



5 Courses

**Neural Networks and Deep Learning**

**Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization**

**Structuring Machine Learning Projects**

**Convolutional Neural Networks**

**Sequence Models**



Apr 14, 2021

**Nahin Hossain Uday**

has successfully completed the online, non-credit Specialization

## Deep Learning

Congratulations! You have completed all five courses of the Deep Learning Specialization. In this Specialization, you built neural network architectures such as Convolutional Neural Networks, Recurrent Neural Networks, LSTMs, Transformers and learned how to make them better with strategies such as Dropout, BatchNorm, Xavier/He initialization, and more. You mastered these theoretical concepts and their application using Python and TensorFlow and also tackled real-world case studies such as autonomous driving, sign language reading, music generation, computer vision, speech recognition, and natural language processing. You're now familiar with the capabilities, challenges, and consequences of deep learning and are ready to participate in the development of leading-edge AI technology.

Andrew Ng,  
Founder,  
DeepLearning.AI  
Co-founder, Coursera

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.

Verify this certificate at:  
[coursera.org/verify/specialization/8MA8VDVQGV6N](https://coursera.org/verify/specialization/8MA8VDVQGV6N)