

COURSE CERTIFICATE

03/05/2018

## 烨 刘

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/9GHK77ARJ8LR

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