



Dec 13, 2020

Karthik Ragunath Ananda  
Kumar

has successfully completed

Improving Deep Neural Networks: Hyperparameter  
tuning, Regularization and Optimization

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng  
Computer Science

COURSE  
CERTIFICATE



Verify at [coursera.org/verify/CBWN7BE3CFEM](https://coursera.org/verify/CBWN7BE3CFEM)

Coursera has confirmed the identity of this individual and their  
participation in the course.