



07/06/2020

**Pavan Vishwanath**

has successfully completed

**Neural Networks and Deep Learning**

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/JGE3C7NRCEQM](https://coursera.org/verify/JGE3C7NRCEQM)

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



07/09/2020

**Pavan Vishwanath**

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 blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng  
Computer Science

**COURSE  
CERTIFICATE**



Verify at [coursera.org/verify/XFRYD2HQBE2Q](https://coursera.org/verify/XFRYD2HQBE2Q)

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



07/11/2020

**Pavan Vishwanath**

has successfully completed

**Structuring Machine Learning Projects**

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/3RTL4TM5LW69](https://coursera.org/verify/3RTL4TM5LW69)  
Coursera has confirmed the identity of this individual and  
their participation in the course.



27.09.2020

**Pavan Vishwanath**

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/SUV9H7Q8UANN](https://coursera.org/verify/SUV9H7Q8UANN)

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





Nov 15, 2020

**Pavan Vishwanath**

has successfully completed

**State Estimation and Localization for Self-Driving Cars**

an online non-credit course authorized by University of Toronto and offered through Coursera

A handwritten signature in black ink, reading "Yaroslav Kheifets".

Associate Professor, Aerospace Studies  
Director, Space & Terrestrial Autonomous Robotic Systems Laboratory

A handwritten signature in black ink, reading "Shreyas Wadhvani".

Associate Professor, Aerospace Studies  
Director, Toronto Robotics and Artificial Intelligence Laboratory

**COURSE  
CERTIFICATE**



Verify at [coursera.org/verify/G6PY2JEUD8UE](https://coursera.org/verify/G6PY2JEUD8UE)

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