



COURSE
CERTIFICATE

May 17, 2024

Eslam Mustafa Elnahas

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 read 'Andrew Ng'.

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

Verify at:
<https://coursera.org/verify/MP5KJ8AHCJGG>

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