

COURSE CERTIFICATE

May 30, 2022

PRATIK YUVRAJ YAWALKAR

has successfully completed

Convolutional Neural Networks in TensorFlow

an online non-credit course authorized by DeepLearning.AI and offered through Coursera



Laurence Moroney

Laurence Moroney Lead AI Advocate, Google

Verify at: https://coursera.org/verify/X7B8PCZ8FAY4

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

Grades



You have completed all of the assignments that are currently due.



You passed this course! Your grade is 100%.

Item		Status		Due	Weight	Grade
Week 1 Quiz	Quiz	Passed		May 23 12:29 PM IST	5%	100%
Cats vs Program	Dogs ming Assignment	Passed		May 23 12:29 PM IST	20%	100%
Week 2 Quiz	Quiz	Passed		May 30 12:29 PM IST	5%	100%
	Dogs with Data Augmentation ming Assignment	Passed		May 30 12:29 PM IST	20%	100%
Week 3 Quiz	Quiz	Passed	31	Jun 6 12:29 PM IST	5%	100%
	r Learning - Horses vs Humans ming Assignment	Passed	31	Jun 6 12:29 PM IST	20%	100%
Week 4 Quiz	Quiz	Passed		Jun 13 12:29 PM IST	5%	100%
	cation: Beyond two classes ming Assignment	Passed		Jun 13 12:29 PM IST	20%	100%

Convolutional Neural Networks in TensorFlow



Completed by **PRATIK YUVRAJ YAWALKAR**

May 30, 2022

4 weeks of study, 4-5 hours/week

Grade Achieved: 100%

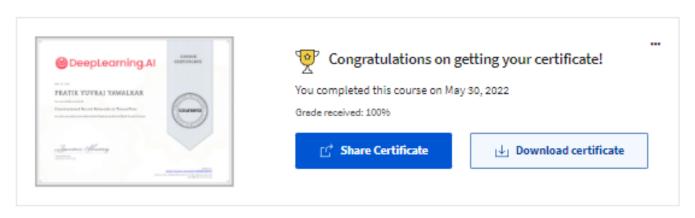
PRATIK YUVRAJ YAWALKAR's account is verified. Coursera certifies their successful completion of <u>Convolutional Neural Networks in TensorFlow</u>





Convolutional Neural Networks in TensorFlow

by DeepLearning.Al





skills you learned, you may find these courses helpful



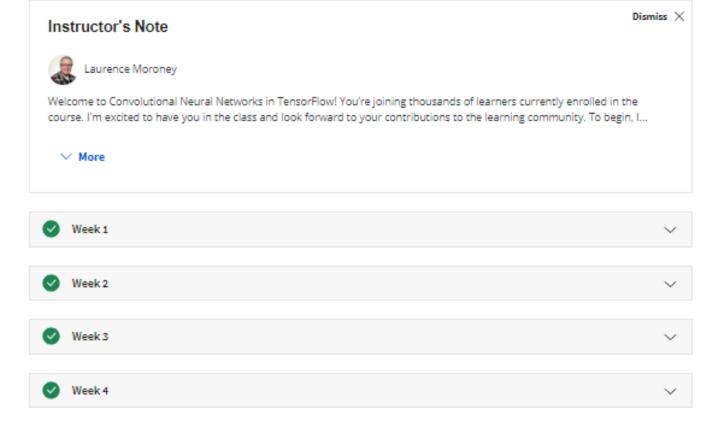
Natural Language Pro... DeepLearning.Al 会会会会会



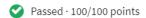
Sequences, Time Seri... DeepLearning.Al 食食食食食



Network Security & Da... 会会会会会



Programming Assignment: Cats vs Dogs





This is your first programming assignment for this course.

Learn more

Dismiss \times

Deadline The assignment was due on May 23, 12:29 PM IST You can still pass this assignment before the course ends.

Instructions

My submissions

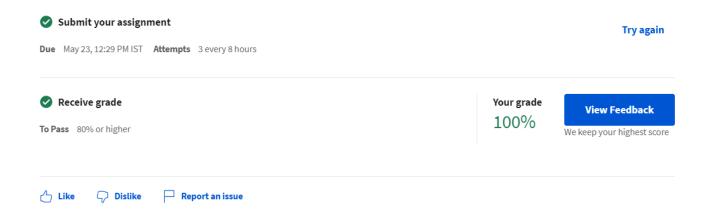
Discussions

NOTE: The graders for all assignments in this course were updated last April 29. 2022. If you started working on this assignment before that date, please re-open the notebook from the assignment link below and paste your solutions there. Then please download and submit that newer notebook instead. That will ensure that your work is properly graded. Thank you!

This week you explored a reduced version of the Cats v Dogs dataset and used it to train a convolutional neural network. You saw that it overfit very quickly, despite great results with the training set. One solution to overfitting is to use more data for both training and validation, and that's this week's exercise -- to build a classifier using the full Cats v Dogs dataset of 25k images!

Note again that when loading the images, you might get warnings about EXIF data being missing or corrupt. Don't worry about this -- it is missing data in the images, but it's not visual data that will impact the training.

Week 1 Quiz



Programming Assignment: Cats vs Dogs with Data Augmentation



Deadline The assignment was due on May 30, 12:29 PM IST

You can still pass this assignment before the course ends.

Instructions My submissions Discussions

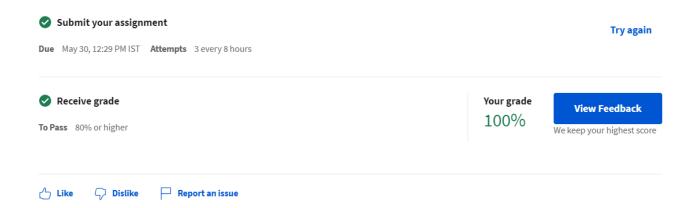
Now that you've seen Image Augmentation in action, it's time to go back to the Cats v Dogs full Kaggle Challenge exercise. Last week you built a classifier for Cats v Dogs and trained it for a few epochs. This week I want you to add Augmentation to it, and experiment with different parameters to avoid overfitting. This will likely take a lot of time -- as it requires using the full dataset along with augmentation code to edit the data on-the-fly. The opportunity here is to try hard to get into State-of-the-Art type classification. Experiment with different images it hasn't before seen, and see if you can get it to correctly classify them! For a particularly challenging image, see if you can get it to classify this one correctly: https://pixabay.com/photos/bed-dog-animals-dogs-pets-relax-1284238/

Lets now build the Cats vs. Dogs classifier using augmentation!

Complete the tasks in the assignment notebook and upload the relevant files here for grading.

This notebook is hosted on github so in order to save any changes you need to create a copy of it within your Drive. You can do so by clicking the `File` tab and then the `Save a copy in drive` option.

Week 2 Quiz



Programming Assignment: Transfer Learning -Horses vs Humans

Passed · 100/100 points

Deadline Pass this assignment by Jun 6, 12:29 PM IST

Instructions

My submissions

Discussions

This week your exercise will be to apply what you've learned about Transfer Learning to see if you can increase training accuracy for Horses v Humans. To avoid crazy overfitting, your validation set accuracy should be around 95% if you do it right!

Your training should automatically stop once it reaches this desired accuracy.

Let's now use Transfer Learning to increase the training accuracy for Horses v Humans!

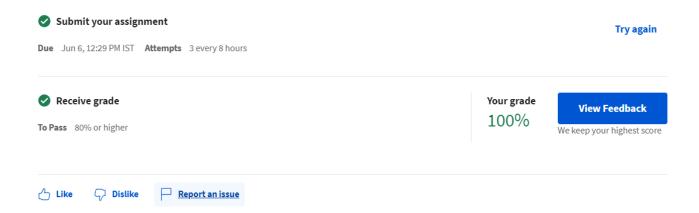
Complete the tasks in the <u>assignment notebook</u> and upload the relevant files here for grading.

This notebook is hosted on github so in order to save any changes you need to create a copy of it within your Drive. You can do so by clicking the `File` tab and then the `Save a copy in drive` option.

You should upload one file:

- The notebook (a file with .ipynb extension) which will be used to test the following functions:

Week 3 Quiz



Programming Assignment: Classification: Beyond two classes

Passed · 100/100 points

Deadline Pass this assignment by Jun 13, 12:29 PM IST

Instructions My submissions Discussions

Now that you've explored the concepts behind going from binary classification to multi class classification, it's time for another Exercise. In this one you'll use the Sign Language dataset from https://www.kaggle.com/datamunge/sign-language-mnist, and attempt to build a multiclass classifier to recognize sign language!

Let's build a multi-class classifier to recognize sign language!

Complete the tasks in the <u>assignment notebook</u> and upload the relevant files here for grading.

This notebook is hosted on github so in order to save any changes you need to create a copy of it within your Drive. You can do so by clicking the `File` tab and then the `Save a copy in drive` option.

Week 4 Quiz

