



4 Courses

**Introduction to TensorFlow  
for Artificial Intelligence,  
Machine Learning, and Deep  
Learning**

**Convolutional Neural  
Networks in TensorFlow**

**Natural Language  
Processing in TensorFlow**

**Sequences, Time Series and  
Prediction**



30-Jan-2022

**Ahmad Khaled Elshafee**

has successfully completed the online, non-credit Professional  
Certificate

# DeepLearning.AI TensorFlow Developer

Congratulations! You have completed all 4 courses of the DeepLearning.AI TensorFlow Developer Professional Certificate program. As part of this Professional Certificate program, you have learned: how to build and train neural networks using TensorFlow, how to improve network performance using convolutions as you train it to identify real-world images, how to teach machines to understand, analyze, and respond to human speech with natural language processing systems, and more! These, and other TensorFlow concepts, are going to be at the forefront of the coming transformation to an AI-powered future.

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Laurence Moroney  
Lead AI Advocate  
Google

Andrew Ng  
Founder  
DeepLearning.AI

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