



9 Jul, 2025

**Joel Trulin**

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

**COURSE  
CERTIFICATE**



Verify at:

<https://coursera.org/verify/46YK7RLR5X80>

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