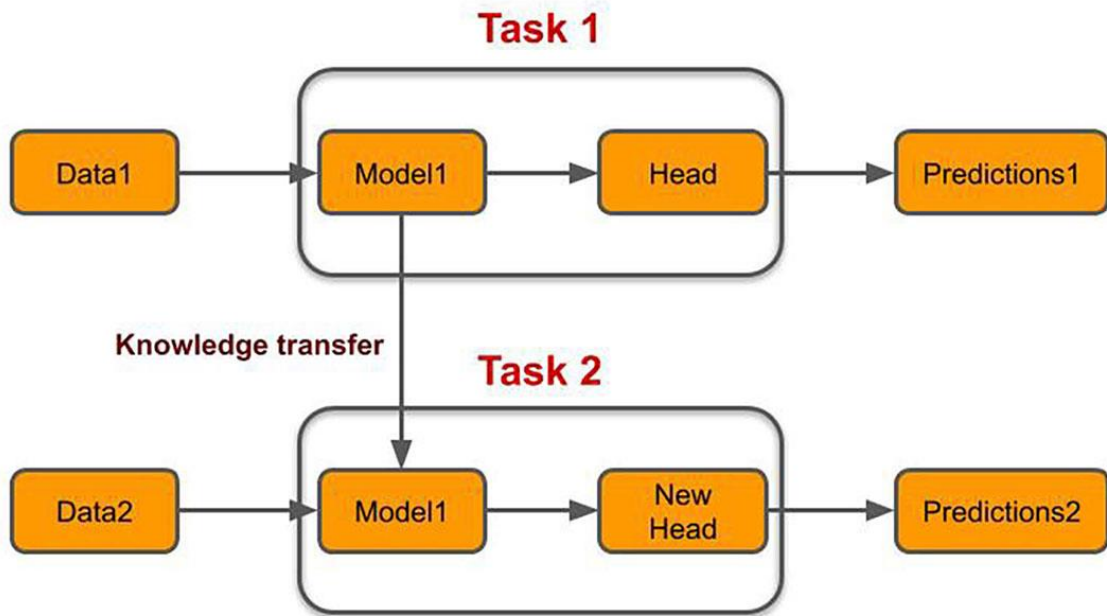


# Transfer Learning



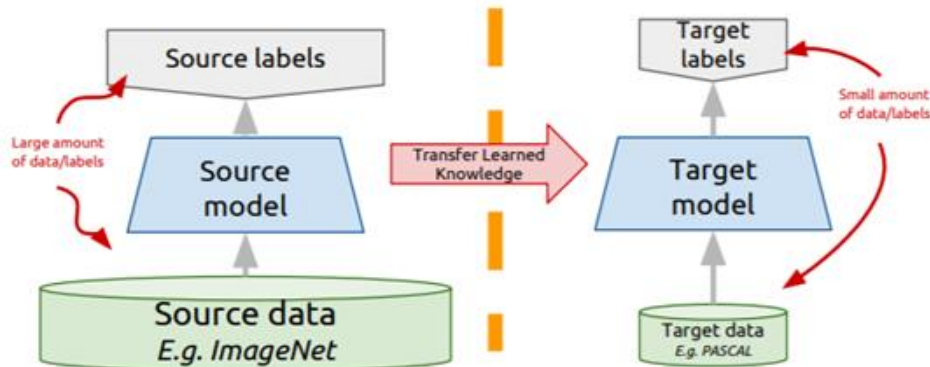
# Transfer learning: idea

Instead of training a deep network from scratch for your task:

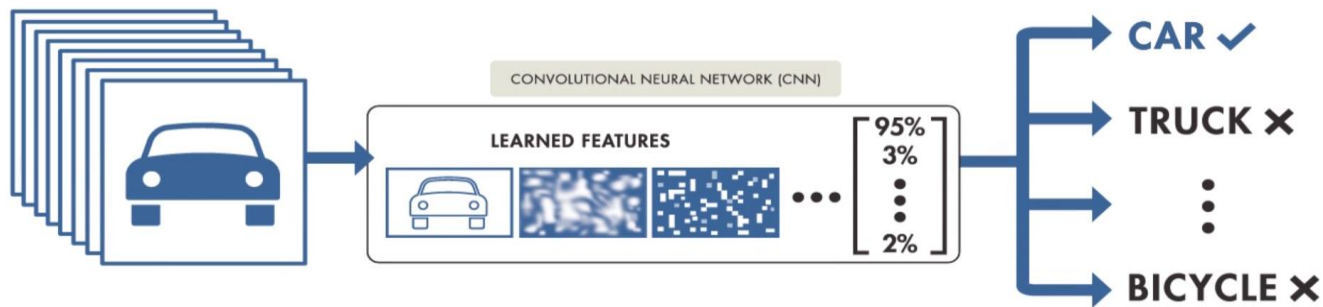
- Take a network trained on a different domain for a different **source task**
- Adapt it for your domain and your **target task**

Variations:

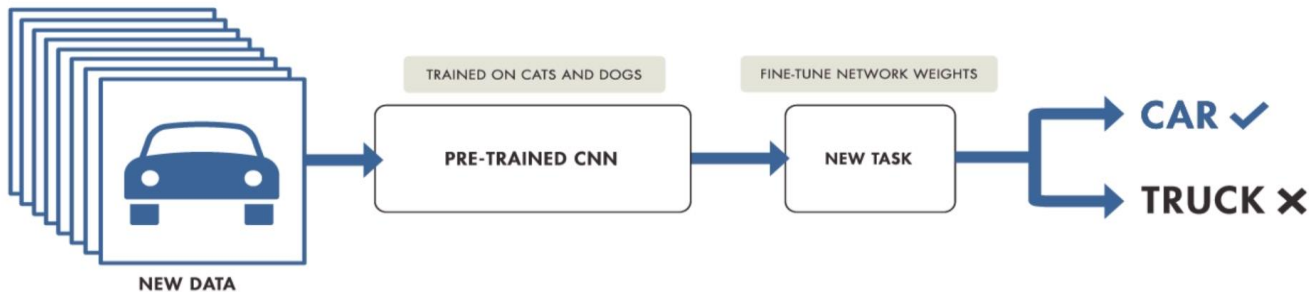
- Same domain, different task
- Different domain, same task



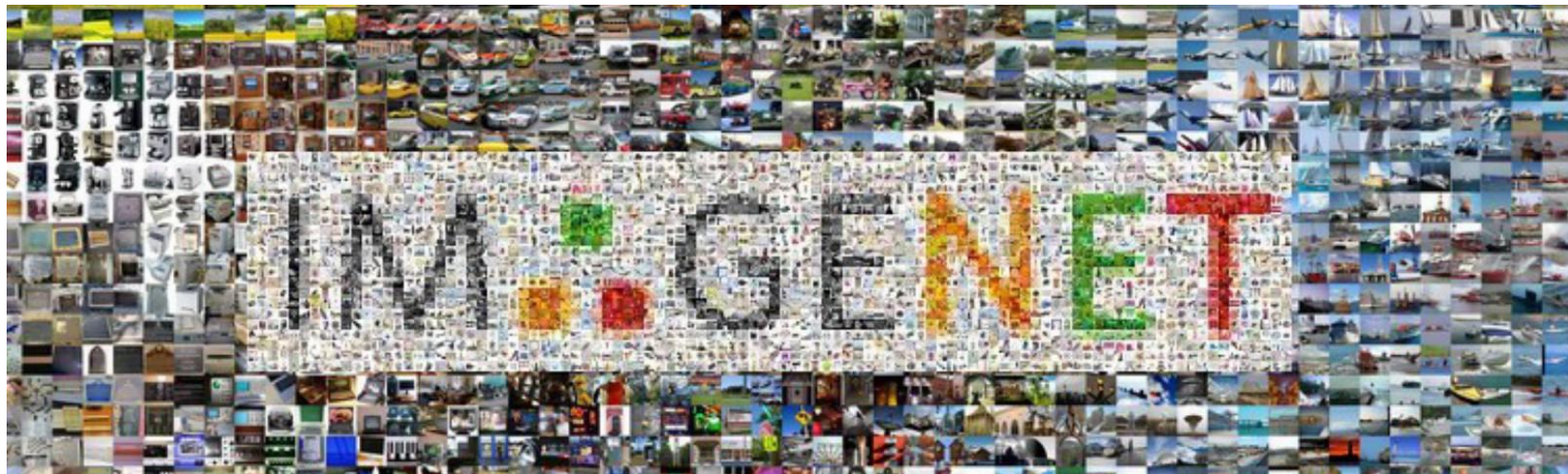
# TRAINING FROM SCRATCH



# TRANSFER LEARNING



# ImageNet Competition



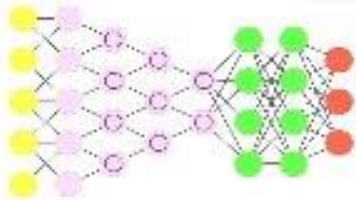
<https://gist.github.com/yrevar/942d3a0ac09ec9e5eb3a>

# Transfer Learning

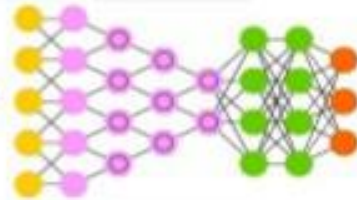
ImageNet



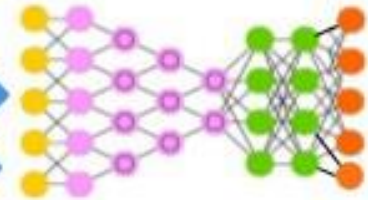
randomly initialized weights



Network trained to classify 1000 classes

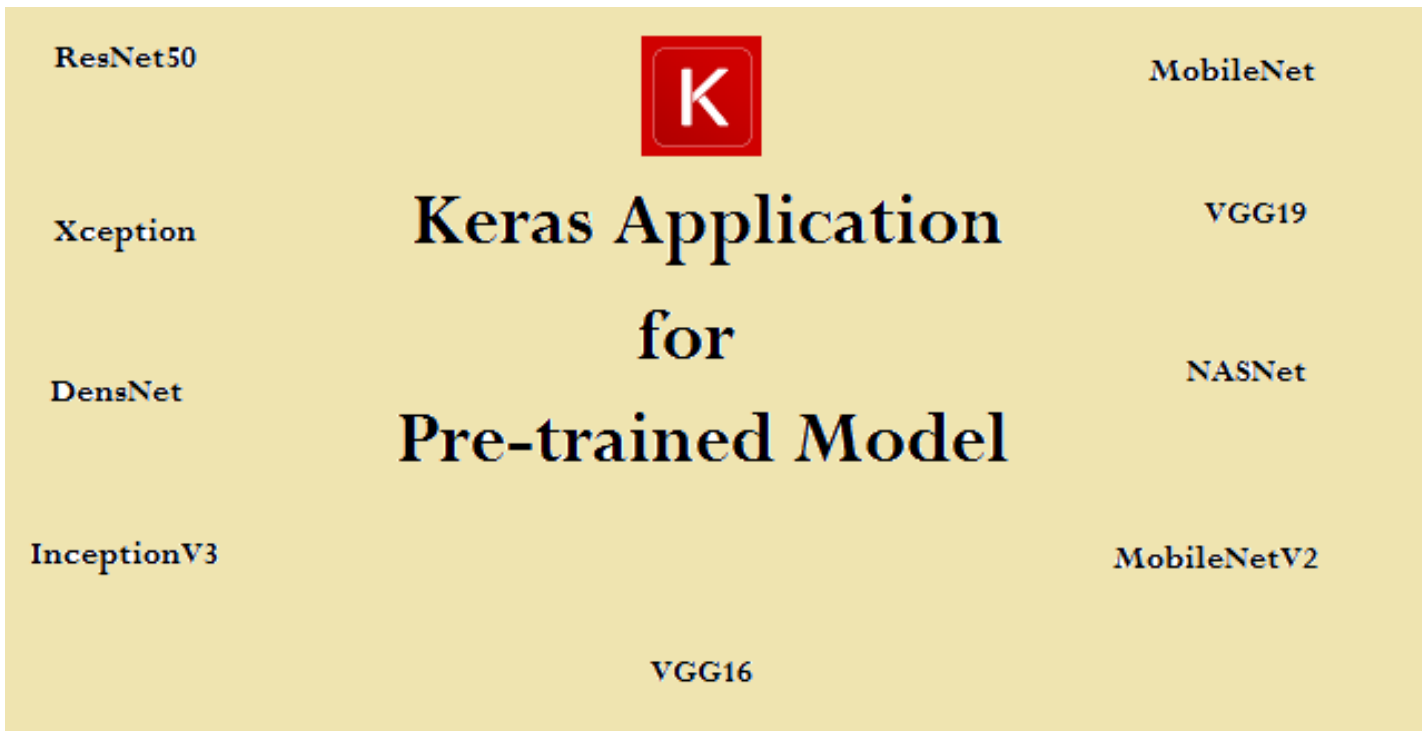


Fine-tune model (update weights)

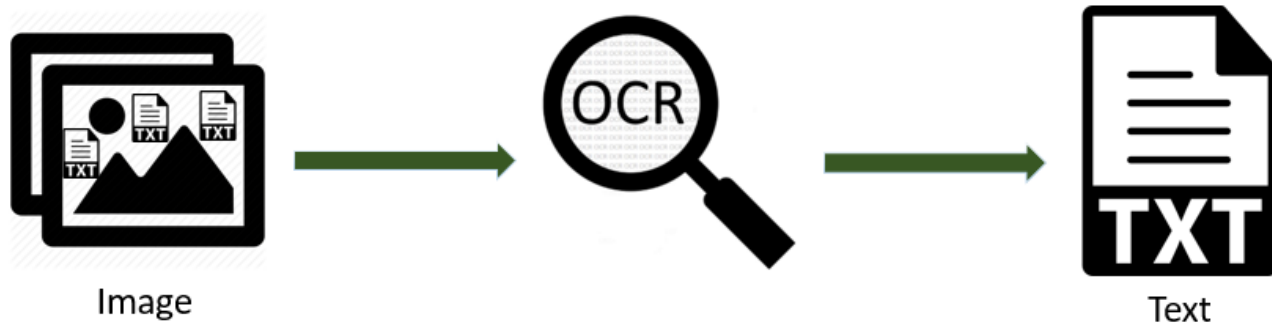


New data  
New classes

BRAINCREATORS 



# Optical Character Recognition



[https://miro.medium.com/max/866/1\\*CBkz7f\\_KjNh\\_wVuqLp-m0A.png](https://miro.medium.com/max/866/1*CBkz7f_KjNh_wVuqLp-m0A.png)



# Installing Tesseract Software

Installing the software on Linux Machine



```
!sudo apt install tesseract-ocr  
!pip install pytesseract --quiet
```



Installing the Python wrapper for Pytesseract



# THANK YOU