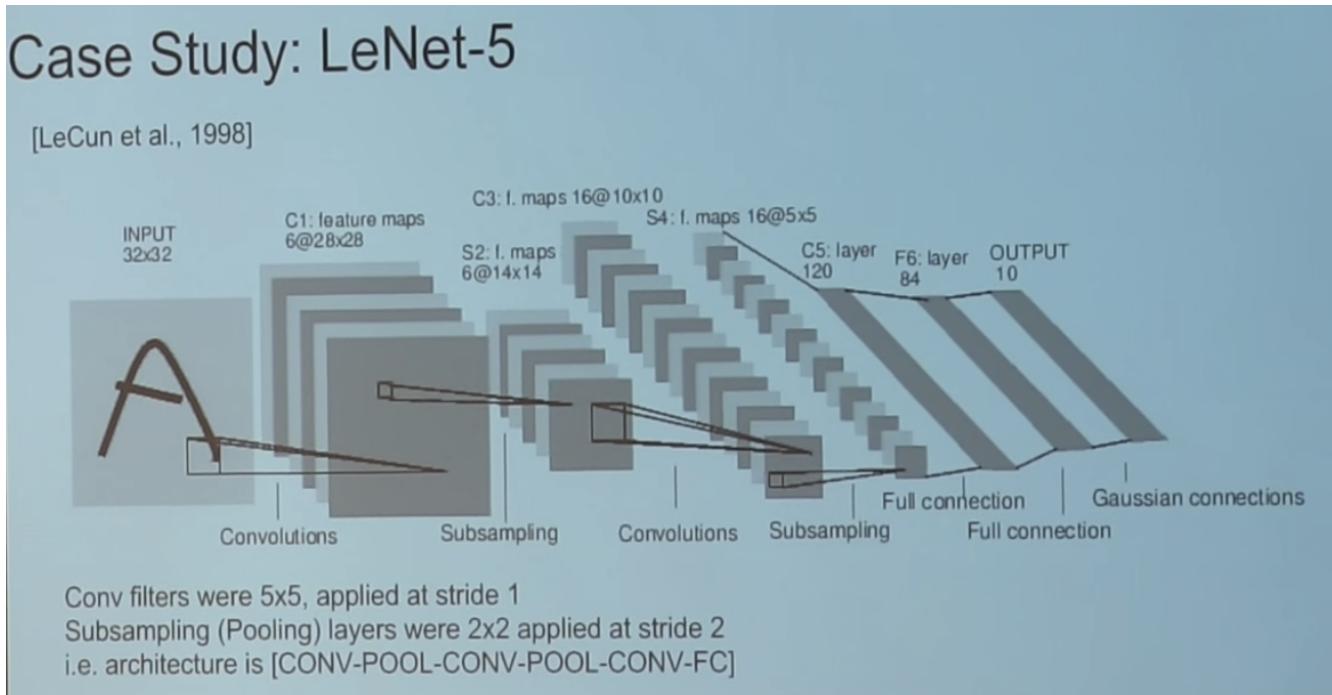
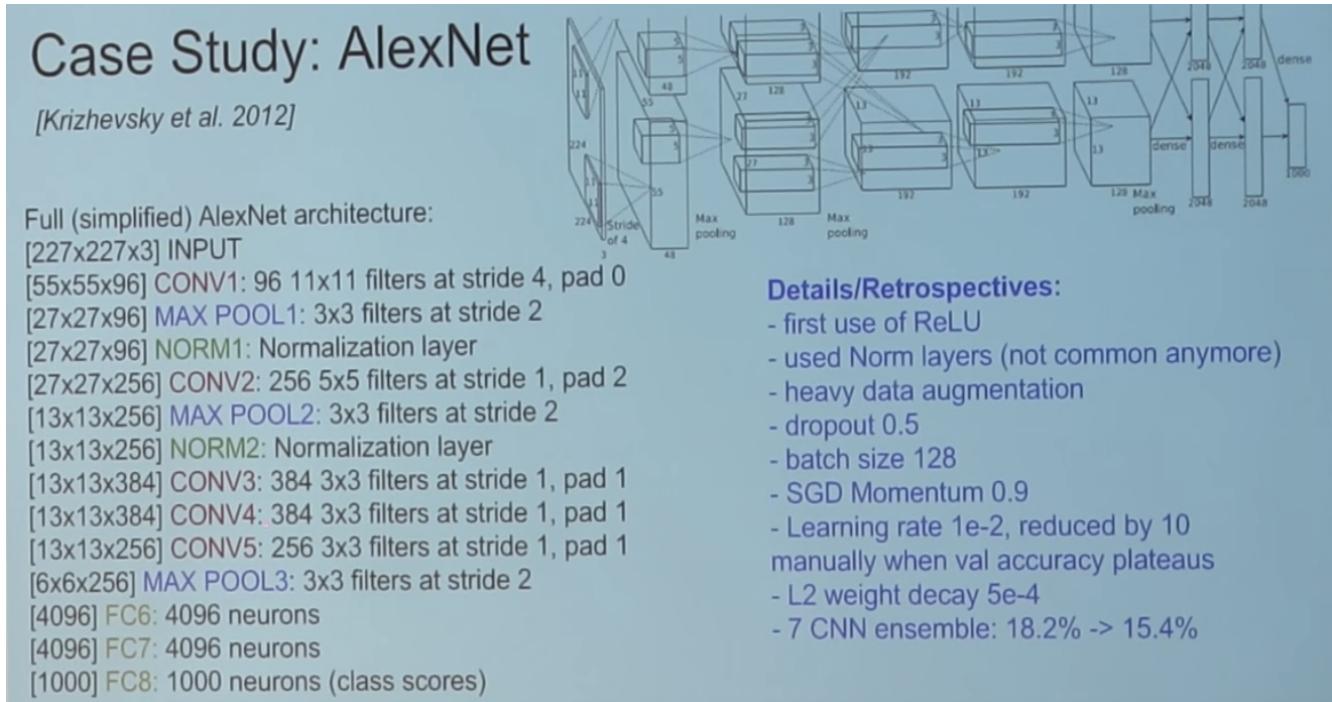


CNNs & recent models

LeNet is from 1998



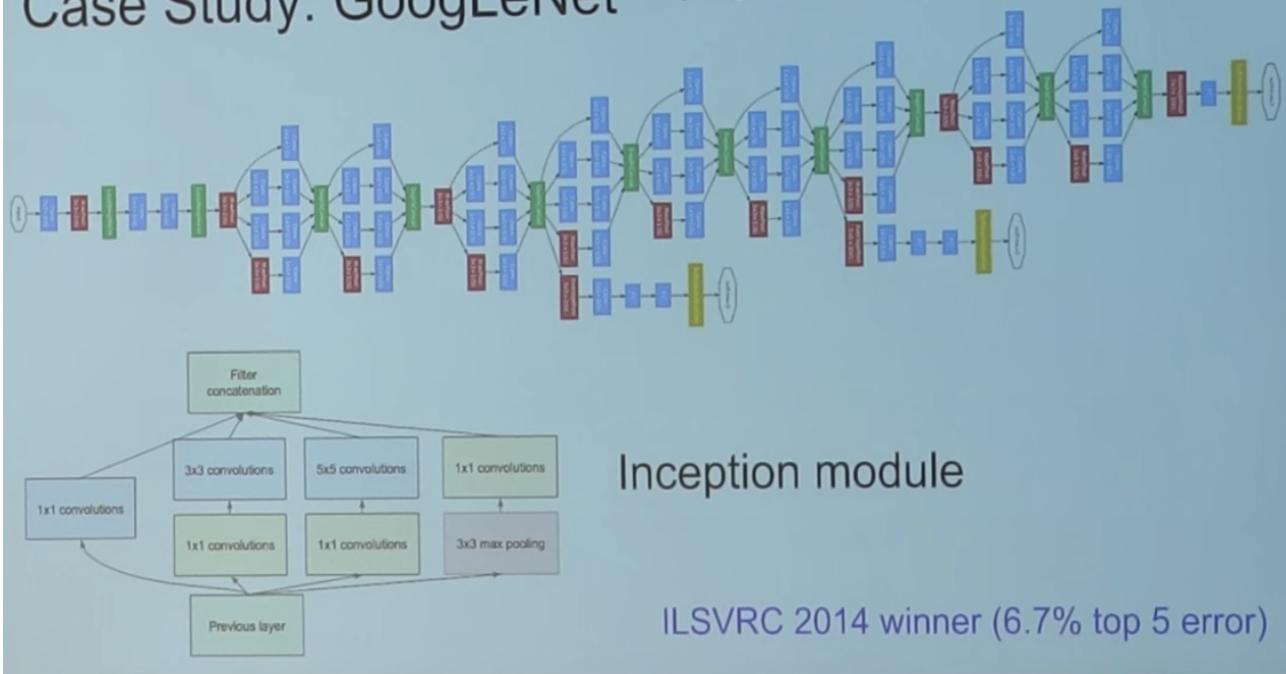
- AlexNet wasn't so different from LeNet, just bigger compute and data to train with mainly.



- GoogLeNet introduced this thing called the inception module. This has the benefit of offering a lot of modelling capability, yet reducing the number of parameters in the model. To see how, watch this 1-minute [video](#).

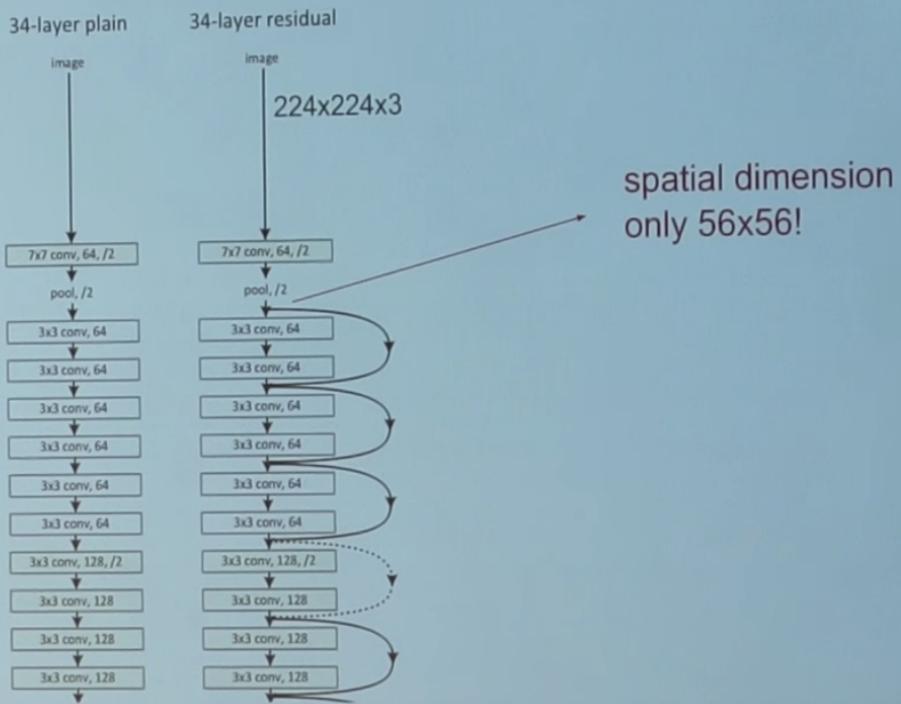
Case Study: GoogLeNet

[Szegedy et al., 2014]



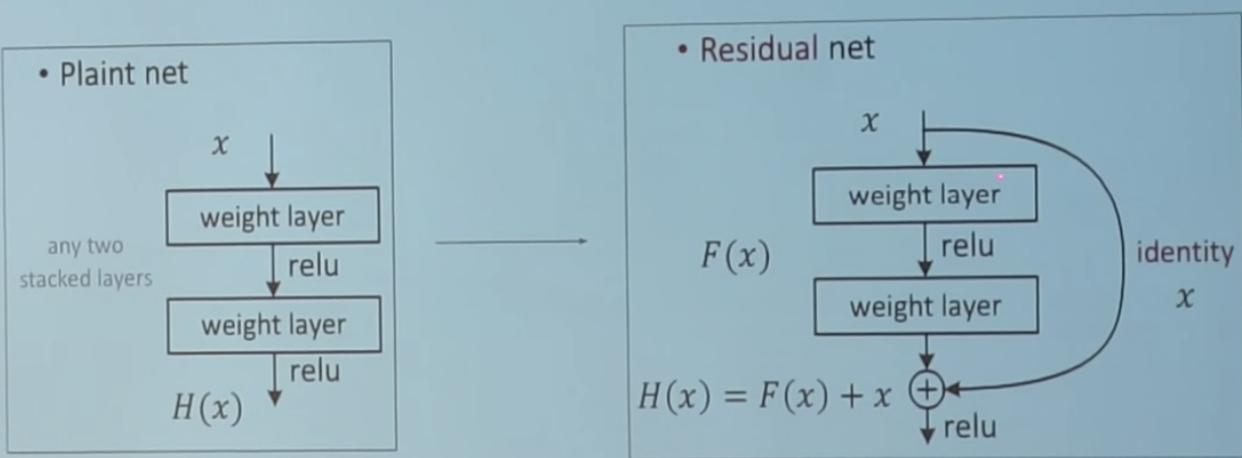
Case Study: ResNet

[He et al., 2015]



Case Study: ResNet

[He et al., 2015]

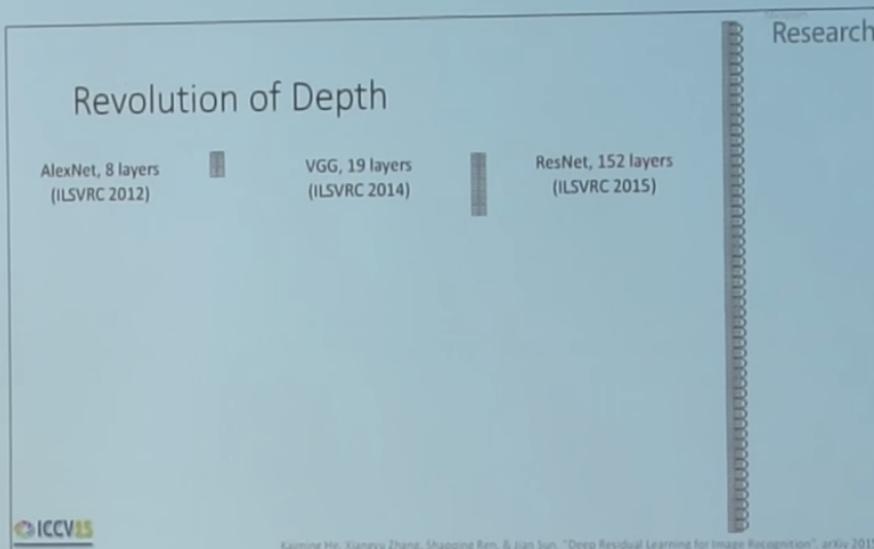


- Skip connections allowed training a 150 layer model when previous models were much fewer in depth

Case Study: ResNet

[He et al., 2015]

ILSVRC 2015 winner (3.6% top 5 error)



CIFAR-10 experiments

