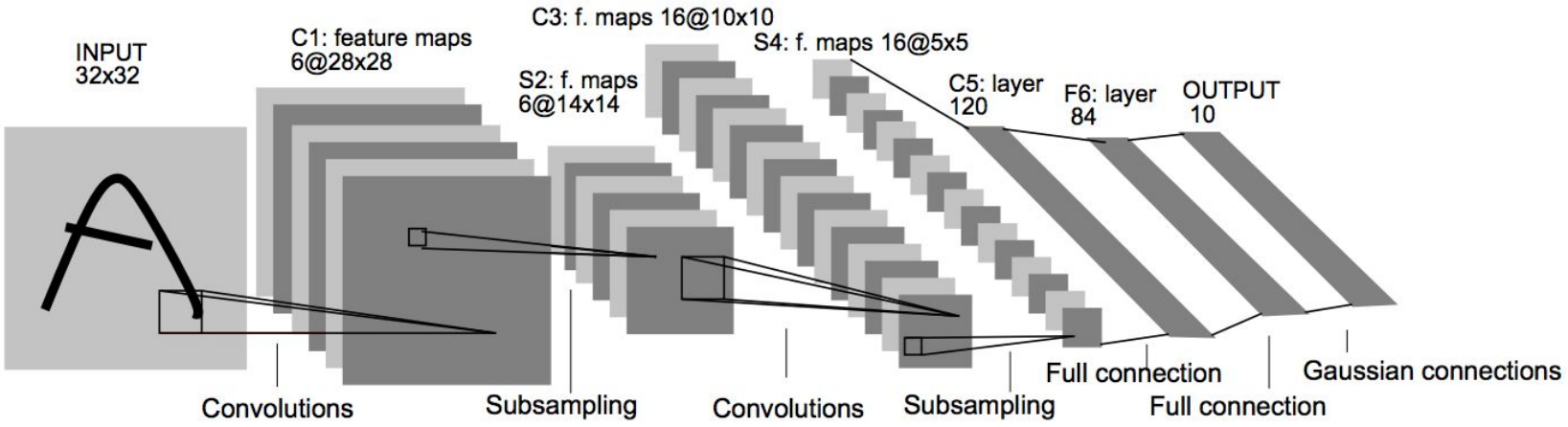
Архитектуры нейросетей

Свёрточные нейросети

LeNet



http://yann.lecun.com/exdb/publis/pdf/lecun-98.pdf

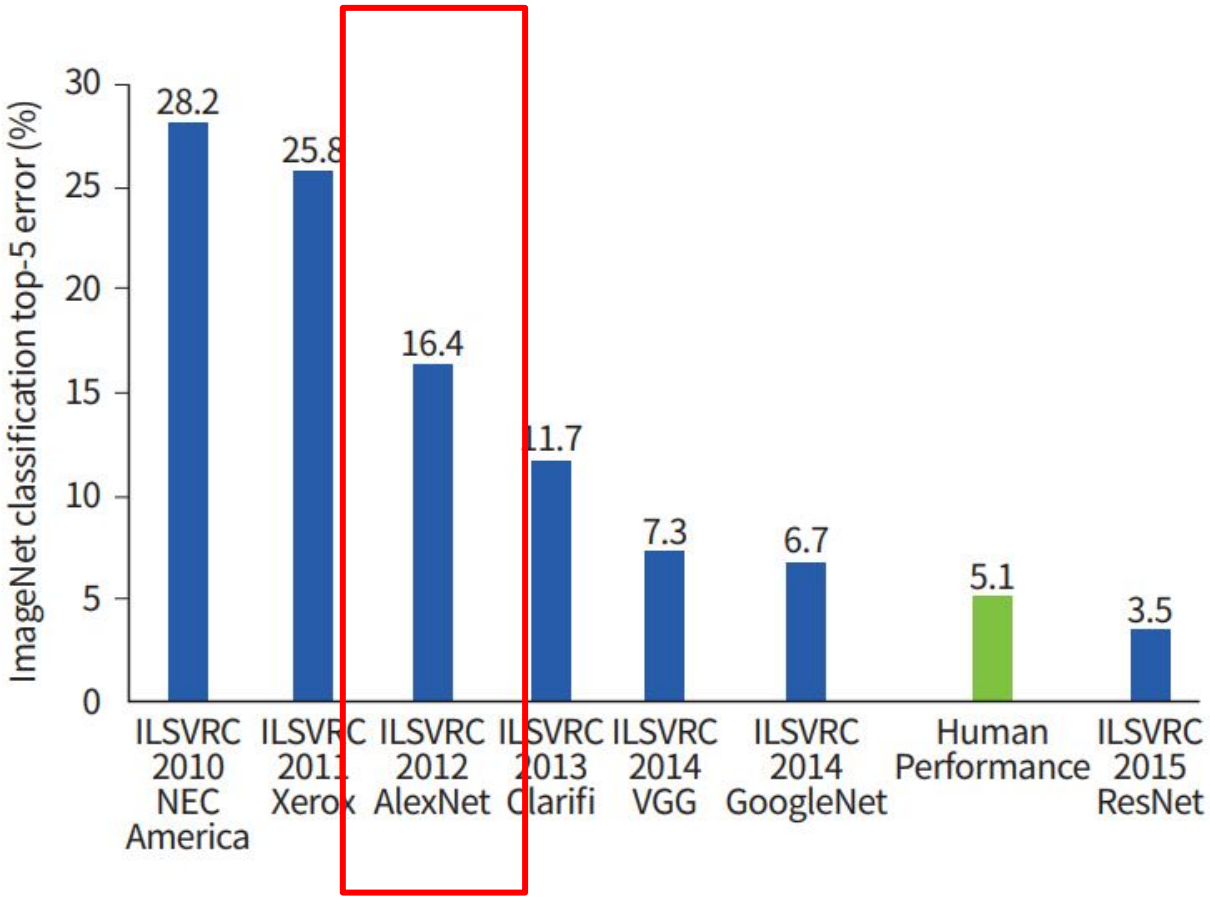
ImageNet

http://www.image-net.org

ILSVRC

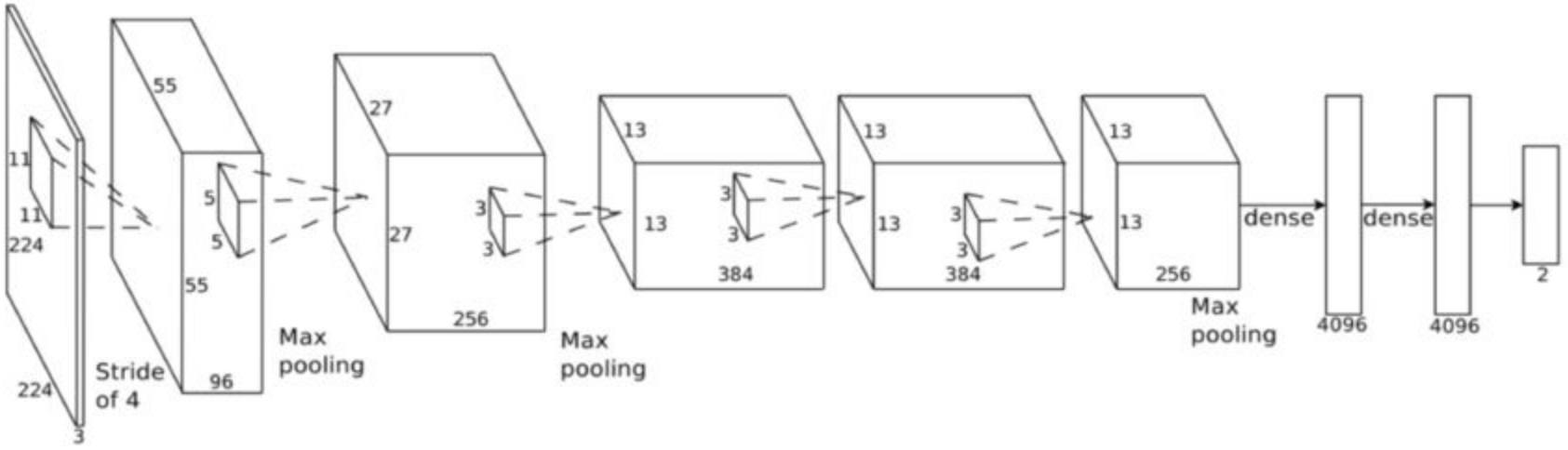
http://www.image-net.org/challenges/LSVRC/

ILSVRC



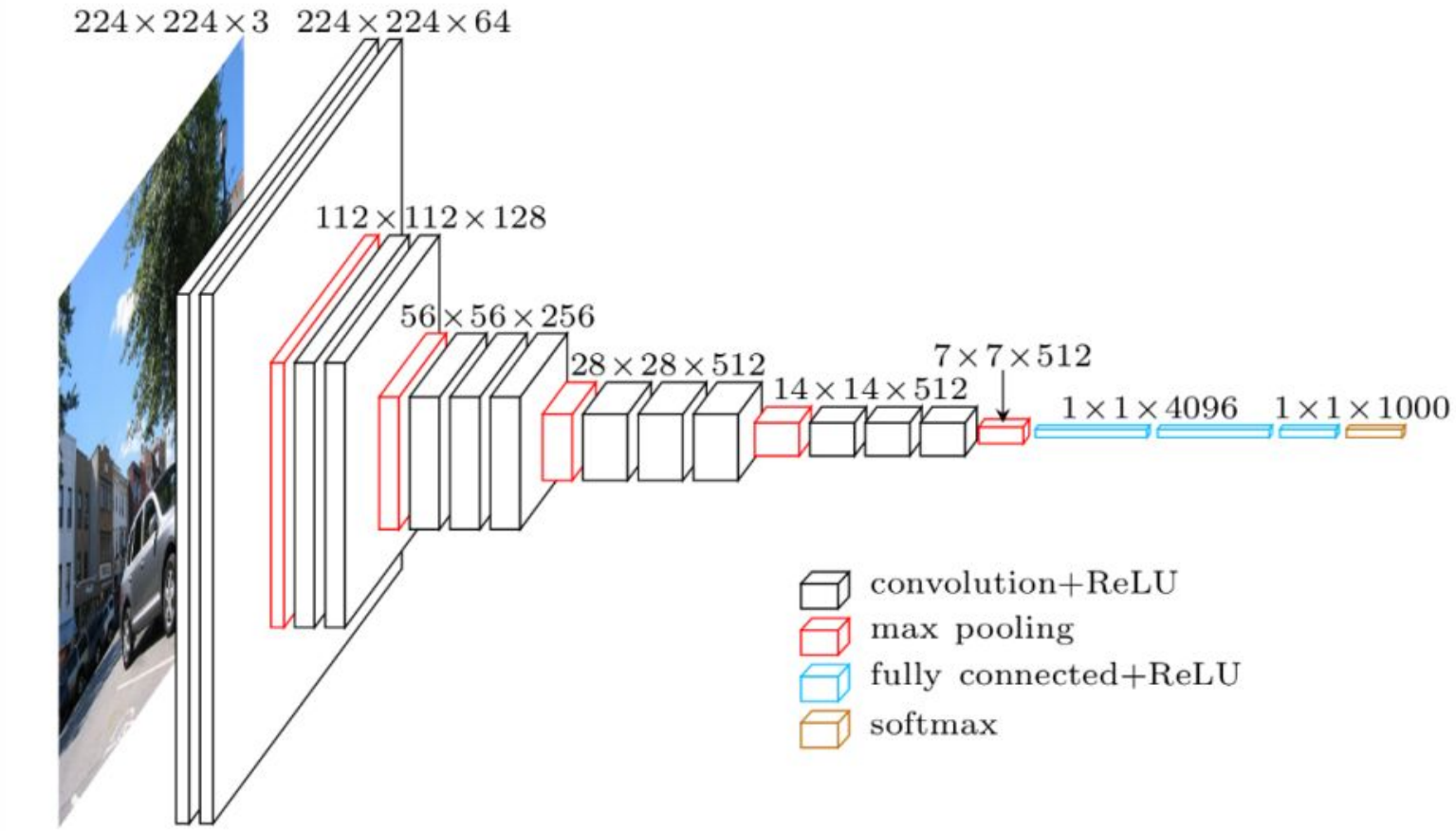
http://www.image-net.org/challenges/LSVRC/

AlexNet



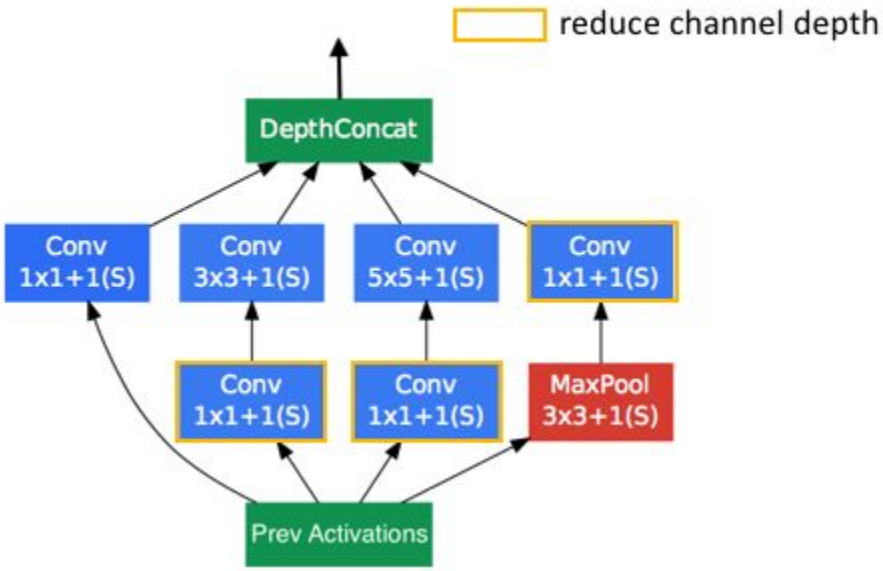
http://papers.nips.cc/paper/4824-imagenet-classification-with-deep-convolutional-neural-networks.pdf

VGG



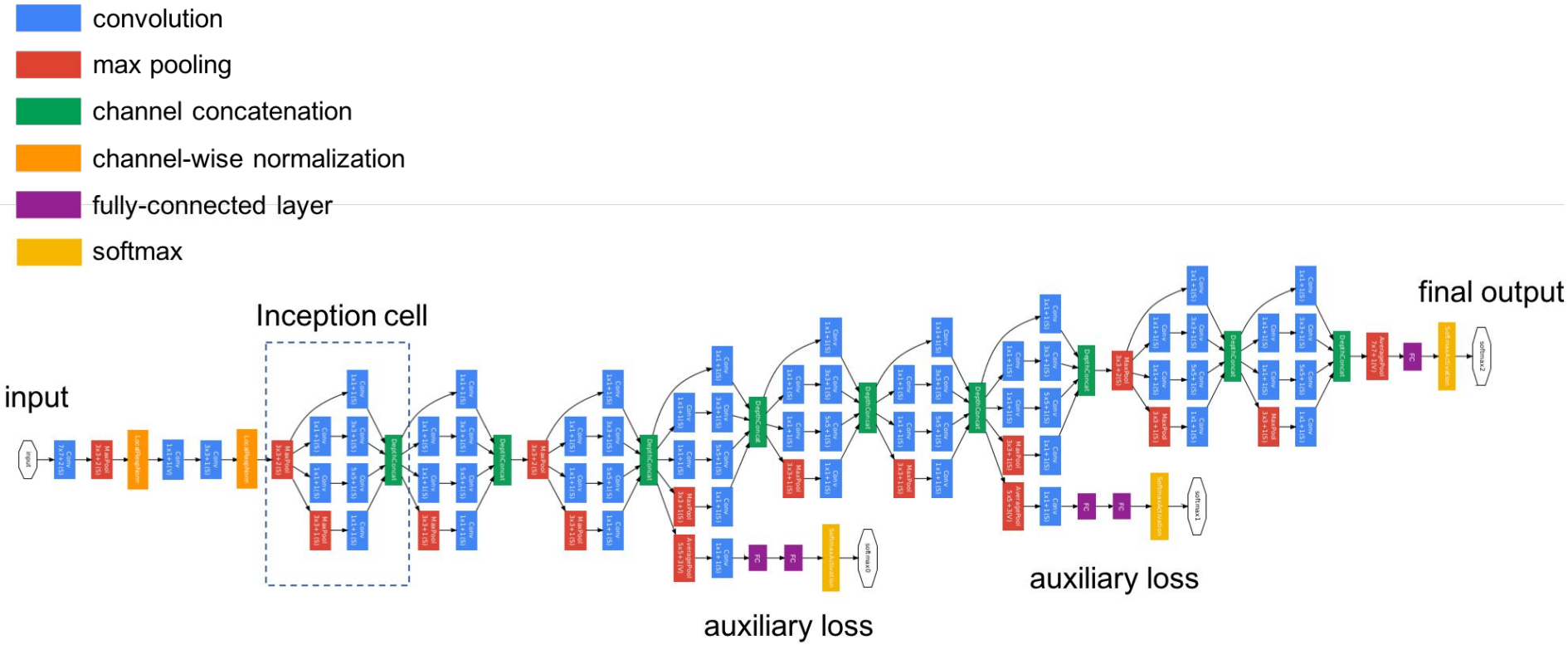
https://arxiv.org/pdf/1409.1556.pdf

Inception-v1 (GoogLeNet)



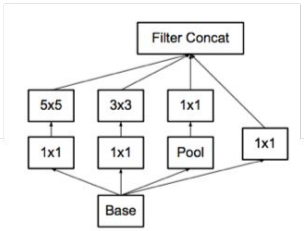
https://arxiv.org/abs/1409.4842

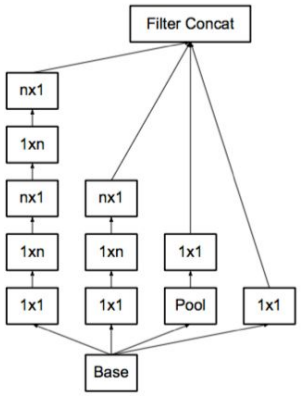
Inception-v1 (GoogLeNet)

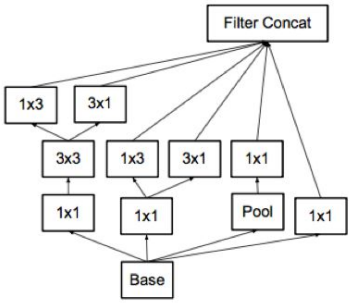


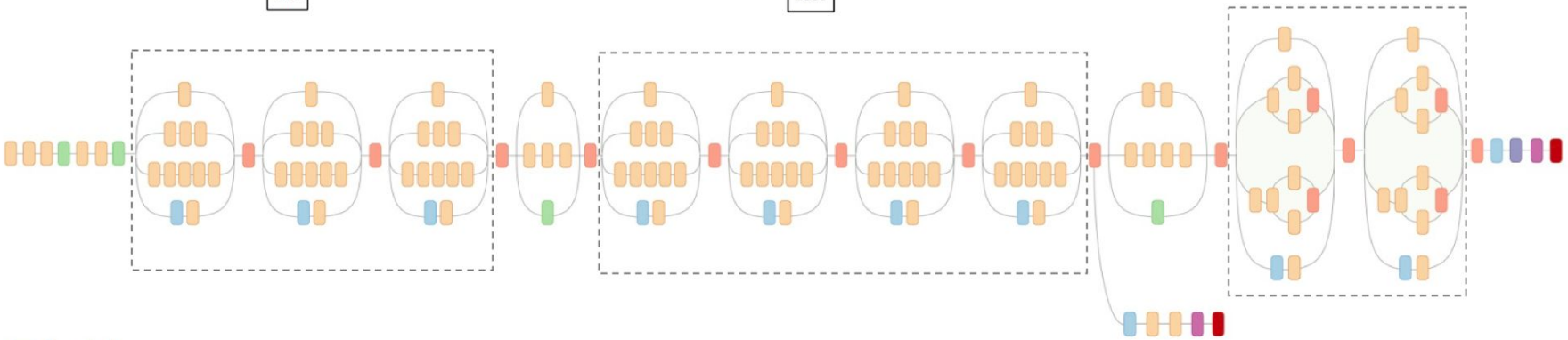
https://arxiv.org/abs/1409.4842

Inception-v2





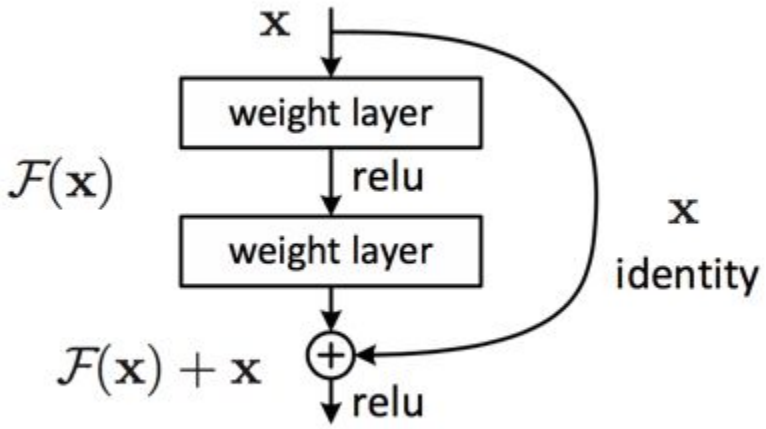




Convolution
AvgPool
MaxPool
Concat
Dropout
Fully connected
Softmax

https://arxiv.org/pdf/1512.00567.pdf

ResNet

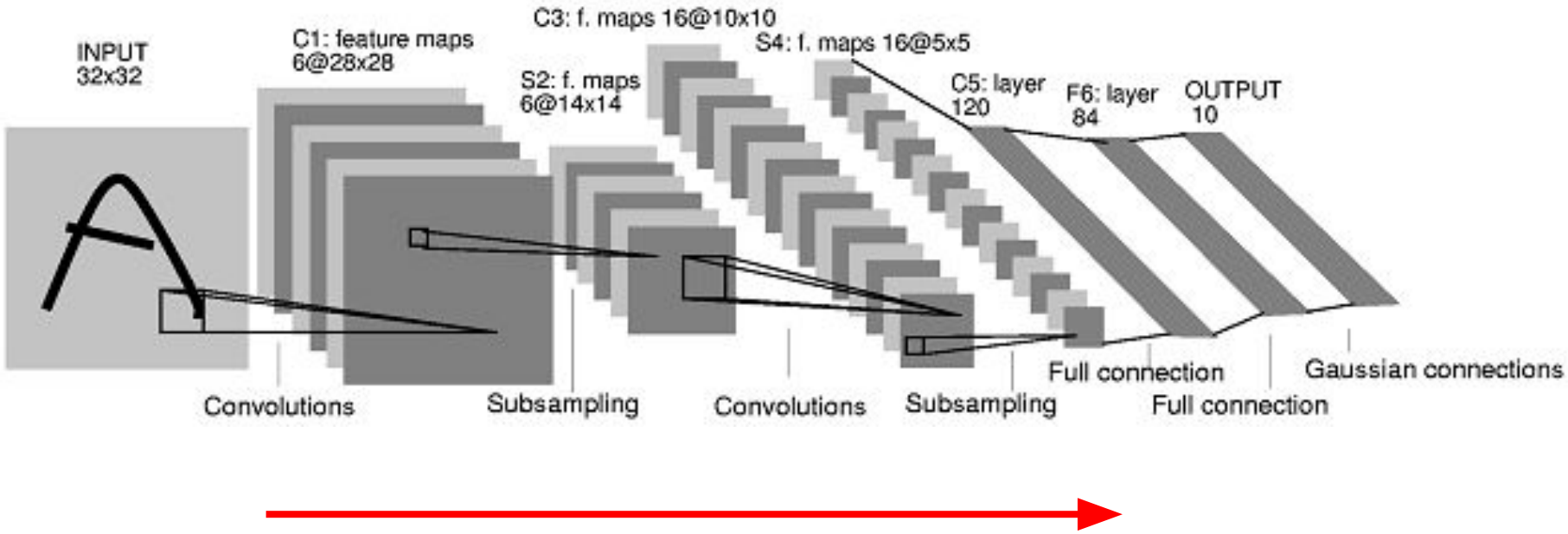


https://arxiv.org/abs/1512.03385

ResNet

https://arxiv.org/abs/1512.03385

Feature maps



количество карт признаков

More architectures

Модели для классификации на ImageNet:

- ResNeXt (https://arxiv.org/abs/1611.05431)
- SENet (https://arxiv.org/abs/1709.01507)
- DenseNet (https://arxiv.org/abs/1608.06993)
- Inception-ResNet-V2 (https://arxiv.org/abs/1602.07261)
- Inception-V4 (https://arxiv.org/abs/1602.07261)
- Xception (https://arxiv.org/abs/1610.02357)

Легковесные модели (для мобильных устройств):

- NASNet (https://arxiv.org/abs/1707.07012)
- MobileNetV2 (https://arxiv.org/abs/1801.04381)
- ShuffleNet (https://arxiv.org/abs/1707.01083)
- SqueezeNet (https://arxiv.org/abs/1602.07360)