skills in this exciting field. What you will learn Use TensorFlow to build RNN models Use the correct RNN architecture for a particular machine learning task Collect and clear the training data for your models Use the correct Python libraries for any task during the building phase of your model Optimize your model for higher accuracy Identify the differences between multiple models and how you can substitute them Learn the core deep learning fundamentals applicable to any machine learning model Who this book is for This book is for Machine Learning engineers and data scientists who want to learn about Recurrent Neural Network models with practical use-cases. Exposure to Python programming is required. Previous experience with TensorFlow will be helpful, but not mandatory.

Summary Deep Learning with R introduces the world of deep learning using the powerful Keras library and its R language interface. The book builds your understanding of deep learning through intuitive explanations and practical examples. Continue your journey into the world of deep learning with Deep Learning with R in Motion, a practical, hands-on video course available exclusively at Manning.com (www.manning.com/livevideo/deep-learning-with-r-in-motion). Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Machine learning has made remarkable progress in recent years. Deep-learning systems now enable previously impossible smart applications, revolutionizing image recognition and natural-language processing, and identifying complex patterns in data. The Keras deep-learning library provides data scientists and
developers working in R a state-of-the-art toolset for tackling deep-learning tasks. About the Book Deep Learning with Python by François Chollet and adapted for R by RStudio founder J. J. Allaire, this book builds your understanding of deep learning through intuitive explanations and practical examples. You'll practice your new skills with R-based applications in computer vision, natural-language processing, and generative models. What's Inside Deep learning from first principles Setting up your own deep-learning environment Image classification and generation Deep learning for text and sequences About the Reader You'll need intermediate R programming skills. No previous experience with machine learning or deep learning is assumed. About the Authors François Chollet is a deep-learning researcher at Google and the author of the Keras library. J.J. Allaire is the founder of RStudio and the author of the R interfaces to TensorFlow and Keras. Table of Contents PART 1 - FUNDAMENTALS OF DEEP LEARNING What is deep learning? Before we begin: the mathematical building blocks of neural networks Getting started with neural networks Fundamentals of machine learning PART 2 - DEEP LEARNING IN PRACTICE Deep learning for computer vision Deep learning for text and sequences Advanced deep-learning best practices Generative deep learning Conclusions

There are many reasons why neural networks fascinate us and have captivated headlines in recent years. They make web searches better, organize photos, and are even used in speech translation. Heck, they can even generate encryption. At the same time, they are also mysterious and mind-bending: how exactly do they accomplish these things? What goes on inside a neural network? On a high level, a network learns just like we do, through trial and error. This is true regardless if the network is supervised, unsupervised, or semi-supervised. Once we dig a bit deeper though, we discover that a handful of mathematical functions play a major role in the trial and error process. It also becomes clear that a grasp of the underlying mathematics helps clarify how a network learns. In the following chapters we will unpack the mathematics that drive a neural network. To do this, we will use a feedforward network as our model and follow input as it moves through the network.

Unlock the groundbreaking advances of deep learning with this extensively revised new edition of the bestselling original. Learn directly from the creator of Keras and master practical Python deep learning techniques that are easy to apply in the real world. In Deep Learning with Python, Second Edition you will learn: Deep learning from first principles Image classification and image segmentation Timeseries forecasting Text classification and machine translation Text generation, neural style transfer, and image generation Deep Learning with Python has taught thousands of readers how to put the full capabilities of deep learning into action. This extensively revised second edition introduces deep learning using Python and Keras, and is loaded with insights for both novice and experienced ML practitioners. You’ll learn practical techniques that are easy to apply in the real world, and important theory for perfecting neural networks. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Recent innovations in deep learning unlock exciting new software capabilities like automated language translation, image recognition, and more. Deep learning is quickly becoming essential knowledge for every
software developer, and modern tools like Keras and TensorFlow put it within your reach—even if you have no background in mathematics or data science. This book shows you how to get started. About the book Deep Learning with Python, Second Edition introduces the field of deep learning using Python and the powerful Keras library. In this revised and expanded new edition, Keras creator François Chollet offers insights for both novice and experienced machine learning practitioners. As you move through this book, you’ll build your understanding through intuitive explanations, crisp illustrations, and clear examples. You’ll quickly pick up the skills you need to start developing deep-learning applications. What’s inside Deep learning from first principles Image classification and image segmentation Time series forecasting Text classification and machine translation Text generation, neural style transfer, and image generation About the reader For readers with intermediate Python skills. No previous experience with Keras, TensorFlow, or machine learning is required. About the author François Chollet is a software engineer at Google and creator of the Keras deep-learning library. Table of Contents 1 What is deep learning? 2 The mathematical building blocks of neural networks 3 Introduction to Keras and TensorFlow 4 Getting started with neural networks: Classification and regression 5 Fundamentals of machine learning 6 The universal workflow of machine learning 7 Working with Keras: A deep dive 8 Introduction to deep learning for computer vision 9 Advanced deep learning for computer vision 10 Deep learning for timeseries 11 Deep learning for text 12 Generative deep learning 13 Best practices for the real world 14 Conclusions

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

Programming With Python - 8 BOOK BUNDLE!! Deep Learning With Keras Here Is A Preview Of What You’ll Learn Here... The difference between deep learning and machine learning Deep neural networks Convolutional neural networks Building deep learning models with Keras Multi-layer perceptron network models And much more Convolutional Neural Networks In Python Here Is A Preview Of What You’ll Learn Here... Convolutional neural networks structure How convolutional neural networks actually work Convolutional neural networks applications The importance of convolution operator How to build a simple image classification CNN And much, much more! Python Machine Learning Here Is A Preview Of What You’ll Learn Here... Basics behind machine learning
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techniques Most commonly used machine learning algorithms, linear and logistic regression, decision trees support vector machines, k-nearest neighbors, random forests Solving multi-classification problems Data visualization with Matplotlib and data transformation with Pandas and Scikit-learn Solving multi-label classification problems And much, much more Machine Learning With TensorFlow Here Is A Preview Of What You'll Learn Here... What is machine learning Main uses and benefits of machine learning How to get started with TensorFlow, installing and loading data Data flow graphs and basic TensorFlow expressions Creating MNIST classifiers with one-hot transformation And much, much more Data Analytics With Python Here Is A Preview Of What You'll Learn Here... What is Data Analytics? Difference between data science, big data and data analytics Installing python Python data structures Pandas series and data frames And much, much more Natural Language Processing With Python Here Is A Preview Of What You'll Learn Here... Challenges of natural language processing How natural language processing works? Part of speech tagging N-grams Running natural language processing script And much, much more DevOps Handbook Here Is A Preview Of What You'll Learn Here... Issues and mistakes plaguing software development What is software development life cycle? How software development life cycle works? The origins of devops Testing and building systems tools And much, much more DevOps Adoption Here Is A Preview Of What You'll Learn Here... Devops definition Overcoming traditional dev and ops Devops and security integration Devops success factors Is devops right for you? And much, much more Get this book bundle NOW and SAVE money!

Discover the practical aspects of implementing deep-learning solutions using the rich Python ecosystem. This book bridges the gap between the academic state-of-the-art and the industry state-of-the-practice by introducing you to deep learning frameworks such as Keras, Theano, and Caffe. The practicalities of these frameworks is often acquired by practitioners by reading source code, manuals, and posting questions on community forums, which tends to be a slow and a painful process. Deep Learning with Python allows you to ramp up to such practical know-how in a short period of time and focus more on the domain, models, and algorithms. This book briefly covers the mathematical prerequisites and fundamentals of deep learning, making this book a good starting point for software developers who want to get started in deep learning. A brief survey of deep learning architectures is also included. Deep Learning with Python also introduces you to key concepts of automatic differentiation and GPU computation which, while not central to deep learning, are critical when it comes to conducting large scale experiments. What You Will Learn Leverage deep learning frameworks in Python namely, Keras, Theano, and Caffe Gain the fundamentals of deep learning with mathematical prerequisites Discover the practical considerations of large scale experiments Take deep learning models to production Who This Book Is For Software developers who want to try out deep learning as a practical solution to a particular problem. Software developers in a data science team who want to take deep learning models developed by data scientists to production.

Explore deep learning applications, such as computer vision, speech recognition, and chatbots, using frameworks such as TensorFlow and Keras. This book helps you to ramp up your practical know-how in a short period of time and focuses you on the domain, models, and algorithms required for deep learning applications. Deep Learning with Applications Using Python covers topics such as chatbots, natural language processing, and face and object recognition. The goal is to equip you with the concepts,
Read Free Convolutional Neural Networks In Python Beginners Guide To Convolutional Neural Networks In Python techniques, and algorithm implementations needed to create programs capable of performing deep learning. This book covers convolutional neural networks, recurrent neural networks, and multilayer perceptrons. It also discusses popular APIs such as IBM Watson, Microsoft Azure, and scikit-learn. What You Will Learn Work with various deep learning frameworks such as TensorFlow, Keras, and scikit-learn. Use face recognition and face detection capabilities Create speech-to-text and text-to-speech functionality Engage with chatbots using deep learning Who This Book Is For Data scientists and developers who want to adapt and build deep learning applications.

As global communities are attempting to transform into more efficient and technologically-advanced metropolises, artificial intelligence (AI) has taken a firm grasp on various professional fields. Technology used in these industries is transforming by introducing intelligent techniques including machine learning, cognitive computing, and computer vision. This has raised significant attention among researchers and practitioners on the specific impact that these smart technologies have and what challenges remain. Applications of Artificial Intelligence for Smart Technology is a pivotal reference source that provides vital research on the implementation of advanced technological techniques in professional industries through the use of AI. While highlighting topics such as pattern recognition, computational imaging, and machine learning, this publication explores challenges that various fields currently face when applying these technologies and examines the future uses of AI. This book is ideally designed for researchers, developers, managers, academicians, analysts, students, and practitioners seeking current research on the involvement of AI in professional practices.

This book doesn't have any superpowers or magic formula to help you master the art of neural networks and deep learning. We believe that such learning is all in your heart. You need to learn a concept by heart and then brainstorm its different possibilities. I don't claim that after reading this book you will become an expert in Python and Deep Learning Neural Networks. Instead, you will, for sure, have a basic understanding of deep learning and its implications and real-life applications. Most of the time, what confuses us is the application of a certain thing in our lives. Once we know that, we can relate the subject to that particular thing and learn. An interesting thing is that neural networks also learn the same way. This makes it easier to learn about them when we know the basics. Let's take a look at what this book has to offer: The basics of Python including data types, operators and numbers. Advanced programming in Python with Python expressions, types and much more. A comprehensive overview of deep learning and its link to the smart systems that we are now building. An overview of how artificial neural networks work in real life. An overview of PyTorch. An overview of TensorFlow. An overview of Keras. How to create a convolutional neural network. A comprehensive understanding of deep learning applications and its ethical implications, including in the present and future. This book offers you the basic knowledge about Python and Deep Learning Neural Networks that you will need to lay the foundation for future studies. This book will start you on the road to mastering the art of deep learning neural networks. When I say that I don't have the magic formula to make you learn, I mean it. My point is that you should learn Python coding and Python libraries to build neural networks by practicing hard. The more you practice, the better it is for your skills. It is only after thorough and in depth
practice that you will be able to create your own programs. Unlike other books, I don't claim that this book will make you a master of deep learning after a single read. That's not realistic, in fact, it's even a bit absurd. What I claim is that you will definitely learn about the basics. The rest is practice. The more you practice the better you code.

Learn how to apply TensorFlow to a wide range of deep learning and Machine Learning problems with this practical guide on training CNNs for image classification, image recognition, object detection and many computer vision challenges. Key Features
- Learn the fundamentals of Convolutional Neural Networks
- Harness Python and TensorFlow to train CNNs
- Build scalable deep learning models that can process millions of items

Book Description
Convolutional Neural Networks (CNN) are one of the most popular architectures used in computer vision apps. This book is an introduction to CNNs through solving real-world problems in deep learning while teaching you their implementation in popular Python library - TensorFlow. By the end of the book, you will be training CNNs in no time! We start with an overview of popular machine learning and deep learning models, and then get you set up with a TensorFlow development environment. This environment is the basis for implementing and training deep learning models in later chapters. Then, you will use Convolutional Neural Networks to work on problems such as image classification, object detection, and semantic segmentation. After that, you will use transfer learning to see how these models can solve other deep learning problems. You will also get a taste of implementing generative models such as autoencoders and generative adversarial networks. Later on, you will see useful tips on machine learning best practices and troubleshooting. Finally, you will learn how to apply your models on large datasets of millions of images. What you will learn
- Train machine learning models with TensorFlow
- Create systems that can evolve and scale during their life cycle
- Use CNNs in image recognition and classification

Who this book is for
This book is for Software Engineers, Data Scientists, or Machine Learning practitioners who want to use CNNs for solving real-world problems. Knowledge of basic machine learning concepts, linear algebra and Python will help.

Convolutional Neural Networks in Python (2nd Edition) Deep learning has been a great part of various scientific fields and since this is my third book regarding this topic, you already know the great significance of deep learning in comparison to traditional methods. At this point, you are also familiar with types of neural networks and their wide range of applications including image and speech recognition, natural language processing, video game development and other. On the other hand, this book is all about convolutional neural networks and how to use these neural networks in various tasks of automatic image and speech recognition in Python. You will also get a better insight into the architecture of convolutional layers as we are going deeper into this subject. Deep learning is pretty complex subject, but since you already have a fundamental knowledge of this topic, getting to know convolutional neural networks better is next logical step. What you will learn in Convolutional Neural Networks in Python: Architecture of convolutional neural networks
- Solving computer vision tasks using convolutional neural networks
- Python and computer vision
- Automatic image and speech recognition
- Theano and TensorFlow image recognition
- How to use MNIST vision dataset

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commonly used convolutional filters. Get this book today and learn more about Convolutional Neural Networks in Python!! PS: Get the Paperback and get this Ebook for FREE!!


Build real-world Artificial Intelligence applications with Python to intelligently interact with the world around you. About This Book Step into the amazing world of intelligent apps using this comprehensive guide. Enter the world of Artificial Intelligence, explore it, and create your own applications. Work through simple yet insightful examples that will get you up and running with Artificial Intelligence in no time. Who This Book Is For. This book is for Python developers who want to build real-world Artificial Intelligence applications. This book is friendly to Python beginners, but being familiar with Python would be useful to play around with the code. It will also be useful for experienced Python programmers who are looking to use Artificial Intelligence techniques in their existing...
technology stacks. What You Will Learn
- Realize different classification and regression techniques
- Understand the concept of clustering and how to use it to automatically segment data
- See how to build an intelligent recommender system
- Understand logic programming and how to use it
- Build automatic speech recognition systems
- Understand the basics of heuristic search and genetic programming
- Develop games using Artificial Intelligence
- Learn how reinforcement learning works
- Discover how to build intelligent applications centered on images, text, and time series data
- See how to use deep learning algorithms and build applications based on it

In Detail
Artificial Intelligence is becoming increasingly relevant in the modern world where everything is driven by technology and data. It is used extensively across many fields such as search engines, image recognition, robotics, finance, and so on. We will explore various real-world scenarios in this book and you'll learn about various algorithms that can be used to build Artificial Intelligence applications. During the course of this book, you will find out how to make informed decisions about what algorithms to use in a given context. Starting from the basics of Artificial Intelligence, you will learn how to develop various building blocks using different data mining techniques. You will see how to implement different algorithms to get the best possible results, and will understand how to apply them to real-world scenarios. If you want to add an intelligence layer to any application that's based on images, text, stock market, or some other form of data, this exciting book on Artificial Intelligence will definitely be your guide!

Style and approach
This highly practical book will show you how to implement Artificial Intelligence. The book provides multiple examples enabling you to create smart applications to meet the needs of your organization. In every chapter, we explain an algorithm, implement it, and then build a smart application.

Concepts, tools, and techniques to explore deep learning architectures and methodologies
Key Features
- Explore advanced deep learning architectures using various datasets and frameworks
- Implement deep architectures for neural network models such as CNN, RNN, GAN, and many more
- Discover design patterns and different challenges for various deep learning architectures

Book Description
Deep learning architectures are composed of multilevel nonlinear operations that represent high-level abstractions; this allows you to learn useful feature representations from the data. This book will help you learn and implement deep learning architectures to resolve various deep learning research problems. Hands-On Deep Learning Architectures with Python explains the essential learning algorithms used for deep and shallow architectures. Packed with practical implementations and ideas to help you build efficient artificial intelligence systems (AI), this book will help you learn how neural networks play a major role in building deep architectures. You will understand various deep learning architectures (such as AlexNet, VGG Net, GoogleNet) with easy-to-follow code and diagrams. In addition to this, the book will also guide you in building and training various deep architectures such as the Boltzmann mechanism, autoencoders, convolutional neural networks (CNNs), recurrent neural networks (RNNs), natural language processing (NLP), GAN, and more—all with practical implementations. By the end of this book, you will be able to construct deep models using popular frameworks and datasets with the required design patterns for each architecture. You will be ready to explore the potential of deep architectures in today's world. What you will learn
- Implement CNNs, RNNs, and other commonly used architectures with Python
- Explore architectures such as VGGNet, AlexNet, and GoogleNet
- Build deep learning architectures for AI applications such as face and image recognition, fraud detection, and many more

Understand the architectures and applications of
Boltzmann machines and autoencoders with concrete examples Master artificial intelligence and neural network concepts and apply them to your architecture Understand deep learning architectures for mobile and embedded systems Who this book is for If you’re a data scientist, machine learning developer/engineer, or deep learning practitioner, or are curious about AI and want to upgrade your knowledge of various deep learning architectures, this book will appeal to you. You are expected to have some knowledge of statistics and machine learning algorithms to get the best out of this book.

Summary Grokking Deep Learning teaches you to build deep learning neural networks from scratch! In his engaging style, seasoned deep learning expert Andrew Trask shows you the science under the hood, so you grok for yourself every detail of training neural networks. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Deep learning, a branch of artificial intelligence, teaches computers to learn by using neural networks, technology inspired by the human brain. Online text translation, self-driving cars, personalized product recommendations, and virtual voice assistants are just a few of the exciting modern advancements possible thanks to deep learning. About the Book Grokking Deep Learning teaches you to build deep learning neural networks from scratch! In his engaging style, seasoned deep learning expert Andrew Trask shows you the science under the hood, so you grok for yourself every detail of training neural networks. Using only Python and its math-supporting library, NumPy, you'll train your own neural networks to see and understand images, translate text into different languages, and even write like Shakespeare! When you're done, you'll be fully prepared to move on to mastering deep learning frameworks. About the Reader For readers with high school-level math and intermediate programming skills. About the Author Andrew Trask is a PhD student at Oxford University and a research scientist at DeepMind. Previously, Andrew was a researcher and analytics product manager at Digital Reasoning, where he trained the world's largest artificial neural network and helped guide the analytics roadmap for the Synthesys cognitive computing platform. Table of Contents Introducing deep learning: why you should learn it Fundamental concepts: how do machines learn? Introduction to neural prediction: forward propagation Introduction to neural learning: gradient descent Learning multiple weights at a time: generalizing gradient descent Building your first deep neural network: introduction to backpropagation How to picture neural networks: in your head and on paper Learning signal and ignoring noise: introduction to regularization and batching Modeling probabilities and nonlinearities: activation functions Neural learning about edges and corners: intro to convolutional neural networks Neural networks that understand language: king - man + woman == ? Neural networks that write like Shakespeare: recurrent layers for variable-length data Introducing automatic optimization: let's build a deep learning framework Learning to write like Shakespeare: long short-term memory Deep learning on unseen data: introducing federated learning Where to go from here: a brief guide

This book shows readers how they can successfully analyze data using only two core machine learning algorithms---and how to do so using the popular Python programming language. These algorithms deal with common scenarios faced by all data analysts and
data scientists. This book focuses on two algorithm families (linear methods and ensemble methods) that effectively predict outcomes. This type of problem covers a multitude of use cases (what ad to place on a web page, predicting prices in securities markets, detecting credit card fraud, etc.). The focus on two families gives enough room for full descriptions of the mechanisms at work in the algorithms. Then the code examples serve to illustrate the workings of the machinery with specific hackable code. The author will explain in simple terms, using no complex math, how these algorithms work, and will then show how to apply them in Python. He will also provide advice on how to select from among these algorithms, and will show how to prepare the data, and how to use the trained models in practice. The author begins with an overview of the two core algorithms, explaining the types of problems solved by each one. He then introduces a core set of Python programming techniques that can be used to apply these algorithms. The author shows various techniques for building predictive models that solve a range of problems, from simple to complex; he also shows how to measure the performance of each model to ensure you use the right one. The following chapters provide a deep dive into each of the two algorithms: penalized linear regression and ensemble methods. Chapters will show how to apply each algorithm in Python. Readers can directly use the sample code to build their own solutions.

This must-read text/reference introduces the fundamental concepts of convolutional neural networks (ConvNets), offering practical guidance on using libraries to implement ConvNets in applications of traffic sign detection and classification. The work presents techniques for optimizing the computational efficiency of ConvNets, as well as visualization techniques to better understand the underlying processes. The proposed models are also thoroughly evaluated from different perspectives, using exploratory and quantitative analysis. Topics and features: explains the fundamental concepts behind training linear classifiers and feature learning; discusses the wide range of loss functions for training binary and multi-class classifiers; illustrates how to derive ConvNets from fully connected neural networks, and reviews different techniques for evaluating neural networks; presents a practical library for implementing ConvNets, explaining how to use a Python interface for the library to create and assess neural networks; describes two real-world examples of the detection and classification of traffic signs using deep learning methods; examines a range of varied techniques for visualizing neural networks, using a Python interface; provides self-study exercises at the end of each chapter, in addition to a helpful glossary, with relevant Python scripts supplied at an associated website. This self-contained guide will benefit those who seek to both understand the theory behind deep learning, and to gain hands-on experience in implementing ConvNets in practice. As no prior background knowledge in the field is required to follow the material, the book is ideal for all students of computer vision and machine learning, and will also be of great interest to practitioners working on autonomous cars and advanced driver assistance systems.

This dataset is designed for teaching the convolutional neural network (CNN). The dataset is a subset of data derived from the 1998 MNIST dataset of handwritten digits, and the example demonstrates how to train the CNN to recognize handwritten digits in images. The dataset file is accompanied by a Teaching Guide, a Student Guide, and a How-to Guide for Python.
Introduction to Deep Learning and Neural Networks with PythonTM: A Practical Guide is an intensive step-by-step guide for neuroscientists to fully understand, practice, and build neural networks. Providing math and PythonTM code examples to clarify neural network calculations, by book’s end readers will fully understand how neural networks work starting from the simplest model $Y = X$ and building from scratch. Details and explanations are provided on how a generic gradient descent algorithm works based on mathematical and PythonTM examples, teaching you how to use the gradient descent algorithm to manually perform all calculations in both the forward and backward passes of training a neural network. Examines the practical side of deep learning and neural networks Provides a problem-based approach to building artificial neural networks using real data Describes PythonTM functions and features for neuroscientists Uses a careful tutorial approach to describe implementation of neural networks in PythonTM Features math and code examples (via companion website) with helpful instructions for easy implementation

Deep learning is the most interesting and powerful machine learning technique right now. Top deep learning libraries are available on the Python ecosystem like Theano and TensorFlow. Tap into their power in a few lines of code using Keras, the best-of-breed applied deep learning library. In this Ebook, learn exactly how to get started and apply deep learning to your own machine learning projects.

Gain expertise in advanced deep learning domains such as neural networks, meta-learning, graph neural networks, and memory augmented neural networks using the Python ecosystem Key Features Get to grips with building faster and more robust deep learning architectures Investigate and train convolutional neural network (CNN) models with GPU-accelerated libraries such as TensorFlow and PyTorch Apply deep neural networks (DNNs) to computer vision problems, NLP, and GANs Book Description In order to build robust deep learning systems, you’ll need to understand everything from how neural networks work to training CNN models. In this book, you’ll discover newly developed deep learning models, methodologies used in the domain, and their implementation based on areas of application. You’ll start by understanding the building blocks and the math behind neural networks, and then move on to CNNs and their advanced applications in computer vision. You’ll also learn to apply the most popular CNN architectures in object detection and image segmentation. Further on, you’ll focus on variational autoencoders and GANs. You’ll then use neural networks to extract sophisticated vector representations of words, before going on to cover various types of recurrent networks, such as LSTM and GRU. You’ll even explore the attention mechanism to process sequential data without the help of recurrent neural networks (RNNs). Later, you’ll use graph neural networks for processing structured data, along with covering meta-learning, which allows you to train neural networks with fewer training samples. Finally, you’ll understand how to apply deep learning to autonomous vehicles. By the end of this book, you’ll have mastered key deep learning concepts and the different applications of deep learning models in the real world. What you will learn Cover advanced and state-of-the-art neural network architectures Understand the theory and math behind neural networks Train DNNs and apply them to modern deep learning problems Use CNNs for object detection and image segmentation Implement generative adversarial networks (GANs) and variational autoencoders to generate new images Solve natural language processing (NLP) tasks, such as machine translation, using sequence-
to-sequence models. Understand DL techniques, such as meta-learning and graph neural networks. Who this book is for: This book is for data scientists, deep learning engineers and researchers, and AI developers who want to further their knowledge of deep learning and build innovative and unique deep learning projects. Anyone looking to get to grips with advanced use cases and methodologies adopted in the deep learning domain using real-world examples will also find this book useful. Basic understanding of deep learning concepts and working knowledge of the Python programming language is assumed.

This book helps you master CNN, from the basics to the most advanced concepts in CNN such as GANs, instance classification and attention mechanism for vision models and more. You will implement advanced CNN models using complex image and video datasets. By the end of the book you will learn CNN’s best practices to implement smart ConvNet.

Deep learning methods are achieving state-of-the-art results on challenging machine learning problems such as describing photos and translating text from one language to another. In this new laser-focused Ebook, finally cut through the math, research papers and patchwork descriptions about natural language processing. Using clear explanations, standard Python libraries and step-by-step tutorial lessons you will discover what natural language processing is, the promise of deep learning in the field, how to clean and prepare text data for modeling, and how to develop deep learning models for your own natural language processing projects.

Deploy deep learning applications into production across multiple platforms. You will work on computer vision applications that use the convolutional neural network (CNN) deep learning model and Python. This book starts by explaining the traditional machine-learning pipeline, where you will analyze an image dataset. Along the way you will cover artificial neural networks (ANNs), building one from scratch in Python, before optimizing it using genetic algorithms. For automating the process, the book highlights the limitations of traditional hand-crafted features for computer vision and why the CNN deep-learning model is the state-of-art solution. CNNs are discussed from scratch to demonstrate how they are different and more efficient than the fully connected ANN (FCNN). You will implement a CNN in Python to give you a full understanding of the model. After consolidating the basics, you will use TensorFlow to build a practical image-recognition model that you will deploy to a web server using Flask, making it accessible over the Internet. Using Kivy and NumPy, you will create cross-platform data science applications with low overheads. This book will help you apply deep learning and computer vision concepts from scratch, step-by-step from conception to production. What You Will Learn: Understand how ANNs and CNNs work. Create computer vision applications and CNNs from scratch using Python. Follow a deep learning project from conception to production using TensorFlow. Use NumPy with Kivy to build cross-platform data science applications. Who This Book Is For: Data scientists, machine learning and deep learning engineers, software developers.

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