

No Appropriate Architecture for the Problem

Scenarios

New Problem

Not enough Data

Architectures for Different Problems

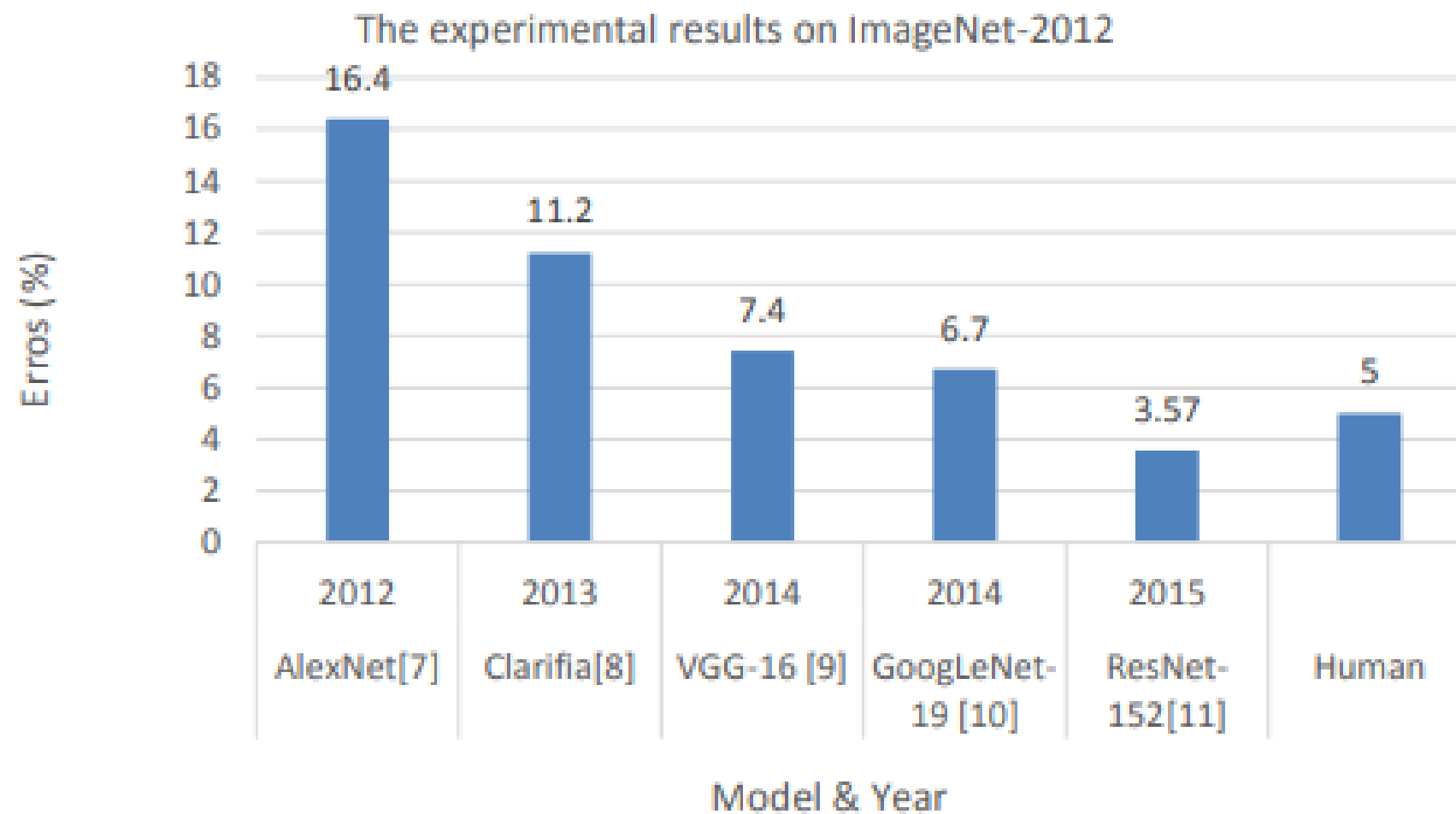
Classification / Regression

1. VGG16
2. VGG19
3. ResNet
4. Xception
5. Inception
6. NASNet

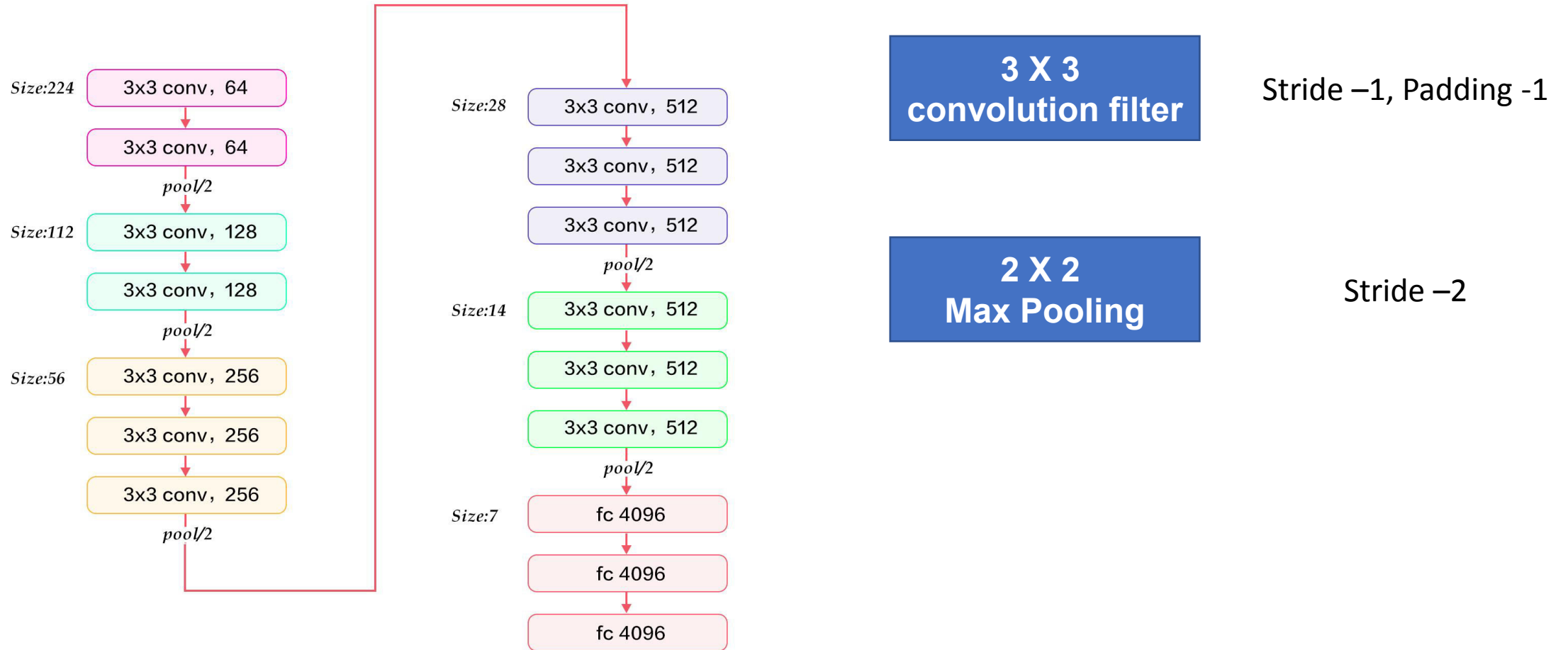
Detection / Segmentation

1. Mask R-CNN
2. YOLO v3
3. SSD
4. RetinaNet
5. DeepLab

VGG16



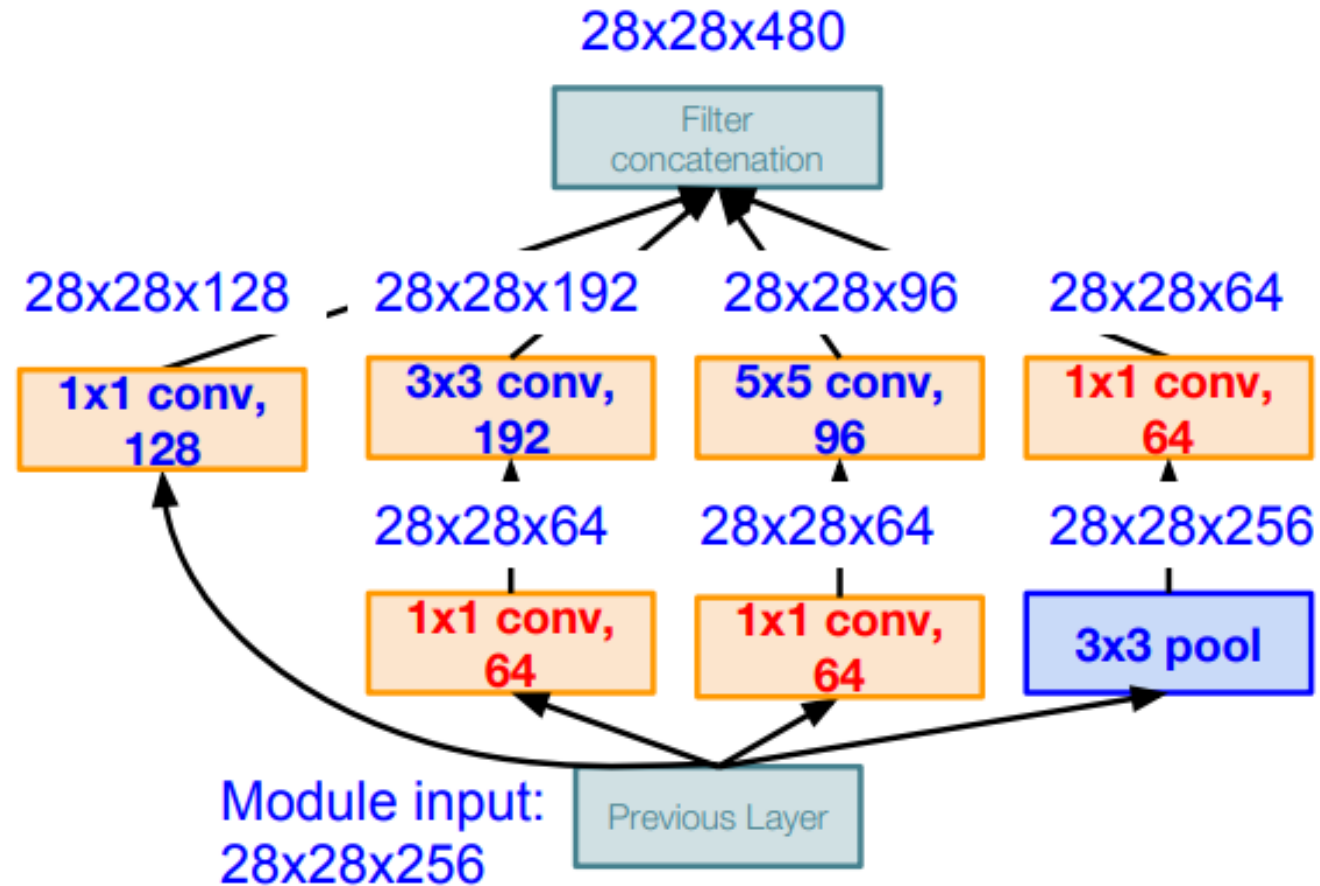
Architecture - VGG16



GoogLeNet (Inception v1)

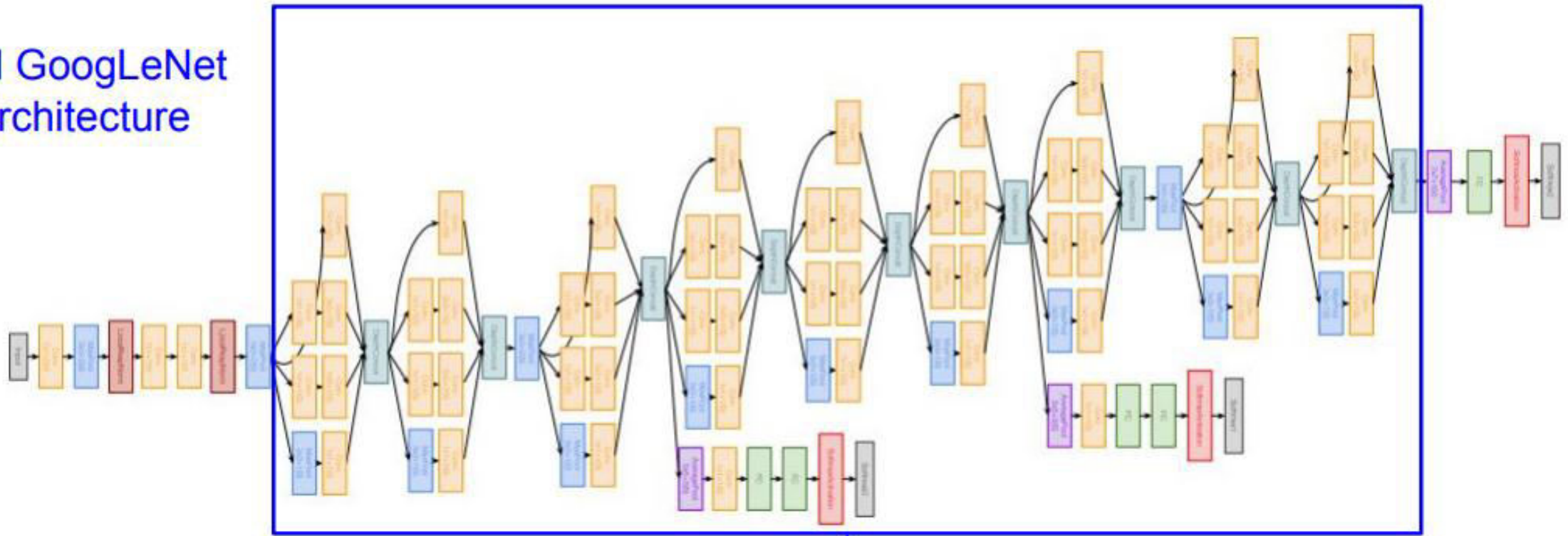


Architecture – GoogLeNet (Inception v1)



Architecture – GoogLeNet (Inception v1)

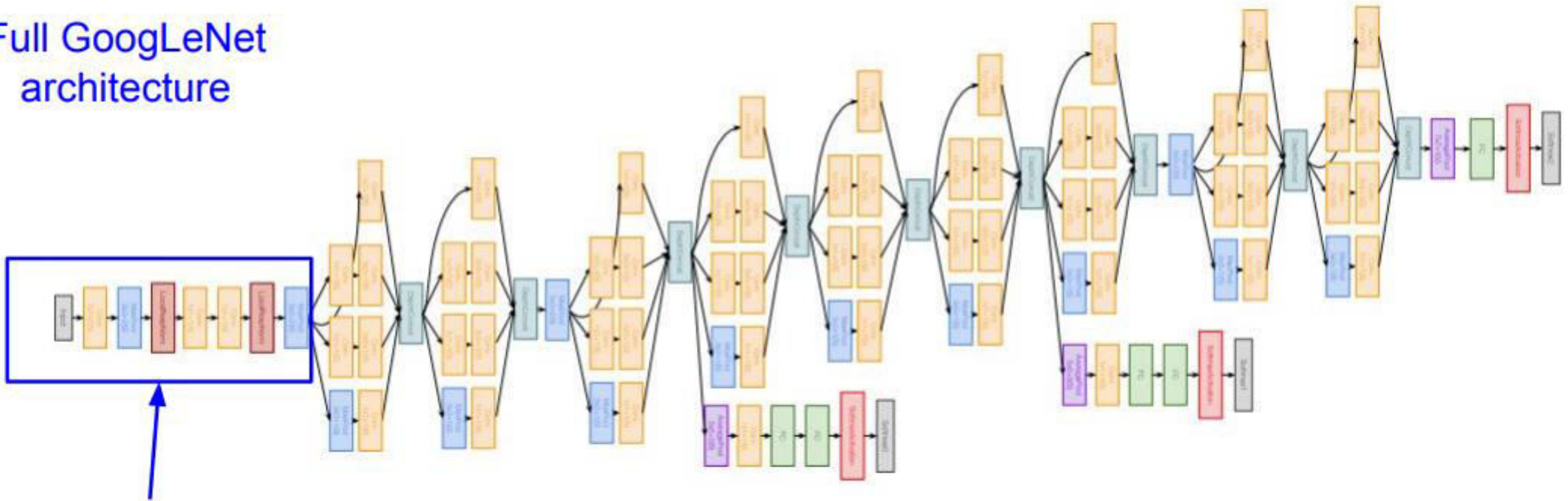
Full GoogLeNet architecture



Stacked Inception Modules

Architecture – GoogLeNet (Inception v1)

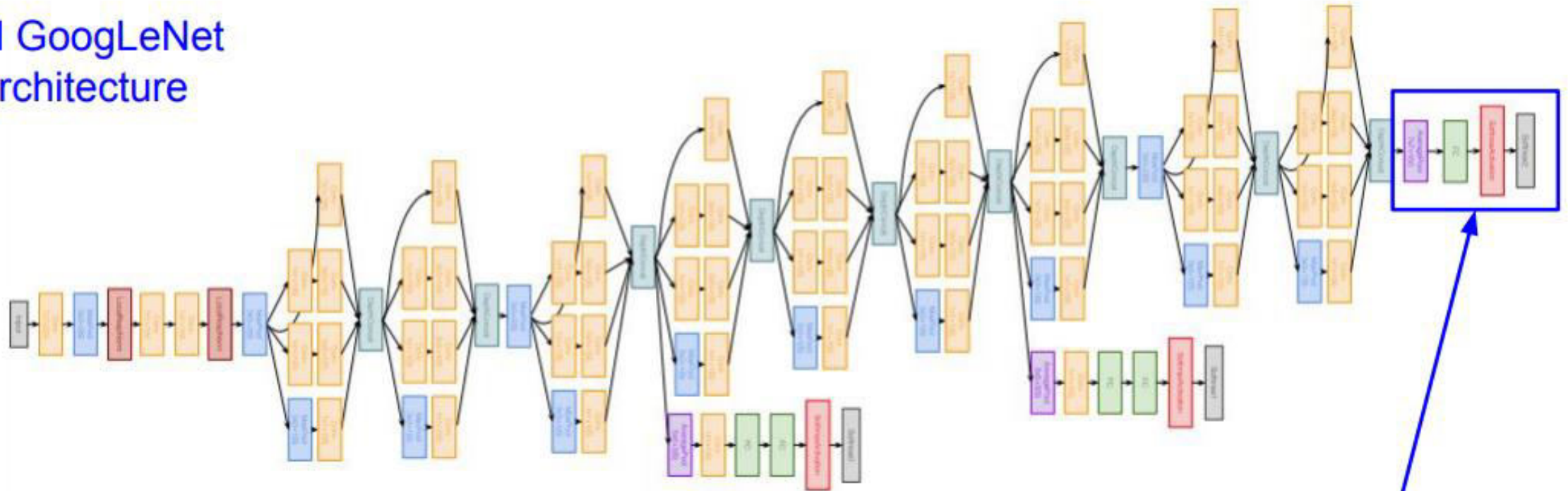
Full GoogLeNet
architecture



Stem Network:
Conv-Pool-
2x Conv-Pool

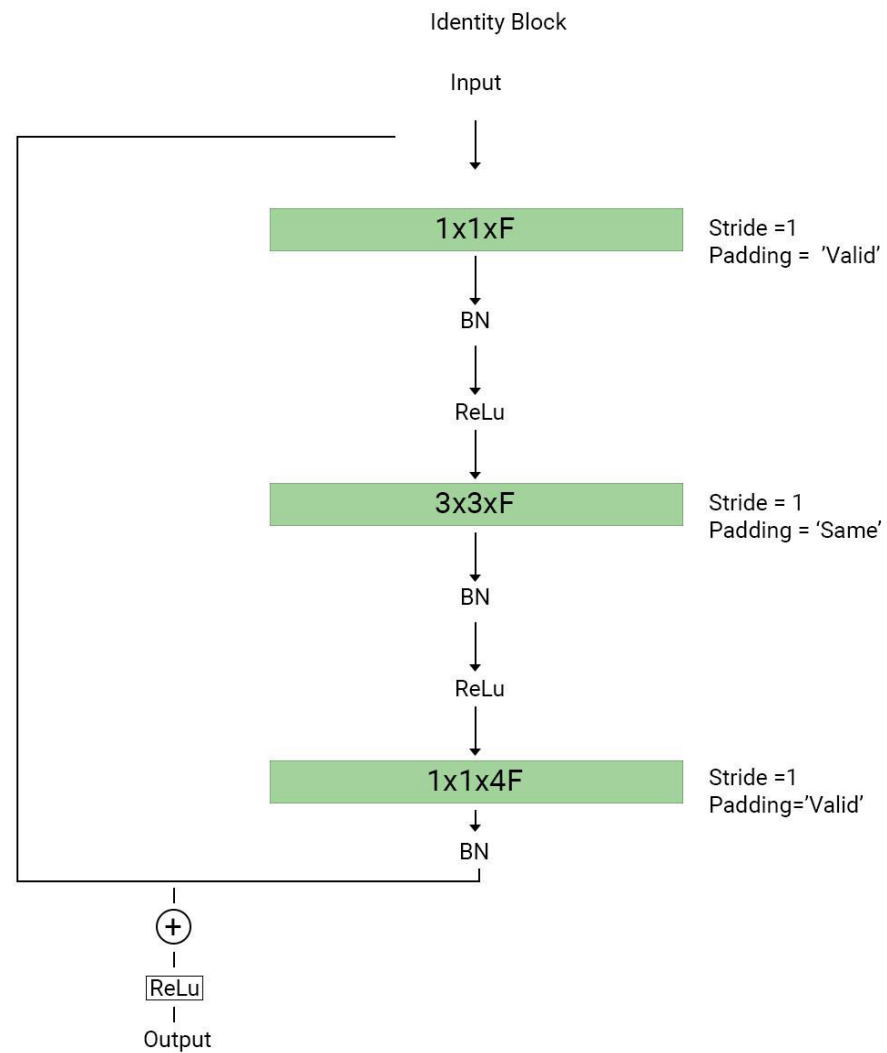
Architecture – GoogLeNet (Inception v1)

Full GoogLeNet
architecture

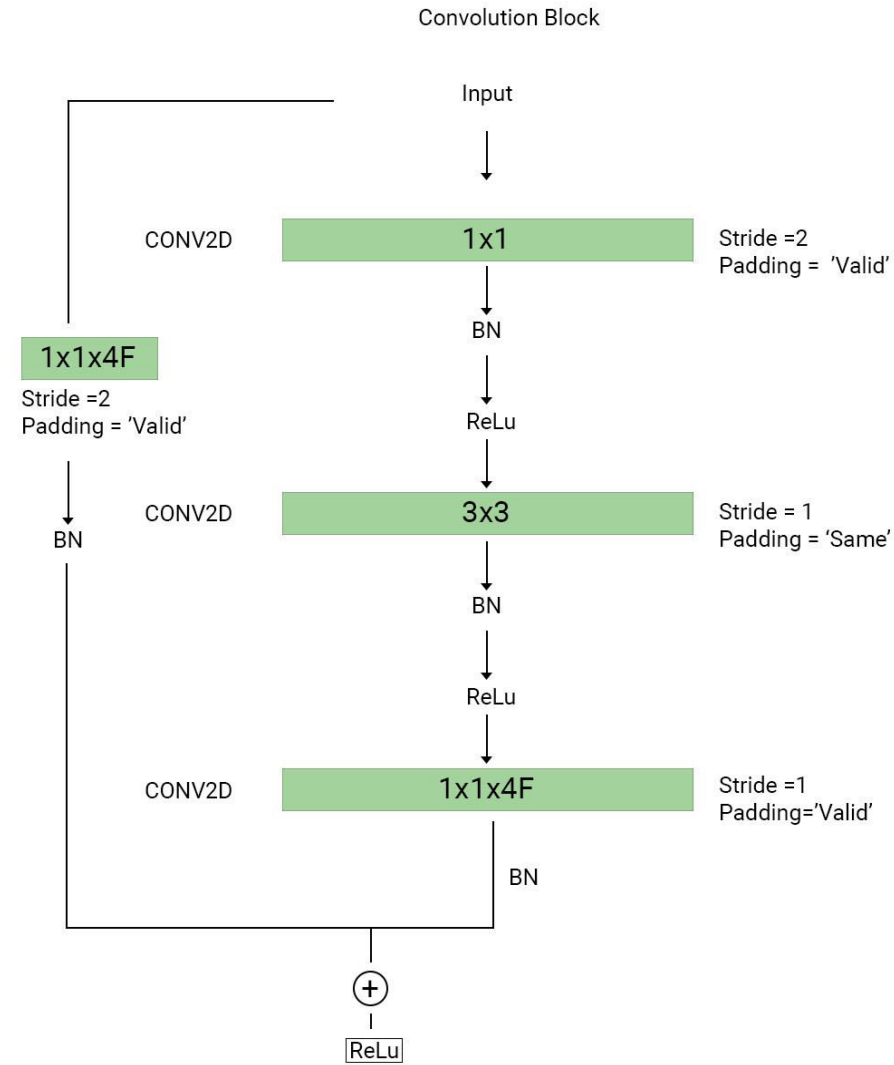


Classifier output

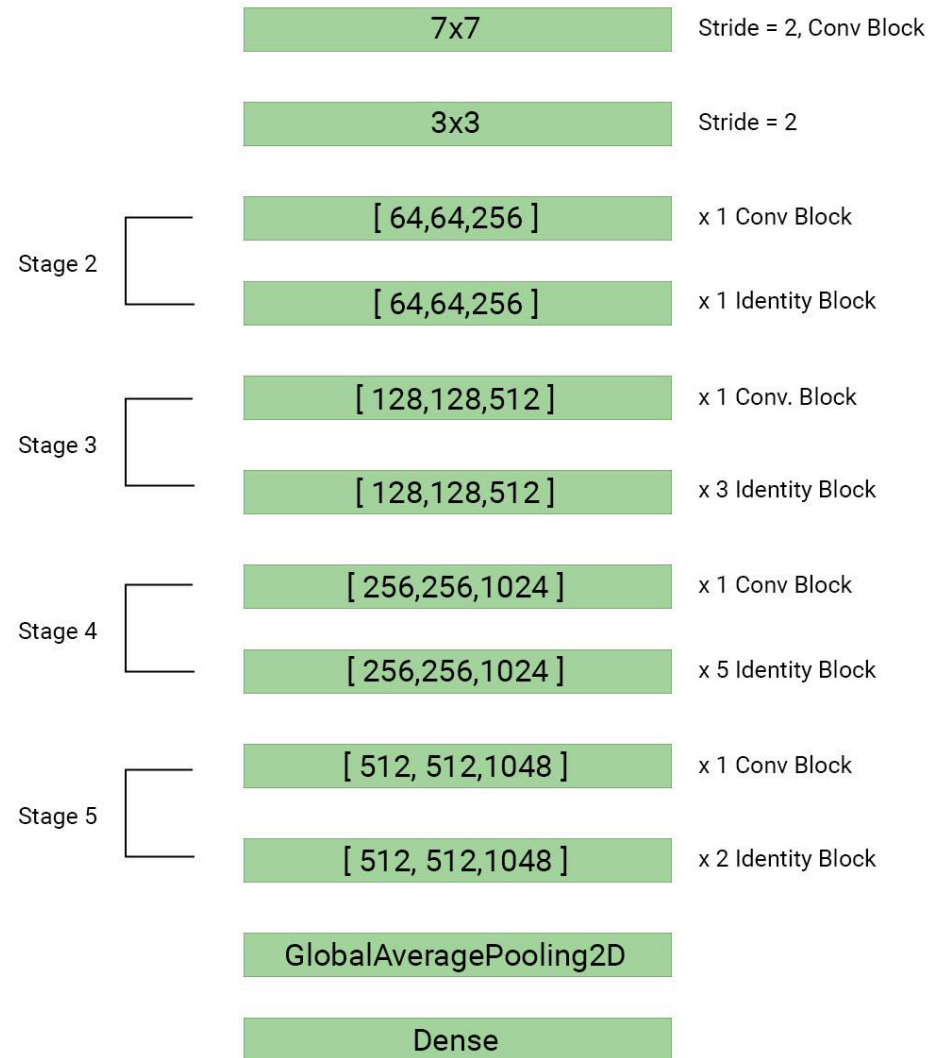
Architecture – ResNet 50 – Identity Block



Architecture – ResNet 50 – Convolution Block



Architecture – ResNet 50



Thank You