

TensorFlow Quickstart

GoSkills online course syllabus

Skill level

Beginner

Lessons

16

Pre-requisites

No prior experience needed

Video duration

38m

Estimated study time

38m 39s

Instructor

Greg Damico

Introduction

1 Dive into AI with TensorFlow

TensorFlow is a high-powered data science tool that's used to build sophisticated models, making predictions for regression, classification, NLP, and other types of ML endeavors.

Introduction to TensorFlow

2 Get started with TensorFlow

TensorFlow is a powerful tool for machine learning that enables developers to create complex models with ease.

3 Understand TensorFlow's core concepts

Grasping the basic building blocks of TensorFlow is crucial for any machine learning project.

4 TensorFlow vs. other frameworks

Understanding how TensorFlow compares to other machine learning frameworks can help you choose the right tool for your projects.

Building Blocks of TensorFlow

5 Define and manipulate tensors

Tensors are the fundamental data structures in TensorFlow and understanding them is essential.

6 Utilize TensorFlow operations

Operations are what make TensorFlow powerful for machine learning tasks.

7 Utilizing variables and placeholders

Variables and placeholders are key to feeding data into your TensorFlow models.

Implement Machine Learning Models

- 8 Build your first machine learning model**
Building a machine learning model with TensorFlow is an exciting step.
- 9 Train and evaluate your model**
Training and evaluating are critical steps in the machine learning workflow.
- 10 Debug your models**
Debugging is key to improving your machine learning model's performance.
- 11 Save and restore models**
Learning how to save and restore TensorFlow models is crucial for long-term projects.

Build a Neural Network and Apply Advanced Techniques

- 12 Implement a neural network**
Neural networks are at the heart of deep learning applications.
- 13 Explore advanced optimization techniques**
Advanced optimization techniques can significantly improve your model's training speed and performance.
- 14 Implement batch normalization**
Batch normalization is a technique to improve training stability and performance.
- 15 Use Dropout for regularization**
Dropout is a regularization technique to prevent overfitting in neural networks.

Conclusion

- 16 Start building with TensorFlow**
Thanks for watching!

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