



Overview

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Week 3

Convolutional Neural Networks in TensorFlow

Week 3

Discuss this week's modules here.

293 threads · Last post a day ago

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Transfer Learning



Laurence Moroney

Building models for yourself is great, and can be very powerful. But, as you've seen, you can be limited by the data you have on hand. Not everybody has access to massive datasets or the compute power that's needed to train them effectively. Transfer learning can help solve this -- where people with models trained on large datasets train them, so that you can either use them directly, or, you can use the features that they have learned and apply them to your scenario. This is Transfer learning, and you'll look into that this week!

[^](#) [Less](#)

Transfer Learning

**Video:** A conversation with Andrew Ng 3 min**Video:** Understanding transfer learning: the concepts 2 min**Reading:** Start coding! 10 min**Video:** Coding transfer learning from the inception mode 1 min[Resume](#)**Reading:** Adding your DNN 10 min**Video:** Coding your own model with transferred features 2 min**Reading:** Using dropouts! 10 min**Video:** Exploring dropouts 1 min**Reading:** Applying Transfer Learning to Cats v Dogs 10 min**Video:** Exploring Transfer Learning with Inception 1 min**Reading:** What have we seen so far? 10 min**Quiz:** Week 3 Quiz 8 questions

Due Nov 23, 1:59 AM CST

**Video:** Week 3 Wrap up 36 sec

Weekly Exercise- Transfer Learning

**Lab:** Exercise 3 - Horses vs. humans using Transfer Learning 1h**Programming Assignment:** Exercise 3 - Horses vs. humans using Transfer Learning 3h

Due Nov 23, 1:59 AM CST

Optional: Ungraded Google Colaboratory environment

**Ungraded External Tool:** Exercise 3 - Horses vs. humans using Transfer Learning 1h