

The Applied Tensorflow And Keras Workshop: Mastering Deep Learning with Hands-On Exercises

Are you fascinated by the vast potential of deep learning and machine intelligence? Do you want to excel in building and deploying advanced neural networks? If so, then The Applied Tensorflow and Keras Workshop is your ultimate destination!

Deep learning has revolutionized various industries, from healthcare to finance, by enabling machines to learn and make intelligent decisions. Tensorflow and Keras are two leading open-source libraries that have empowered developers and data scientists worldwide to implement cutting-edge deep learning models effortlessly. In this workshop, you will dive into the intricate workings of these powerful frameworks and gain hands-on experience to take your AI skills to the next level.

Why Should You Attend?

Developed and led by industry experts, this immersive workshop offers an unparalleled opportunity to master the principles and applications of deep learning. With a focus on practicality and real-world scenarios, you will acquire the knowledge and skills necessary to build complex neural networks, train models efficiently, and deploy them effectively. Here's why you shouldn't miss this workshop:

**The Applied TensorFlow and Keras Workshop:
Develop your practical skills by working through a
real-world project and build your own Bitcoin**



price prediction tracker

by Harveen Singh Chadha (Kindle Edition)

★★★★☆ 4.6 out of 5

Language : English

File size : 16877 KB

Text-to-Speech : Enabled

Enhanced typesetting : Enabled

Print length : 180 pages

Screen Reader : Supported



1. Comprehensive Coverage of Tensorflow and Keras

Throughout the workshop, you will receive a comprehensive overview of Tensorflow and Keras, right from the basics to the most advanced concepts. We believe in starting from scratch and gradually progressing towards complex topics, ensuring that participants of all skill levels can follow along seamlessly. By the end of the workshop, you will have a deep understanding of these libraries and gain the confidence to apply them in real-world projects.

2. Hands-On Exercises

The workshop provides a hands-on learning experience through practical exercises. You will work on a series of guided exercises and coding challenges, helping you solidify your understanding of deep learning concepts. These exercises are carefully designed to simulate real-life projects, ensuring that you are well-prepared to tackle any deep learning challenge upon completion of the workshop.

3. Expert Guidance

Our instructors are seasoned professionals with extensive experience in the field of deep learning. They will guide you throughout the workshop, providing invaluable insights and practical tips to enhance your learning. You will have the opportunity to interact with them, ask questions, and receive personalized feedback tailored to your progress. Rest assured, you will be learning from the best!

What Will You Learn?

The Applied Tensorflow and Keras Workshop equips you with the knowledge and skills to succeed in the ever-expanding field of deep learning. During the workshop, you will:

1. Understand Deep Learning Basics

Deep learning can seem daunting at first, but our expert instructors break down complex concepts into easily understandable modules. You will learn about neural networks, activation functions, loss functions, optimization techniques, and more. By the end of this session, you will have a solid foundation in deep learning principles.

2. Master Tensorflow Fundamentals

Tensorflow, Google's powerful deep learning framework, will be demystified in this workshop. You will learn how to build computational graphs, create tensors, utilize data pipelines, and optimize your models with TensorBoard. Whether you are a beginner or an experienced developer, this section will help you leverage Tensorflow effectively in your projects.

3. Dive Deep into Keras

Keras, a high-level neural networks API, will be another focal point of the workshop. You will explore its features and understand how to build, train, and

fine-tune deep learning models. With Keras, you can easily experiment with different architectures and hyperparameters, accelerating your development process and improving model performance.

4. Implement Convolutional Neural Networks (CNN)

CNNs have been a game-changer in computer vision tasks, and this workshop provides a dedicated session to master this essential deep learning architecture. You will learn how CNNs are used for image classification, object detection, and image segmentation. Through practical exercises, you will gain hands-on experience in building, training, and deploying CNN-based models.

5. Explore Recurrent Neural Networks (RNN)

RNNs excel at sequence modeling tasks such as text generation, machine translation, and sentiment analysis. In this section, you will learn about different RNN architectures, including LSTM and GRU, and their practical applications. By the end of the workshop, you will be confident in building RNN-based models and leveraging their power in various domains.

6. Real-World Project Deployment

After mastering the foundations and advanced concepts, you will learn how to deploy deep learning models into production. From setting up cloud-based architectures to optimizing models for performance, this session covers the essentials of taking your models from the development environment to real-world scenarios. You will gain insights into deployment best practices and industry use cases.

Who Should Attend?

The Applied Tensorflow and Keras Workshop caters to a broad range of individuals with an interest in deep learning and machine intelligence. Whether

you are a beginner looking to broaden your skillset or an experienced data scientist aiming to enhance your expertise, this workshop is for you.

Professionals from the following fields will find the workshop highly beneficial:

- Data Scientists and Analysts
- Machine Learning Engineers
- Software Developers
- Researchers
- Graduate Students

Deep learning has emerged as a transformative technology, yielding groundbreaking results in a wide range of industries. By attending The Applied Tensorflow and Keras Workshop, you will unlock the potential of deep learning and gain the knowledge and skills to build intelligent systems. With comprehensive coverage, hands-on exercises, and expert guidance, this workshop is your gateway to mastering deep learning and taking your career to new heights. Don't miss out on this invaluable opportunity!



The Applied TensorFlow and Keras Workshop: Develop your practical skills by working through a real-world project and build your own Bitcoin price prediction tracker

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Cut through the noise and get real results with this workshop for beginners. Use a project-based approach to exploring machine learning with TensorFlow and Keras.

Key Features

- Understand the nuances of setting up a deep learning programming environment
- Gain insights into the common components of a neural network and its essential operations
- Get to grips with deploying a machine learning model as an interactive web application with Flask

Book Description

Machine learning gives computers the ability to learn like humans. It is becoming increasingly transformational to businesses in many forms, and a key skill to learn to prepare for the future digital economy.

As a beginner, you'll unlock a world of opportunities by learning the techniques you need to contribute to the domains of machine learning, deep learning, and modern data analysis using the latest cutting-edge tools.

The Applied TensorFlow and Keras Workshop begins by showing you how neural networks work. After you've understood the basics, you will train a few networks by altering their hyperparameters. To build on your skills, you'll learn how to select the most appropriate model to solve the problem in hand. While tackling advanced concepts, you'll discover how to assemble a deep learning system by

bringing together all the essential elements necessary for building a basic deep learning system - data, model, and prediction. Finally, you'll explore ways to evaluate the performance of your model, and improve it using techniques such as model evaluation and hyperparameter optimization.

By the end of this book, you'll have learned how to build a Bitcoin app that predicts future prices, and be able to build your own models for other projects.

What you will learn

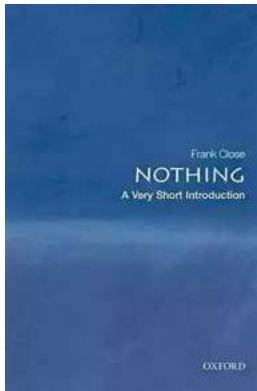
- Familiarize yourself with the components of a neural network
- Understand the different types of problems that can be solved using neural networks
- Explore different ways to select the right architecture for your model
- Make predictions with a trained model using TensorBoard
- Discover the components of Keras and ways to leverage its features in your model
- Explore how you can deal with new data by learning ways to retrain your model

Who this book is for

If you are a data scientist or a machine learning and deep learning enthusiast, who is looking to design, train, and deploy TensorFlow and Keras models into real-world applications, then this workshop is for you. Knowledge of computer science and machine learning concepts and experience in analyzing data will help you to understand the topics explained in this book with ease.

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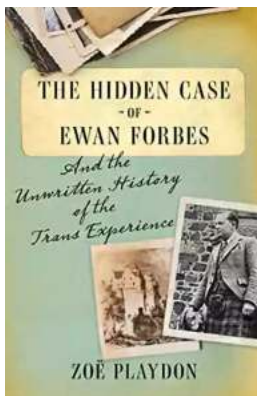
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