

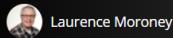
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Offered By



DeepLearning.AI TensorFlow Developer Professional Certificate

★★★★★ 4.7 26,130 ratings



Laurence Moroney

[Enroll for Free](#)
 Starts Oct 31

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Financial aid available

97,598 already enrolled

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WHAT YOU WILL LEARN

- ✓ Best practices for TensorFlow, a popular open-source machine learning framework to train a neural network for a computer vision applications.
- ✓ Handle real-world image data and explore strategies to prevent overfitting, including augmentation and dropout.
- ✓ Build natural language processing systems using TensorFlow.
- ✓ Apply RNNs, GRUs, and LSTMs as you train them using text repositories.

SKILLS YOU WILL GAIN

- Computer Vision
- Convolutional Neural Network
- Machine Learning
- Natural Language Processing
- Tensorflow
- Inductive Transfer
- Augmentation
- Dropouts
- Tokenization
- RNNs
- Forecasting
- Time Series

About this Professional Certificate

243,223 recent views

TensorFlow is one of the most in-demand and popular open-source deep learning frameworks available today. The DeepLearning.AI TensorFlow Developer Professional Certificate program teaches you applied machine learning skills with TensorFlow so you can build and train powerful models.

In this hands-on, four-course Professional Certificate program, you'll learn the necessary tools to build scalable AI-powered applications with TensorFlow. After finishing this program, you'll be able to apply your new TensorFlow skills to a wide range of problems and projects. This program can help you prepare for the [Google TensorFlow Certificate exam](#) and bring you one step closer to achieving the Google TensorFlow Certificate.

Looking for more advanced TensorFlow content? Check out the new [TensorFlow: Data and Deployment Specialization](#).

Applied Learning Project

In the DeepLearning.AI TensorFlow Developer Professional Certificate program, you'll get hands-on experience through 16 Python programming assignments. By the end of this program, you will be ready to:

- Build and train neural networks using TensorFlow
- Improve your network's performance using convolutions as you train it to identify real-world images
- Teach machines to understand, analyze, and respond to human speech with natural language processing systems
- Process text, represent sentences as vectors, and train a model to create original poetry!

LEARNER CAREER OUTCOMES

26% Started a new career after completing this specialization.

11% Got a pay increase or promotion.

Shareable Certificate

Earn a Certificate upon completion

100% online courses

Start instantly and learn at your own schedule.

Flexible Schedule

Set and maintain flexible deadlines.

Intermediate Level

Some related experience required.

Approx. 4 months to complete

Suggested 5 hours/week

English

Subtitles: English, French, Portuguese (Brazilian), Russian, Turkish, Spanish, Japanese, Korean



The courses helped me understand my strengths and weaknesses, and gave me the confidence I needed to quit my job and launch my own startup.

— Zeeshan U.



When I need courses on topics that my university doesn't offer, Coursera is one of the best places to go.

— Larry W.



Coursera's timely course offerings helped me book and re-establish myself in my field. Coursera to everyone!

What is a Professional Certificate?

Build the Skills to Get Job Ready

Whether you're looking to start a new career, or change your current one, Professional Certificates on Coursera help you become job ready. Learn at your own pace, whenever and wherever it's most convenient for you. Enroll today and explore a new career path with a 7 day free trial. You can pause your learning or end your subscription at any time.

Hands-On Projects

Apply your skills with hands-on projects and build a portfolio that showcases your job readiness to potential employers. You'll need to successfully finish the project(s) to earn your Certificate.

Earn a Career Credential

When you complete all of the courses in the program, you'll earn a Certificate to share with your professional network as well as unlock access to career support resources to help you kickstart your new career. Many Professional Certificates have hiring partners that recognize the Professional Certificate credential and others can help prepare you for a certification exam. You can find more information on individual Professional Certificate pages where it applies.



There are 4 Courses in this Professional Certificate

COURSE

[Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning](#)

1

★★★★★ 4.7 12,731 ratings • 2,699 reviews

If you are a software developer who wants to build scalable AI-powered algorithms, you need to understand how to use the tools to build them. This course is part of the upcoming Machine Learning in Tensorflow Specialization and will teach you best practices for using TensorFlow, a popular open-source framework for machine learning.

The Machine Learning course and Deep Learning Specialization from Andrew Ng teach the most important and foundational principles of Machine Learning and Deep Learning. This new deeplearning.ai TensorFlow Specialization teaches you how to use TensorFlow to implement those principles so that you can start building and applying scalable models to real-world problems. To develop a deeper understanding of how neural networks work, we recommend that you take the Deep Learning Specialization.

COURSE

[Convolutional Neural Networks in TensorFlow](#)

2

★★★★★ 4.7 5,595 ratings • 845 reviews

If you are a software developer who wants to build scalable AI-powered algorithms, you need to understand how to use the tools to build them. This course is part of the upcoming Machine Learning in Tensorflow Specialization and will teach you best practices for using TensorFlow, a popular open-source framework for machine learning.

In Course 2 of the deeplearning.ai TensorFlow Specialization, you will learn advanced techniques to improve the computer vision model you built in Course 1. You will explore how to work with real-world images in different shapes and sizes, visualize the journey of an image through convolutions to understand how a computer "sees" information, plot loss and accuracy, and explore strategies to prevent overfitting, including augmentation and dropout. Finally, Course 2 will introduce you to transfer learning and how learned features can be extracted from models. The Machine Learning course and Deep Learning Specialization from Andrew Ng teach the most important and foundational principles of Machine Learning and Deep Learning. This new deeplearning.ai TensorFlow Specialization teaches you how to use TensorFlow to implement those principles so that you can start building and applying scalable models to real-world problems. To develop a deeper understanding of how neural networks work, we recommend that you take the Deep Learning Specialization.

COURSE

[Natural Language Processing in TensorFlow](#)

3

★★★★★ 4.6 4,578 ratings • 706 reviews

If you are a software developer who wants to build scalable AI-powered algorithms, you need to understand how to use the tools to build them. This Specialization will teach you best practices for using TensorFlow, a popular open-source framework for machine learning.

In Course 3 of the deeplearning.ai TensorFlow Specialization, you will build natural language processing systems using TensorFlow. You will learn to process text, including tokenizing and representing sentences as vectors, so that they can be input to a neural network. You'll also learn to apply RNNs, GRUs, and LSTMs in TensorFlow. Finally, you'll get to train an LSTM on existing text to create original poetry! The Machine Learning course and Deep Learning Specialization from Andrew Ng teach the most important and foundational principles of Machine Learning and Deep Learning. This new deeplearning.ai TensorFlow Specialization teaches you how to use TensorFlow to implement those principles so that you can start building and applying scalable models to real-world problems. To develop a deeper understanding of how neural networks work, we recommend that you take the Deep Learning Specialization.

COURSE

Sequences, Time Series and Prediction

4

★★★★★ 4.6 3,226 ratings • 520 reviews

If you are a software developer who wants to build scalable AI-powered algorithms, you need to understand how to use the tools to build them. This Specialization will teach you best practices for using TensorFlow, a popular open-source framework for machine learning.

In this fourth course, you will learn how to build time series models in TensorFlow. You'll first implement best practices to prepare time series data. You'll also explore how RNNs and 1D ConvNets can be used for prediction. Finally, you'll apply everything you've learned throughout the Specialization to build a sunspot prediction model using real-world data! The Machine Learning course and Deep Learning Specialization from Andrew Ng teach the most important and foundational principles of Machine Learning and Deep Learning. This new deeplearning.ai TensorFlow Specialization teaches you how to use TensorFlow to implement those principles so that you can start building and applying scalable models to real-world problems. To develop a deeper understanding of how neural networks work, we recommend that you take the Deep Learning Specialization.

Instructor



Laurence Moroney

AI Advocate

Google Brain

259,842 Learners

10 Courses

Offered by



DeepLearning.AI

Founded by Andrew Ng, DeepLearning.AI is an education technology company that develops a global community of AI talent.

DeepLearning.AI's expert-led educational experiences provide AI practitioners and non-technical professionals with the necessary tools to go all the way from foundational basics to advanced application, empowering them to build an AI-powered future.

Start Today with a 7-Day Free Trial

- ✓ Taught by top companies and universities
- ✓ Affordable programs and 7 day free trial
- ✓ Apply your skills with hands-on projects
- ✓ Learn on your own schedule
- ✓ Course videos and readings
- ✓ Graded quizzes and assignments
- ✓ No degree or experience required for many programs
- ✓ Shareable Certificate upon completion

Enroll for Free
Starts Oct 31

Shareable on **LinkedIn**



You can share your Certificate in the Certifications section of your LinkedIn profile, on printed resumes, CVs, or other documents.

97,598 already enrolled

Frequently Asked Questions

/ What is the refund policy?

› Can I just enroll in a single course?

› Is this course really 100% online? Do I need to attend any classes in person?

› Can I transition to paying for the full Specialization if I already paid \$49 for one of the courses?

More questions? Visit the [Learner Help Center](#).

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