

COURSE CERTIFICATE

12/18/2019

Muhammad Ali Qadar

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



Adjunct Professor Andrew Ng Computer Science

 $Verify\ at\ coursera.org/verify/LKMW5MKCFT48$

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