



Oct 9, 2024

JOELLE ABU HANI

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 black ink, appearing to be 'Andrew Ng'.

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

COURSE  
CERTIFICATE



Verify at:  
<https://coursera.org/verify/5KT8079CKHZ3>

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