[Books] Deep Learning For Beginners Concepts And Algorithms Volume 1 Data Sciences

Thank you totally much for downloading **deep learning for beginners concepts and algorithms volume 1 data sciences**.Most likely you have knowledge that, people have see numerous times for their favorite books as soon as this deep learning for beginners concepts and algorithms volume 1 data sciences, but stop in the works in harmful downloads.

Rather than enjoying a good book when a mug of coffee in the afternoon, otherwise they juggled as soon as some harmful virus inside their computer. **deep learning for beginners concepts and algorithms volume 1 data sciences** is nearby in our digital library an online admission to it is set as public therefore you can download it instantly. Our digital library saves in fused countries, allowing you to get the most less latency epoch to download any of our books considering this one. Merely said, the deep learning for beginners concepts and algorithms volume 1 data sciences is universally compatible taking into account any devices to read.

Deep Learning for Beginners-Thomas Laville 2017-10-30 Thinking of learning more in Deep Learning? Then you have landed in the right place. The overall aim of this book in Deep Learning is to explore and examine key concepts, methods and techniques used in the Deep Learning. Then you have landed in the right place. The overall aim of this book in Deep Learning is to explore and examine key concepts, methods and techniques used in the Deep Learning. This book will help you explore exactly what deep learning is and will also teach you about why it is so revolutionary and fascinating. The 11 chapters introduce the reader the concepts, techniques, application of Dep Leaning Algorithm with the practical case studies and walk-through examples to practice. By the time you are done reading this book, you will have a complete understanding as to what deep learning is and why it is such an incredible advancement in technology. Chapters in this book Introduction to Deep Learning Fundamental Concepts of Deep Learning Artificial Neural Networks Deep Neural Networks Deep Learning Applications Glossary of important terms And more Book Objectives To have an appreciation for Deep Learning and an understanding of their fundamental principles. To have an elementary adeptness in a Deep Learning Concepts and terms which includes an ability to understand the algorithms. To have an elementary understanding of (some of the) more advanced topics of Deep Learning such as Neural Networks, Deep Neural Networks. Target Users The book designed for a variety of target audiences. The most suitable users would include: 1. Newbies in Computer Science Techniques and Artificial Intelligence 2. Professionals in Data scientist and Social Sciences 3. Professors or lecturers or tutors to be in position to find better ways to explain the content to their students with simples and easiest way 4. The students and Academicians, especially those that are focusing on Deep Learning as their professionsScroll to the top and buy now to get started.

Deep Learning for Beginners-François Duval 2018-01-13 ***** Buy now (Will soon return to $38.99 + Special Offer Below) ***** ***** #1 Kindle Store Bestseller in Computer Modelling ***** Free Kindle eBook for customers who purchase the print book from Amazon Are you thinking of learning more about Deep Learning? If you are looking for a book to help you understand concepts and algorithms of deep learning, then this is a good book for you. Several Visual Illustrations and Examples Equations are great for really understanding every last detail of an algorithm. But to get a basic idea of how things work, this book contains several graphs which detail each neural networks/deep learning algorithms. It is contains also several graphs for the practical examples. This Is a Practical Guide Book This book will help you explore exactly

what deep learning is and will also teach you about why it is so revolutionary and fascinating. The chapters will introduce the reader to the concepts, techniques, and applications of deep learning algorithms with the practical case studies and walk-through examples on which to practice. This book takes a different approach that is based on providing simple examples of how deep learning algorithms work, and building on those examples step by step to encompass the more complicated parts of the algorithms. Target Users The book designed for a variety of target audiences. The most suitable users would include: Newbies in computer science techniques and deep learning Professionals in data science and social sciences Professors, lecturers or tutors who are looking to find better ways to explain the content to their students in the simplest and easiest way Students and academicians, especially those focusing on neural networks and deep learning What's inside this book? Pre-requisite for Deep Learning Introduction to Artificial Neural Networks The Basics of Artificial Neural Networks Deep Learning Evolution and Recurring Methods Relationship between machine learning and deep learning Multilayer Perceptron (MLP) Convolutional Neural Networks (CNN) Other Deep Learning Algorithms Deep Learning Applications Glossary of Some Useful Terms in Deep Learning Useful References Frequently Asked Questions Q: Is this book for me and do I need programming experience? A: If you want to learn more about deep learning, this book is for you. Little math knowledge is required. If you already have a basic notion in statistic and data science, you'll be OK. No coding experience is required. Q: Can I loan this book to friends? A: Yes. Under Amazon's Kindle Book Lending program, you can lend this book to friends and family for a duration of 14 days. Q: Does this book include everything I need to become a deep learning expert? A: Unfortunately, no. This book is designed for readers taking their first steps in deep learning and further learning will be required beyond this book to master all aspects of deep 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. will also be happy to help you if you send us an email at customer_service@datasciences-book.com.

Deep Learning Fundamentals-Chao Pan

2016-06-15 This book is the first part of the book deep learning with Python write by the same author. If you already purchased deep learning with Python by Chao Pan no need for this book. Are you thinking of learning deep Learning fundamentals, concepts and algorithms? (For Beginners) If you are looking for a complete beginners guide to learn deep learning with examples, in just a few hours, this book is for you. From AI Sciences Publisher Our books may be the best one for beginners; it's a step-by-step guide for any person who wants to start learning Artificial Intelligence and Data Science from scratch. It will help you in preparing a solid foundation and learn any other high-level courses.To get the most out of the concepts that would be covered, readers are advised to adopt hands on approach, which would lead to better mental representations. Step By Step Guide and Visual Illustrations and Examples This book and the accompanying examples, you would be well suited to tackle problems, which pique your interests using machine learning and deep learning models. Instead of tough math formulas, this book contains several graphs and images. Book Objectives Have an appreciation for deep learning and an understanding of their fundamental principles. Have an elementary grasp of deep learning concepts and algorithms. Have achieved a technical background in deep learning and neural networks. Target Users 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? Introduction Teaching Approach What is Artificial Intelligence, Machine Learning and Deep Learning? Mathematical Foundations of Deep Learning Machine Learning Fundamentals Fully Connected Neural Networks Convolutional Neural Networks Recurrent Neural Networks Generative Adversarial Networks Deep Reinforcement Learning Introduction to Deep Neural Networks with Keras Sources & References Frequently Asked Questions Q: Is this book for me and do I need programming experience?A: if you want to smash deep learning from scratch, this book is for you. No programming experience is required. The present only the fundamentals concepts and algorithms of deep learning. It ll be a good

introduction for beginners.Q: Can I loan this book to friends?A: Yes. Under Amazon's Kindle Book Lending program, you can lend this book to friends and family for a duration of 14 days.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 Deep Learning and further learning will be required beyond this book to master all aspects.Q: Can I have a refund if this book is not fitted for me?A: Yes, Amazon refund you if you aren't satisfied, for more information about the amazon refund service please go to the amazon help platform. We will also be happy to help you if you send us an email at contact@aisciences.net.

Deep Learning with Python-Chao Pan 2016-06-14 ***** BUY NOW (will soon return to 24.77 $) *****Are you thinking of learning deep Learning using Python? (For Beginners Only) If you are looking for a beginners guide to learn deep learning, in just a few hours, this book is for you. From AI Sciences Publisher Our books may be the best one for beginners; it's a step-by-step guide for any person who wants to start learning Artificial Intelligence and Data Science from scratch. It will help you in preparing a solid foundation and learn any other high-level courses.To get the most out of the concepts that would be covered, readers are advised to adopt a hands on approach, which would lead to better mental representations.Step-by-Step Guide and Visual Illustrations and ExamplesThis book and the accompanying examples, you would be well suited to tackle problems, which pique your interests using machine learning and deep learning models. Book Objectives This book will help you: Have an appreciation for deep learning and an understanding of their fundamental principles. Have an elementary grasp of deep learning concepts and algorithms. Have achieved a technical background in deep learning and neural networks using Python. Target UsersThe book designed for a variety of target audiences. 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 deep learning who desire a bird's eye view of current techniques and approaches. What's Inside This Book? Introduction What is Artificial Intelligence,

Machine Learning and Deep Learning? Mathematical Foundations of Deep Learning Understanding Machine Learning Models Evaluation of Machine Learning Models: Overfitting, Underfitting, Bias Variance Tradeoff Fully Connected Neural Networks Convolutional Neural Networks Recurrent Neural Networks Generative Adversarial Networks Deep Reinforcement Learning Introduction to Deep Neural Networks with Keras A First Look at Neural Networks in Keras Introduction to Pytorch The Pytorch Deep Learning Framework Your First Neural Network in Pytorch Deep Learning for Computer Vision Build a Convolutional Neural Network Deep Learning for Natural Language Processing Working with Sequential Data Build a Recurrent Neural Network Frequently Asked Questions Q: Is this book for me and do I need programming experience?A: if you want to smash Deep Learning from scratch, this book is for you. Little programming experience is required. If you already wrote a few lines of code and recognize basic programming statements, you'll be OK. Q: Can I have a refund if this book doesn't fit 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.***** MONEY BACK GUARANTEE BY AMAZON ***** Editorial Reviews"This is an excellent book, it is a very good introduction to deep learning and neural networks. The concepts and terminology are clearly explained. The book also points out several good locations on the internet where users can obtain more information. I was extremely happy with this book and I recommend it for all beginners" - Prof. Alain Simon, EDHEC Business School. Statistician and DataScientist.

Deep Learning for Beginners-Steven Cooper 2019-07-30 If you are looking for a complete beginners guide to learn deep learning with examples, in just a few hours, then you need to continue reading. This book delves into the basics of deep learning for those who are enthusiasts concerning all things machine learning and artificial intelligence. For those who have seen movies which show computer systems taking over the world like, Terminator, or benevolent systems that watch over the population, i.e. Person of Interest, this should be right up your alley. This book will give you the basics of what deep learning entails. That means

frameworks used by coders and significant components and tools used in deep learning, that enable facial recognition, speech recognition, and virtual assistance. Yes, deep learning provides the tools through which systems like Siri became possible. Grab your copy today and learn: Deep learning utilizes frameworks which allow people to develop tools which are able to offer better abstraction, along with simplification of hard programming issues. TensorFlow is the most popular tool and is used by corporate giants such as Airbus, Twitter, and even Google. The book illustrates TensorFlow and Caffe2 as the prime frameworks that are used for development by Google and Facebook. Facebook illustrates Caffe2 as one of the lightweight and modular deep learning frameworks, though TensorFlow is the most popular one, considering it has a lot of popularity, and thus, a big forum, which allows for assistance on main problems. The book considers several components and tools of deep learning such as the neural networks; CNNs, RNNs, GANs, and auto-encoders. These algorithms create the building blocks which propel deep learning and advance it. The book also considers several applications, including chatbots and virtual assistants, which have become the main focus for deep learning into the future, as they represent the next frontier in information gathering and connectivity. The Internet of Things is also represented here, as deep learning allows for integration of various systems via an artificial intelligence system, which is already being used for the home and car functions. And much more... The use of data science adds a lot of value to businesses, and we will continue to see the need for data scientists grow. This book is probably one of the best books for beginners. It's a step-by-step guide for any person who wants to start learning deep learning and artificial intelligence from scratch. When data science can reduce spending costs by billions of dollars in our economy, why wait to jump in?

Deep Learning with Python-Francois Chollet 2017-10-28 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 Fran�ois 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 Fran�ois 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. By 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 Fran�ois 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

Deep Learning and Neural Networks: Concepts, Methodologies, Tools, and Applications-Management Association, Information Resources 2019-10-11 Due to the growing use of web applications and communication devices, the use of data has increased throughout various industries. It is necessary to develop new techniques for managing data in order to ensure adequate usage. Deep learning, a subset of artificial intelligence and machine learning, has been recognized in various real-world applications such as computer vision, image processing, and pattern recognition. The deep learning approach has opened new opportunities that can make such real-life applications and tasks easier and more efficient. Deep Learning and Neural Networks: Concepts, Methodologies, Tools, and Applications is a vital reference source that trends in data analytics and potential technologies that will facilitate insight in various domains of science, industry, business, and consumer applications. It also explores the latest concepts, algorithms, and techniques of deep learning and data mining and analysis. Highlighting a range of topics such as natural language processing, predictive analytics, and deep neural networks, this multi-volume book is ideally designed for computer engineers, software developers, IT professionals, academicians, researchers, and upper-level students seeking current research on the latest trends in the field of deep learning.

Deep Learning-Mark Howard 2018-09-14 Have you ever wanted to learn how to better use your data? Are you interested in the works of machine learning? If you answered yes to these questions, then this book is for you. Deep learning is a powerful data tool that can help improve businesses. In this book, you will learn: Neural networks Machine learning How it relates to certain businesses What deep learning is Data handling And much more Deep learning is an amazing tool when you want to use data in an effective manner. Data is important to many different areas in life, so it's important that you know how to use it. Don't let all of your data go to waste. Get this book today and improve the way your business works.

Machine Learning For Dummies-John Paul Mueller 2021-02-09 One of Mark Cuban's top reads for better understanding A.I. (inc.com, 2021) Your comprehensive entry-level guide to machine learning While machine learning expertise doesn't quite mean you can create your own Turing Test-proof android—as in the movie Ex Machina—it is a form of artificial intelligence and one of the most exciting technological means of identifying opportunities and solving problems fast and on a large scale. Anyone who masters the principles of machine learning is mastering a big part of our tech future and opening up incredible new directions in careers that include fraud detection, optimizing search results, serving real-time ads, credit-scoring, building accurate and sophisticated pricing models—and way, way more. Unlike most machine learning books, the fully updated 2nd Edition of Machine Learning For Dummies doesn't assume you have years of experience using programming languages such as Python (R source is also included in a downloadable form with comments and explanations), but lets you in on the ground floor, covering the entry-level materials that will get you up and running building models you need to perform practical tasks. It takes a look at the underlying—and fascinating—math principles that power machine learning but also shows that you don't need to be a math whiz to build fun new tools and apply them to your work and study. Understand the history of AI and machine learning Work with Python 3.8 and TensorFlow 2.x (and R as a download) Build and test your own models Use the latest datasets, rather than the worn out data found in other books Apply machine learning to real problems Whether you want to learn for college or to enhance your business or career performance, this friendly beginner's guide is your best introduction to machine learning, allowing you to become quickly confident using this amazing and fast-developing technology that's impacting lives for the better all over the world.

Python Machine Learning from Scratch-Jonathan Adam 2016-08-24 ***** 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/

Deep Learning-Ian Goodfellow 2016-11-10 An introduction to a broad range of topics in deep learning, covering mathematical and conceptual background, deep learning techniques used in industry, and research perspectives. "Written by three experts in the field, Deep Learning is the only comprehensive book on the subject." —Elon Musk, cochair of OpenAI; cofounder and CEO of Tesla and SpaceX 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. The text offers mathematical and conceptual background, covering relevant concepts in linear algebra, probability theory and information theory, numerical computation, and machine learning. It describes deep learning techniques used by practitioners in industry, including deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology; and it surveys such applications as natural language processing, speech recognition, computer vision, online recommendation systems, bioinformatics, and videogames. Finally, the book offers research perspectives, covering such theoretical topics as linear factor models, autoencoders, representation learning, structured probabilistic models, Monte Carlo methods, the partition function, approximate inference, and deep generative models. Deep Learning can be used by undergraduate or graduate students planning careers in either industry or research, and by software engineers who want to begin using deep learning in their products or platforms. A website offers

supplementary material for both readers and instructors.

Deep Learning for Beginners-Steven Cooper 2018-09-06 Buy the Paperback version of this bundle, and get the Kindle eBook version included for FREE Get 2 books in 1! This is the bundle of two successful books in the market! Book 1: In "Machine Learning: An Introduction for Beginners, Why Machine Learning Matters Today and How Machine Learning Networks, Algorithms, Concepts and Neural Networks Really Work" you will learn: The different types of learning algorithm that you can expect to encounter The numerous applications of machine learning The different types of machine learning and how they diffe The best practices for picking up machine learning What languages and libraries to work with The future of machine learning The various problems that you can solve with machine learning algorithms And much more... Book 2: In "Neural Networks: A Practical Guide for Understanding and Programming Neural Networks and Useful Insights for Inspiring Reinvention" you will learn: The history of neural networks and the way modern neural networks work How deep learning REALLY works The different types of neural networks The ability to explain a neural network to others, while simultaneously being able to build on this knowledge without being COMPLETELY LOST How to build your own neural network An effective technique for hacking into a neural network Some introductory advice for modifying parameters in the code-based environment And much more... These books provide proven concepts and strategies for people who want to know more about machine learning and neural networks. After reading this bundle you will be able to choose the right kind of architecture, how to build a system that can learn, how to train it, and then how to use it to accomplish your goals. Get your copy of these fantastic guides as a part of your commitment to improving your data knowledge. Don't wait any longer and scroll up to click the buy now button!

Machine Learning for Beginners-Daniel Géron 2021-02-19 What is machine learning? How machine learning works? Should I use a machine learning model or another approach to solve my problem? How do I implement machine learning to my problem? What are the machine learning methods I can use for my problem? How do I

know my machine learning model is efficient? Are you wondering all these questions and hesitate on how to start with machine learning? The object of this book is to answer all of these questions. This book will give an initiation to machine learning methods. In fact, this book will give the very fundamental concepts of machine learning methods with no pre-requisite skills. Machine learning include is a large domain of research and have different branches. This book will teach the concepts of machine learning in general and also how to use artificial neural networks. By acquiring the skills presented in this book, we will be able to decide if machine learning is suited to solve your problem. You will also be able to make a judgement on the best way to implement a machine learning model to solve the problem you have in hand. By reading this book you will learn: - The general concept of machine learning - When to use and when to avoid machine learning - The 4 main types of machine learning - When to use each type of machine learning - The general concept of artificial neural networks - Activation function in artificial neural network and to choose an activation function within an artificial neural network - The 5 main types of artificial neural network - The best function to be used to train artificial neural networks. - the 2 main concepts to know in the training process of the artificial neural network - the main variants and algorithms for the formation of an artificial neural network and a machine learning model in general. Even you don't have any mathematical background or a statistical skill, this book will help you develop a sound understanding of machine learning methods and artificial neural networks.

AI Crash Course-Hadelin de Ponteves 2019-11-29 This friendly and accessible guide to AI theory and programming in Python requires no maths or data science background. Key Features Roll up your sleeves and start programming AI models No math, data science, or machine learning background required Packed with hands-on examples, illustrations, and clear step-by-step instructions 5 hands-on working projects put ideas into action and show step-by-step how to build intelligent software Book Description AI is changing the world – and with this book, anyone can start building intelligent software! Through his best-selling video courses, Hadelin de Ponteves has taught hundreds of thousands of people to write AI software. Now,

for the first time, his hands-on, energetic approach is available as a book. Taking a graduated approach that starts with the basics before easing readers into more complicated formulas and notation, Hadelin helps you understand what you really need to build AI systems with reinforcement learning and deep learning. Five full working projects put the ideas into action, showing step-by-step how to build intelligent software using the best and easiest tools for AI programming: Google Colab Python TensorFlow Keras PyTorch AI Crash Course teaches everyone to build an AI to work in their applications. Once you've read this book, you're only limited by your imagination. What you will learn Master the key skills of deep learning, reinforcement learning, and deep reinforcement learning Understand Q-learning and deep Q-learning Learn from friendly, plain English explanations and practical activities Build fun projects, including a virtual-self-driving car Use AI to solve real-world business problems and win classic video games Build an intelligent, virtual robot warehouse worker Who this book is for If you want to add AI to your skillset, this book is for you. It doesn't require data science or machine learning knowledge. Just maths basics (high school level).

Learning Deep Architectures for AI-Yoshua Bengio 2009 Theoretical results suggest that in order to learn the kind of complicated functions that can represent high-level abstractions (e.g. in vision, language, and other AI-level tasks), one may need deep architectures. Deep architectures are composed of multiple levels of non-linear operations, such as in neural nets with many hidden layers or in complicated propositional formulae re-using many sub-formulae. Searching the parameter space of deep architectures is a difficult task, but learning algorithms such as those for Deep Belief Networks have recently been proposed to tackle this problem with notable success, beating the state-of-the-art in certain areas. This paper discusses the motivations and principles regarding learning algorithms for deep architectures, in particular those exploiting as building blocks unsupervised learning of single-layer models such as Restricted Boltzmann Machines, used to construct deeper models such as Deep Belief Networks.

Fundamentals of Deep Learning and

Computer Vision-Nikhil Singh 2020-02-24 Master Computer Vision concepts using Deep Learning with easy-to-follow steps DESCRIPTION This book starts with setting up a Python virtual environment with the deep learning framework TensorFlow and then introduces the fundamental concepts of TensorFlow. Before moving on to Computer Vision, you will learn about neural networks and related aspects such as loss functions, gradient descent optimization, activation functions and how backpropagation works for training multi-layer perceptrons. To understand how the Convolutional Neural Network (CNN) is used for computer vision problems, you need to learn about the basic convolution operation. You will learn how CNN is different from a multi-layer perceptron along with a thorough discussion on the different building blocks of the CNN architecture such as kernel size, stride, padding, and pooling and finally learn how to build a small CNN model. Next, you will learn about different popular CNN architectures such as AlexNet, VGGNet, Inception, and ResNets along with different object detection algorithms such as RCNN, SSD, and YOLO. The book concludes with a chapter on sequential models where you will learn about RNN, GRU, and LSTMs and their architectures and understand their applications in machine translation, image/video captioning and video classification. KEY FEATURES Setting up the Python and TensorFlow environment Learn core Tensorflow concepts with the latest TF version 2.0 Learn Deep Learning for computer vision applications Understand different computer vision concepts and use-cases Understand different state-of-the-art CNN architectures Build deep neural networks with transfer Learning using features from pre-trained CNN models Apply computer vision concepts with easy-to-follow code in Jupyter Notebook WHAT WILL YOU LEARN This book will help the readers to understand and apply the latest Deep Learning technologies to different interesting computer vision applications without any prior domain knowledge of image processing. Thus, helping the users to acquire new skills specific to Computer Vision and Deep Learning and build solutions to real-life problems such as Image Classification and Object Detection. This book will serve as a basic guide for all the beginners to master Deep Learning and Computer Vision with lucid and intuitive explanations using basic mathematical concepts. It also explores these concepts with popular the deep learning framework TensorFlow. WHO THIS BOOK IS

FOR This book is for all the Data Science enthusiasts and practitioners who intend to learn and master Computer Vision concepts and their applications using Deep Learning. This book assumes a basic Python understanding with hands-on experience. A basic senior secondary level understanding of Mathematics will help the reader to make the best out of this book. Table of Contents 1. Introduction to TensorFlow 2. Introduction to Neural Networks 3. Convolutional Neural Network 4. CNN Architectures 5. Sequential Models

Mastering Deep Learning Fundamentals with Python-Richard Wilson 2019-07-14 ︎︎Buy the Paperback Version of this Book and get the Kindle Book version for FREE ︎︎ Step into the fascinating world of data science.. You to participate in the revolution that brings artificial intelligence back to the heart of our society, thanks to data scientists. Data science consists in translating problems of any other nature into quantitative modeling problems, solved by processing algorithms. This book, designed for anyone wishing to learn Deep Learning. This book presents the main techniques: deep neural networks, able to model all kinds of data, convolution networks, able to classify images, segment them and discover the objects or people who are there, recurring networks, it contains sample code so that the reader can easily test and run the programs. On the program: Deep learning Neural Networks and Deep Learning Deep Learning Parameters and Hyper-parameters Deep Neural Networks Layers Deep Learning Activation Functions Convolutional Neural Network Python Data Structures Best practices in Python and Zen of Python Installing Python Python These are some of the topics covered in this book: fundamentals of deep learning fundamentals of probability fundamentals of statistics fundamentals of linear algebra introduction to machine learning and deep learning fundamentals of machine learning fundamentals of neural networks and deep learning deep learning parameters and hyper-parameters deep neural networks layers deep learning activation functions convolutional neural network Deep learning in practice (in jupyter notebooks) python data structures best practices in python and zen of python installing python The following are the objectives of this book: To help you understand deep learning in detail To help you know how to get started with deep learning in Python by setting up the coding environment.

To help you transition from a deep learning Beginner to a Professional. To help you learn how to develop a complete and functional artificial neural network model in Python on your own. And more Get this book now to learn more about -- Deep learning in Python by setting up the coding environment.!

Deep Learning With Python-Ethan Williams 2020-05-27 Introduction 1Deep Learning with Python - The ultimate beginners guide to Learn Deep Learning with Python Step by StepYou have made a perfect choice to consider learning Python and most importantly to develop your skills in the programming world. A good choice comes with good tidings since you have you are looking at a highly comprehensive beginners' guidebook that will provide you with all the necessary steps and tips to get started. Deep Learning with Python - The ultimate beginners guide to Learn Deep Learning with Python Step by Step is packed with basic beginners' concepts, detailed examples and extra reminder exercises.Newbies are totally welcome to dive in! You do not need any experience with programming whatsoever. Just have a notepad ready because taking short notes helps and get ready to play around with the samples and do a whole lot of coding!The program was developed in December 1989 by Guido van Rossum. Guido's passion and hobby was to write and learn new codes that were available during his time. It is documented that he developed the python programming language while interacting and learning the ABC programming language.This is one of the best languages that you can choose to begin learning and at the end have a successful career in it. In summary, since the programming language was open-sourced, we expect a lot of advancements and developments on the language that will make it simpler and easier to use over the coming years.Introduction 2Deep Learning with Python - Comprehensive Guide of Tips and Tricks using Deep Learning with Python TheoriesThis book is designed to help you use Python for deep learning, including how to build and run deep learning models using Keras. This book also includes deep learning techniques, sample code, and technical content.The mathematical foundations of deep learning are subtle: but the average user doesn't need to fully understand the mathematical details to pick up the keyboard and start programming. Practically speaking, deep learning is not complicated, but the results are very objective. Teach you how to

use deep learning: this is the purpose of this book.Introduction 3Deep Learning with Python - Advanced and Effective Strategies of Using Deep Learning with Python TheoriesThis book discusses the intricacies of the internal workings of a deep learning model. It addresses the techniques and methods that can not only boost the productivity of your machine learning architectural skills, but also introduces new concepts. Implemented correctly, these can set your deep learning model a league apart from all other models. This book not only focuses on theoretical and conceptual realms of such knowledge, but also gives equal importance to putting this information to the test. We do this by including some common practical examples and demonstrations that you would normally build deep learning for, hence giving you the best of both worlds. The main features of this book include: -Refreshing the fundamentals of a deep learning model and neural networks and connecting them with the advanced knowledge laid out in this book, reinforcing the reader's prior knowledge and transforming it into an expert-level understanding.-Emphasizing those tasks that are commonly demanded from deep learning models and breathing new life into them by introducing new techniques, methods, and elements that enable the model to drastically improve the performance of deep learning models on such tasks.-No usage of mathematical notations in the examples detailed in this book so that the concepts can be readily assimilated and mastered by programmers that do not have a mathematical background, hence prioritizing clarity of concepts.-Keeping this requirement in mind, the examples use Numpy code throughout as it best represents what the code actually means and its purpose.If you want to learn advanced strategies for Python this is the book for you.

Hands-On Mathematics for Deep Learning-Jay Dawani 2020-06-12 A comprehensive guide to getting well-versed with the mathematical techniques for building modern deep learning architectures Key Features Understand linear algebra, calculus, gradient algorithms, and other concepts essential for training deep neural networks Learn the mathematical concepts needed to understand how deep learning models function Use deep learning for solving problems related to vision, image, text, and sequence applications Book Description Most programmers and data scientists struggle with mathematics, having either overlooked or forgotten core mathematical concepts. This book uses Python libraries to help you understand the math required to build deep learning (DL) models. You'll begin by learning about core mathematical and modern computational techniques used to design and implement DL algorithms. This book will cover essential topics, such as linear algebra, eigenvalues and eigenvectors, the singular value decomposition concept, and gradient algorithms, to help you understand how to train deep neural networks. Later chapters focus on important neural networks, such as the linear neural network and multilayer perceptrons, with a primary focus on helping you learn how each model works. As you advance, you will delve into the math used for regularization, multi-layered DL, forward propagation, optimization, and backpropagation techniques to understand what it takes to build full-fledged DL models. Finally, you'll explore CNN, recurrent neural network (RNN), and GAN models and their application. By the end of this book, you'll have built a strong foundation in neural networks and DL mathematical concepts, which will help you to confidently research and build custom models in DL. What you will learn Understand the key mathematical concepts for building neural network models Discover core multivariable calculus concepts Improve the performance of deep learning models using optimization techniques Cover optimization algorithms, from basic stochastic gradient descent (SGD) to the advanced Adam optimizer Understand computational graphs and their importance in DL Explore the backpropagation algorithm to reduce output error Cover DL algorithms such as convolutional neural networks (CNNs), sequence models, and generative adversarial networks (GANs) Who this book is for This book is for data scientists, machine learning developers, aspiring deep learning developers, or anyone who wants to understand the foundation of deep learning by learning the math behind it. Working knowledge of the Python programming language and machine learning basics is required.

Machine Learning for Beginners-Steven Cooper 2018-09-07 If you are looking for a complete beginners guide to learn machine learning with examples, in just a few hours, then you need to continue reading. Machine learning is an incredibly dense topic. It's hard to imagine condensing it into an easily readable and digestible format. However, this book aims to do

exactly that. □□ Grab your copy today and learn □□ ♦ The different types of learning algorithm that you can expect to encounter ♦ The numerous applications of machine learning ♦ The different types of machine learning and how they differ ♦ The best practices for picking up machine learning ♦ What languages and libraries to work with ♦ The future of machine learning ♦ The various problems that you can solve with machine learning algorithms ♦ And much more... Starting from nothing, we slowly work our way through all the concepts that are central to machine learning. By the end of this book, you're going to feel as though you have an extremely firm understanding of what machine learning is, how it can be used, and most importantly, how it can change the world. You're also going to have an understanding of the logic behind the algorithms and what they aim to accomplish. Don't waste your time working with a book that's only going to make an already complicated topic even more complicated. Scroll up and click the buy now button to learn everything you need to know about Machine Learning!

Deep Learning with TensorFlow 2 and Keras-Antonio Gulli 2019-12-27 Build machine and deep learning systems with the newly released TensorFlow 2 and Keras for the lab, production, and mobile devices Key Features Introduces and then uses TensorFlow 2 and Keras right from the start Teaches key machine and deep learning techniques Understand the fundamentals of deep learning and machine learning through clear explanations and extensive code samples Book Description Deep Learning with TensorFlow 2 and Keras, Second Edition teaches neural networks and deep learning techniques alongside TensorFlow (TF) and Keras. You'll learn how to write deep learning applications in the most powerful, popular, and scalable machine learning stack available. TensorFlow is the machine learning library of choice for professional applications, while Keras offers a simple and powerful Python API for accessing TensorFlow. TensorFlow 2 provides full Keras integration, making advanced machine learning easier and more convenient than ever before. This book also introduces neural networks with TensorFlow, runs through the main applications (regression, ConvNets (CNNs), GANs, RNNs, NLP), covers two working example apps, and then dives into TF in production, TF mobile, and using TensorFlow with AutoML. What you will learn Build machine learning and deep learning

systems with TensorFlow 2 and the Keras API Use Regression analysis, the most popular approach to machine learning Understand ConvNets (convolutional neural networks) and how they are essential for deep learning systems such as image classifiers Use GANs (generative adversarial networks) to create new data that fits with existing patterns Discover RNNs (recurrent neural networks) that can process sequences of input intelligently, using one part of a sequence to correctly interpret another Apply deep learning to natural human language and interpret natural language texts to produce an appropriate response Train your models on the cloud and put TF to work in real environments Explore how Google tools can automate simple ML workflows without the need for complex modeling Who this book is for This book is for Python developers and data scientists who want to build machine learning and deep learning systems with TensorFlow. Whether or not you have done machine learning before, this book gives you the theory and practice required to use Keras, TensorFlow 2, and AutoML to build machine learning systems.

Deep Learning for Beginners-PABLO. RIVAS 2020-09-18

Python Machine Learning-Samuel Burns 2019-03-13 You are interested in becoming a machine learning expert but don't know where to start from? Don't worry you don't need a big boring and expensive Textbook. This book is the best guide for you. Get your copy NOW!! Why this guide is the best one for Data Scientist? Here are the reasons:The author has explored everything about machine learning and deep learning right from the basics. A simple language has been used. Many examples have been given, both theoretically and programmatically. Screenshots showing program outputs have been added. The book is written chronologically, in a step-by-step manner. Book Objectives: The Aims and Objectives of the Book: To help you understand the basics of machine learning and deep learning. Understand the various categories of machine learning algorithms. To help you understand how different machine learning algorithms work. You will learn how to implement various machine learning algorithms programmatically in Python. To help you learn how to use Scikit-Learn and TensorFlow Libraries in Python. To help you know how to

analyze data programmatically to extract patterns, trends, and relationships between variables. Who this Book is for? Here are the target readers for this book: Anybody who is a complete beginner to machine learning in Python. Anybody who needs to advance their programming skills in Python for machine learning programming and deep learning. Professionals in data science. Professors, lecturers or tutors who are looking to find better ways to explain machine learning to their students in the simplest and easiest way. Students and academicians, especially those focusing on neural networks, machine learning, and deep learning. What do you need for this Book? You are required to have installed the following on your computer: Python 3.X Numpy Pandas Matplotlib The Author guides you on how to install the rest of the Python libraries that are required for machine learning and deep learning. What is inside the book: Getting Started Environment Setup Using Scikit-Learn Linear Regression with Scikit-Learn k-Nearest Neighbors Algorithm K-Means Clustering Support Vector Machines Neural Networks with Scikit-learn Random Forest Algorithm Using TensorFlow Recurrent Neural Networks with TensorFlow Linear Classifier This book will teach you machine learning classifiers using scikit-learn and tenserflow . The book provides a great overview of functions you can use to build a support vector machine, decision tree, perceptron, and k-nearest neighbors. Thanks of this book you will be able to set up a learning pipeline that handles input and output data, pre-processes it, selects meaningful features, and applies a classifier on it. This book offers a lot of insight into machine learning for both beginners, as well as for professionals, who already use some machine learning techniques. Concepts and the background of these concepts are explained clearly in this tutorial.

Machine Learning for Beginners-Jason Knox 2019-12-07 Thinking about beginning a career in the field of Data Science? Do you want to understand more in depth everything that concerns Machine Learning? Or maybe you're a total newbie eager to start learning this topic from zero or so. Machine Learning is one of the most exciting developments to come out of computer science since its founding. It's dramatically changing society all around us and the new occupation of Data Science which has arisen as a result of the development of Machine

Learning has opened up a new career path that guarantees employment that is exciting, at the cutting edge, and guaranteed to be challenging. Maybe you're aware of all the hype but you are quite sure what Machine Learning is. If that's the case you've come to the right place. This book is designed to be a beginner's introduction to the exciting world of Machine Learning and Data Science. In this book we are going to pull the curtain back and reveal the secrets and tools used in these exciting fields. We'll begin by recounting a history of machines and how they are an extension of the human mind and also an extension of human labor. Then we will introduce you to the concept of Machine Learning and explore how it relates to Artificial Intelligence into Deep Learning. You will learn all the different ways that Machine Learning can be applied in the real world in practical circumstances. After this, we will reveal the different types of learning and training that is used in order to get computers to learn how to deal with the real world and become autonomous agents. We will teach you all about Supervised and Unsupervised Learning. You're also going to learn the concepts behind all the major algorithms that are used in Data Science and Machine Learning. Inside you'll discover: What Linear Regression is, and the concept of least squares; Types of learning used to train machines to think and act autonomously; Avoid getting lost in Decision Trees and Random Forests; Understand Logistic Regression; Learn how tools like Clustering are used; Find out some of the recent applications of Machine Learning to the real world; See how Machine Learning is being used in Social Media, Analysis, by Government and by companies like Amazon, Netflix and Google; And much more... So, don't waste anymore time and let's start your journey !! ***Scroll up and click the BUY NOW button***

Machine Learning with Python-William Gray 2019-07-26 Do you Know exactly M.L why is it so valuable in data business ? Are you thinking of learning but are you afraid it's not enough ? This book teaches you, thanks to Python, the ways to do it ! 🔲🔲 Buy the Paperback version and get the Kindle Book versions for FREE 🔲🔲 Machine Learning is a branch of AI that applied algorithms to learn from data and create predictions - this is important in predicting the world around us. Today, ML algorithms accomplish tasks that until recently only expert humans could perform and, 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. Programmers who know close to nothing about this technology, now, can use simple, efficient tools to implement programs capable of learning from data. Python is a popular and open-source programming language. In addition, it is one of the most applied languages in artificial intelligence and other scientific fields. Inside "Machine Learning with Python" you'll learn: Fundamental concepts and applications of machine learning Understand the various categories of machine learning algorithms. Some of the branches of Artificial Intelligence The basics of Python Concepts of Machine Learning using Python Python Machine Learning Applications Machine Learning Case Studies with Python The way that Python evolved throughout time And many more Understand the key frameworks in ML Latest Python open source libraries in ML ML techniques using real-world data The ML Classifiers Using Scikit-Learn Implementing a Multilayer Artificial Neural Network from Scratch The Mechanics of TensorFlow ML Model into a Web Application The future of ML You are required to have installed the following on your computer: Python 3.X Numpy Pandas Matplotlib Throughout the recent years, artificial intelligence and machine learning have made some enormous, significant strides in terms of universal, global applicability. You'll discover the steps required to develop a successful machine-learning application using Python. This book offers a lot of insight into machine learning for both beginners, as well as for professionals, who already use some machine learning techniques. Using the latest Python open source libraries, this book offers the practical knowledge you need to create and contribute to machine learning and modern data analysis. Machine Learning with Python is a step-by-step guide for any person who wants to start learning Artificial Intelligence - It will help you in preparing a solid foundation and learn any other high-level courses. Stay ahead and make a choice that will last... If You like to know more, scroll to the top and select " BUY NOW " buttom ∏∏∏ Buy the Paperback version and get the Kindle Book versions for FREE ∏∏∏

Machine Learning for Absolute Beginners-Oliver Theobald 2021 Featured by Tableau as the first of "7 Books About Machine Learning for Beginners." Ready to spin up a virtual GPU instance and smash through petabytes of data? Want to add 'Machine Learning' to your LinkedIn profile?Well, hold on there...Before you embark on your journey, there are some high-level theory and statistical principles to weave through first. But rather than spend $30-$50 USD on a thick textbook, you may want to read this book first. As a clear and concise alternative, this book provides a high-level introduction to machine learning, free downloadable code exercises, and video demonstrations. Machine Learning for Absolute Beginners Third Edition has been written and designed for absolute beginners. This means plain-English explanations and no coding experience required. Where core algorithms are introduced, clear explanations and visual examples are added to make it easy to follow along at home.This new edition also features extended chapters with quizzes, free supplementary online video tutorials for coding models in Python, and downloadable resources not included in the Second Edition. Readers of the Second Edition should not feel compelled to purchase this Third Edition.Disclaimer: If you have passed the 'beginner' stage in your study of machine learning and are ready to tackle coding and deep learning, you would be well served with a long-format textbook. If, however, you are yet to reach that Lion King moment - as a fully grown Simba looking over the Pride Lands of Africa - then this is the book to gently hoist you up and give a clear lay of the land.In this step-by-step guide you will learn: - How to download free datasets- What tools and machine learning libraries you need- Data scrubbing techniques, including one-hot encoding, binning and dealing with missing data- Preparing data for analysis, including k-fold Validation- Regression analysis to create trend lines- k-Means Clustering to find new relationships- The basics of Neural Networks- Bias/Variance to improve your machine learning model- Decision Trees to decode classification, and- How to build your first Machine Learning Model to predict house values using PythonFrequently Asked QuestionsQ: Do I need programming experience to complete this e-book?A: This e-book is designed for absolute beginners, so no programming experience is required. However, two of the later chapters introduce Python to demonstrate an actual machine learning model, so you will see some programming used in this book. Q: I have already purchased the Second Edition of Machine Learning for Absolute Beginners, should I purchase this Third Edition?A: As the same topics from the Second Edition are covered in the Third

Edition, you may be better served reading a more advanced title on machine learning. If you have purchased a previous edition of this book and wish to get access to the free video tutorials, please email the author. 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 machine learning.

Deep Learning Fundamentals for Beginners-Ai Publishing 2020-01-13 Deep Learning Fundamentals for Beginners Theory behind explained for Beginners Are you looking for a small book to learn fundamentals of Deep Learning fast? Do you need to start learning Deep Learning and Neural Networks from Scratch? This book is for you. This book works as guide to present fundamental concepts, theory, examples related to Deep Learning. This book is written for beginners and novices who want to develop fundamental data science skills and learn how to build models that learn useful information from data. This book will prepare the learner for a career or further learning that involves more advanced topics. It contains an introduction and fundamental concepts used in data science and deep learning. The learner does not need to have any prior knowledge of machine learning or deep learning, but some basic understanding of mathematics is required. This book assumes that you know nothing about deep learning. Its goal is to give you the concepts, the intuitions, and the tools you need to actually learn how deep learning works and how and when to use it. What this book offers... You will learn all about statistics, Probability, Machine Learning. Fundamentals and Deep Learning. All the modules will contain examples and images to help beginner understand. Clear and Easy to Understand Solutions The book is extensively tested by a group of beta readers. The contents provided are simplified as much as possible so that they can serve as starting point for you to more advanced courses. What this book aims to do... This book is written with one goal in mind - to help beginners overcome their initial obstacles to learn Deep Learning from Scratch. A lot of times, newbies tend to feel intimidated by Data Science Models and Coding. The goal of this book is to isolate the different concepts so that beginners can gradually gain competency in the fundamentals and keys concepts before start

working on a real project. Beginners in Data Science does not have to be scary or frustrating when you take one step at a time. Ready to start practicing and start learning Deep Learning Fundamentals from Scratch? Click the BUY button now to download this book Topics Covered: Fundamentals of Probability Fundamentals of Statistics Fundamentals of Linear Algebra Introduction to Machine Learning and Deep Learning Fundamentals of Machine Learning Fundamentals of Neural Networks and Deep Learning Deep Learning Parameters and Hyper-parameters Deep Neural Networks Layers Deep Learning Activation Functions Deep Learning Loss Functions Deep Learning Optimization Algorithms Convolutional Neural Network Recurrent Neural Networks LSTM Recursive Neural Networks Bonus Course Conclusion Click the BUY button and download the book now to start learning Deep Learning. ** MONEY BACK GUARANTEE BY AMAZON ** If you aren't satisfied, for more information about the amazon refund service please go to the amazon help platform or contact us by sending an email at contact@aispublishing.net. **GET YOUR COPY NOW, the price will be 24.99$ soon**

Programming Collective Intelligence-Toby Segaran 2007-08-16 Want to tap the power behind search rankings, product recommendations, social bookmarking, and online matchmaking? This fascinating book demonstrates how you can build Web 2.0 applications to mine the enormous amount of data created by people on the Internet. With the sophisticated algorithms in this book, you can write smart programs to access interesting datasets from other web sites, collect data from users of your own applications, and analyze and understand the data once you've found it. Programming Collective Intelligence takes you into the world of machine learning and statistics, and explains how to draw conclusions about user experience, marketing, personal tastes, and human behavior in general -- all from information that you and others collect every day. Each algorithm is described clearly and concisely with code that can immediately be used on your web site, blog, Wiki, or specialized application. This book explains: Collaborative filtering techniques that enable online retailers to recommend products or media Methods of clustering to detect groups of similar items in a large dataset Search engine features -- crawlers, indexers,

query engines, and the PageRank algorithm Optimization algorithms that search millions of possible solutions to a problem and choose the best one Bayesian filtering, used in spam filters for classifying documents based on word types and other features Using decision trees not only to make predictions, but to model the way decisions are made Predicting numerical values rather than classifications to build price models Support vector machines to match people in online dating sites Non-negative matrix factorization to find the independent features in a dataset Evolving intelligence for problem solving -- how a computer develops its skill by improving its own code the more it plays a game Each chapter includes exercises for extending the algorithms to make them more powerful. Go beyond simple database-backed applications and put the wealth of Internet data to work for you. "Bravo! I cannot think of a better way for a developer to first learn these algorithms and methods, nor can I think of a better way for me (an old AI dog) to reinvigorate my knowledge of the details." -- Dan Russell, Google "Toby's book does a great job of breaking down the complex subject matter of machine-learning algorithms into practical, easy-to-understand examples that can be directly applied to analysis of social interaction across the Web today. If I had this book two years ago, it would have saved precious time going down some fruitless paths." -- Tim Wolters, CTO, Collective Intellect

Machine Learning for Hackers-Drew Conway 2012-02-13 If you're an experienced programmer interested in crunching data, this book will get you started with machine learning—a toolkit of algorithms that enables computers to train themselves to automate useful tasks. Authors Drew Conway and John Myles White help you understand machine learning and statistics tools through a series of hands-on case studies, instead of a traditional math-heavy presentation. Each chapter focuses on a specific problem in machine learning, such as classification, prediction, optimization, and recommendation. Using the R programming language, you'll learn how to analyze sample datasets and write simple machine learning algorithms. Machine Learning for Hackers is ideal for programmers from any background, including business, government, and academic research. Develop a naïve Bayesian classifier to determine if an email is spam, based only on its text Use linear regression to predict the number of page views

for the top 1,000 websites Learn optimization techniques by attempting to break a simple letter cipher Compare and contrast U.S. Senators statistically, based on their voting records Build a "whom to follow" recommendation system from Twitter data

Introduction to Machine Learning with Python-William Gray 2019-05-04 What exactly is machine learning and why is it so valuable in the online business ? Are you thinking of learning Python machine learning ?This book teach well you the practical ways to do it ! ▢▢▢ Buy the Paperback version and get the Kindle Book versions for FREE ▢▢▢ Machine Learning is a branch of AI that applied algorithms to learn from data and create predictions - this is important in predicting the world around us. Python is a popular and open-source programming language. In addition, it is one of the most applied languages in artificial intelligence and other scientific fields. Today, it is a top skill in high demand in the job market. Machine learning has become an integral part of many commercial applications and research projects. Using Python, even as a beginner, this book will teach you practical ways to build your own machine learning solutions. Inside Introduction to Machine Learning with Python, you'll learn: Fundamental concepts and applications of machine learning Understand the various categories of machine learning algorithms. Some of the branches of Artificial Intelligence The basics of Python Concepts of Machine Learning using Python Python Machine Learning Applications Machine Learning Case Studies with Python The way that Python evolved throughout time And many more Throughout the recent years, artificial intelligence and machine learning have made some enormous, significant strides in terms of universal, global applicability. You'll discover the steps required to develop a successful machine-learning application using Python. Introduction to Machine Learning with Python is a step-by-step guide for any person who wants to start learning Artificial Intelligence - It will help you in preparing a solid foundation and learn any other high-level courses. Stay ahead and make a choice that will last... If You like to know more, scroll to the top and select " BUY NOW " buttom ▢▢▢ Buy the Paperback version and get the Kindle Book versions for FREE ▢▢▢

Artificial Intelligence-David Brown 2020-12

SPECIAL DEAL: 3 books in 1: Machine Learning, Artificial Intelligence for Business and Computer Networking! It's no doubt that machine learning, artificial intelligence, and deep learning have created a lot of buzz in the tech world. However, unlike many other buzz words that we forget about quickly, technological advancements have made AI, ML, and deep learning a part of our daily lives. Furthermore, AI is here to stay, which is why if you are looking to learn about it, you need to make the most out of your learning. What better way to do this than with a 3 in 1 book bundle that takes you from zero to a future proof AI genius? This bundle contains the following books: ⬜ Machine learning for Beginners - This book explains machine learning concepts in very simple terms for beginners. It will take you not only through ML, but also AI and deep learning concepts. ⬜ Artificial intelligence for business - If you would like to know how you can use AI in your business, what the benefits of that would be and what the future of AI is in business, then you should read this book. You will also learn how modern companies in all industries are using AI and ML; and how you can craft your own AI strategy for your company. ⬜ Computer Networking for Beginners - This final book will give you insights into the power of computer networking and show you how this power is harnessed in machine learning. At the end of it all, you will have a solid knowledge of what networking is and how you can do it successfully. This 3 in 1 book bundle will give you the best value on your money.

Machine Learning For Dummies-John Paul Mueller 2016-05-31 Your no-nonsense guide to making sense of machine learning Machine learning can be a mind-boggling concept for the masses, but those who are in the trenches of computer programming know just how invaluable it is. Without machine learning, fraud detection, web search results, real-time ads on web pages, credit scoring, automation, and email spam filtering wouldn't be possible, and this is only showcasing just a few of its capabilities. Written by two data science experts, Machine Learning For Dummies offers a much-needed entry point for anyone looking to use machine learning to accomplish practical tasks. Covering the entry-level topics needed to get you familiar with the basic concepts of machine learning, this guide quickly helps you make sense of the programming languages and tools you need to turn machine learning-based tasks into a reality.

Whether you're maddened by the math behind machine learning, apprehensive about AI, perplexed by preprocessing data—or anything in between—this guide makes it easier to understand and implement machine learning seamlessly. Grasp how day-to-day activities are powered by machine learning Learn to 'speak' certain languages, such as Python and R, to teach machines to perform pattern-oriented tasks and data analysis Learn to code in R using R Studio Find out how to code in Python using Anaconda Dive into this complete beginner's guide so you are armed with all you need to know about machine learning!

Computer Programming-Daniel Géron 2019-09-18 Do want to learn how machine learning and neural networks work quickly and simply? Do you want to know how to build a machine learning model and you have no programming skill? Do you know a bit of Python coding and want to learn more about how this deep learning works? This bundle is going to guide you to the basics and the principles behind machine learning. Machine learning is an active research domain and includes several different approaches. This bundle is going to help you understand the different approaches of machine learning and neural networks. It will guide you through the steps you need to build a machine learning model. This bundle is intended to address all these questions. In fact, the aim of this bundle is providing the absolute beginners or other programmers that has no experience with Python programming the basic and fundamental tools of the Python language. Through this bundle, you will learn: Principles of machine learning Types of machine learning: supervised, unsupervised, semi-supervised, and reinforcement learning Advantages of each type of machine learning Principle and types of neural networks Steps to develop and fit artificial neural network model Getting started and installing Python Tools and platforms for Python programming How to use pandas, NumPy and matplotlib Python libraries How to develop a simple linear and logistic machine learning model How to develop and train a multi-layer artificial neural network two ways: from scratch and using the Python libraries When to use each type of machine learning The general concept of artificial neural networks Activation function in artificial neural network and to choose an activation function within an artificial neural network The 5 main types of artificial neural

network The best function to be used to train artificial neural networks. the 2 main concepts to know in the training process of the artificial neural network the main variants and algorithms for the formation of an artificial neural network and a machine learning model in general. The basics of the three main Python languages that will help you get the work done--including TensorFlow, Keras, and PyTorch How to install the three Python libraries to help you get started How to install and use magic command in Ipython Functionalities of NumPy library for numerical programming Functionalities of Pandas library for data analysis 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. Would you like to know more? Scroll to the top of the page and select the BUY NOW button!

Python Machine Learning-Sebastian Raschka 2015-09-23 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.

Deep Learning with Swift for TensorFlow-Rahul Bhalley 2021-02-05 Discover more insight about deep learning and how to work with Swift for TensorFlow to develop intelligent apps. TensorFlow was designed for easy adoption by iOS programmers working in Swift. This book covers the established and tested concepts and ties them to modern Swift programming and applicable use in developing for iOS. Using illustrative examples, the book starts off by introducing you to basic machine learning concepts along with code snippets in Swift for TensorFlow.. Fundamentals of neural networks required to understand today's deep learning research will be covered and put in the context of working in the Swift language with the goal of developing primarily for Apple's mobile ecosystem. Other important topics covered include computation graphs, loss functions, optimization techniques, regulazrizing nueral networks, recurrent neural networks—such as those used in Siri and Google Translate; and convolutional neural networks. You'll also learn to reuse pre-trained neural networks and work

with generative models. Finally, developing and building in security to models is addressed. Swift code will be provided throughout the book to keep the concepts grounded in application within Apple's frameworks. What You'll Learn • Write machine learning code in Swift • Run neural networks in Apple environments • Apply fundamental deep learning concepts to mobile app development Who This Book Is For Programmers familiar with Swift and the basics of AI

Machine Learning for Beginners-Steven Cooper 2018-09-07 Buy the Paperback version of this bundle, and get the Kindle eBook version included for FREE Get 2 books in 1! This is the bundle of two successful books in the market! Book 1: In "Machine Learning: An Introduction for Beginners, Why Machine Learning Matters Today and How Machine Learning Networks, Algorithms, Concepts and Neural Networks Really Work" you will learn: The different types of learning algorithm that you can expect to encounter The numerous applications of machine learning The different types of machine learning and how they diffe The best practices for picking up machine learning What languages and libraries to work with The future of machine learning The various problems that you can solve with machine learning algorithms And much more... Book 2: In "Neural Networks: A Practical Guide for Understanding and Programming Neural Networks and Useful Insights for Inspiring Reinvention" you will learn: The history of neural networks and the way modern neural networks work How deep learning REALLY works The different types of neural networks The ability to explain a neural network to others, while simultaneously being able to build on this knowledge without being COMPLETELY LOST How to build your own neural network An effective technique for hacking into a neural network Some introductory advice for modifying parameters in the code-based environment And much more... These books provide proven concepts and strategies for people who want to know more about machine learning and neural networks. After reading this bundle you will be able to choose the right kind of architecture, how to build a system that can learn, how to train it, and then how to use it to accomplish your goals. Get your copy of these fantastic guides as a part of your commitment to improving your data knowledge. Don't wait any longer and scroll up to click the buy now button!

Deep Learning with Python-Daniel Géron 2021-01-18 Do you want to learn how to write your own codes and programming and get your computer set up to learn just like humans do? Do you want to learn how to write out codes in deep learning-without having to spend years going to school to learn to code and how all this works? Do you know a bit of Python coding and want to learn more about how this deep learning works? This guidebook is the tool that you need to not only learn how to do machine learning but also learn how to take this even further and write some of your own codes in deep learning. The field of deep learning is pretty new, and many programmers have not been able to delve into the depths of what we can see with this type of programming-but with the growing market for products and technology that can act and learn just like the human brain, this field is definitely taking off! This book will take some time to explore the different Python libraries that will help you to do some deep learning algorithms in no time. Investing your time in the Python language and learning the different libraries that are needed to turn this basic programming language into a deep learning machine can be one of the best decisions for you. By learning some of the tips in this book, you will be able to save time and resources when it comes to your deep learning needs. Rather than spending time with other, more difficult programming languages, or having to go take complicated classes to learn how to do these algorithms, we will explore exactly how to do all of the tasks that you need with this type of machine learning. You will learn: 1. What deep learning is, how it is different from machine learning, and why Python is such a beneficial language to use with the deep learning algorithms; 2. The basics of the three main Python languages that will help you get the work done-including TensorFlow, Keras, and PyTorch; 3. How to install the three Python libraries to help you get started; 4. A closer look at neural networks, what they are, why they are important, and some of the mathematics of making them work; 5. The basics you need to know about TensorFlow and some of the deep learning you can do with this library; 6. The basics of the Keras library and some of the deep learning you can do with this library; 7. A look at the PyTorch library, how it is different from the other two, and the basics of deep learning with this library; 8. And so much more! Even if you are just a beginner, with very little programming

knowledge but lots of big dreams and even bigger ideas, this book is going to give you the tools that you need to start with deep learning!

Python Machine Learning-Andrew Park 2019-12-17 If you want to learn how to design and master different Machine Learning algorithms quickly and easily, then keep reading. Today, we live in the era of Artificial Intelligence. Self-driving cars, customized product recommendations, real-time pricing, speech and facial recognition are just a few examples proving this truth. Also, think about medical diagnostics or automation of mundane and repetitive labor tasks; all these highlight the fact that we live in interesting times. From research topics to projects and applications in different stages of production, there is a lot going on in the world of Machine Learning. Machines and automation represent a huge part of our daily life. They are becoming part of our experience, and existence. This is Machine Learning. Artificial Intelligence is currently one of the most thriving fields any programmer would wish to delve into, and for a good reason: this is the future! Simply put, Machine Learning is about teaching machines to think and make decisions as we would. The difference between the way machines learn and the way we do is that while for the most part we learn from experiences, machines learn from data. Starting from scratch, Python Machine Learning explains how this happens, how machines build their experience and compounding knowledge. Data forms the core of Machine Learning because within data lie truths whose depths exceed our imagination. The computations machines can perform on data are incredible, beyond anything a human brain could do. Once we introduce data to a machine learning model, we must create an environment where we update the data stream frequently. This builds the machine's learning ability. The more data Machine Learning models are exposed to, the easier it is for these models to expand their potential. Some of the topics that we will discuss inside include: What is Machine Learning and how it is applied in real-world situations Understanding the differences between Machine Learning, Deep Learning, and Artificial Intelligence Supervised learning, unsupervised learning, and semi-supervised learning The place of Regression techniques in Machine Learning, including Linear Regression in Python Machine learning training models How to use Lists and Modules in Python The 12 essential libraries for

Machine Learning in Python What is the Tensorflow library Artificial Neural Networks While most books only focus on widespread details without going deeper into the different models and techniques, Python Machine Learning explains how to master the concepts of Machine Learning technology and helps you to understand how researchers are breaking the boundaries of Data Science to mimic human intelligence in machines using various Machine Learning algorithms. Even if some concepts of Machine Learning algorithms can appear complex to most computer programming beginners, this book takes the time to explain them in a simple and concise way. Would You Like To Know More? Scroll to the top of the page and click the "Buy now" button to get your copy now!

Machine Learning: Concepts, Methodologies, Tools and Applications-Management Association, Information Resources 2011-07-31 "This reference offers a wide-ranging selection of key research in a complex field of study,discussing topics ranging from using machine learning to improve the effectiveness of agents and multi-agent systems to developing machine learning software for high frequency trading in financial markets"--Provided by publishe

Deep Learning from Scratch-Seth Weidman 2019-09-09 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