



05/15/2020

**Charles Mackie**

has successfully completed

**Convolutional Neural Networks**

an online non-credit course authorized by deeplearning.ai and offered through  
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng  
Computer Science

**COURSE  
CERTIFICATE**



Verify at [coursera.org/verify/896DW54ZVCAK](https://coursera.org/verify/896DW54ZVCAK)

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