



DEMYSTIFYING DEEP LEARNING: TUTORIAL SERIES

CHAPTER 7: TRANSFER LEARNING

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AGENDA FOR THE SERIES

Session	Topic
Session 1	Introduction to Deep Learning
Session 2	Building blocks of Neural Network - 1
Session 3	Building blocks of Neural Network - 2
Session 4	Convolutional Neural Network
Session 5	CNN for Image Classification
Session 6	CNN for Object Detection
Session 7	Architectures like AlexNet, Inception etc.
Session 8	Recurrent Neural Network (June 22)
Session 9	NLP Applications of RNN (June 29)

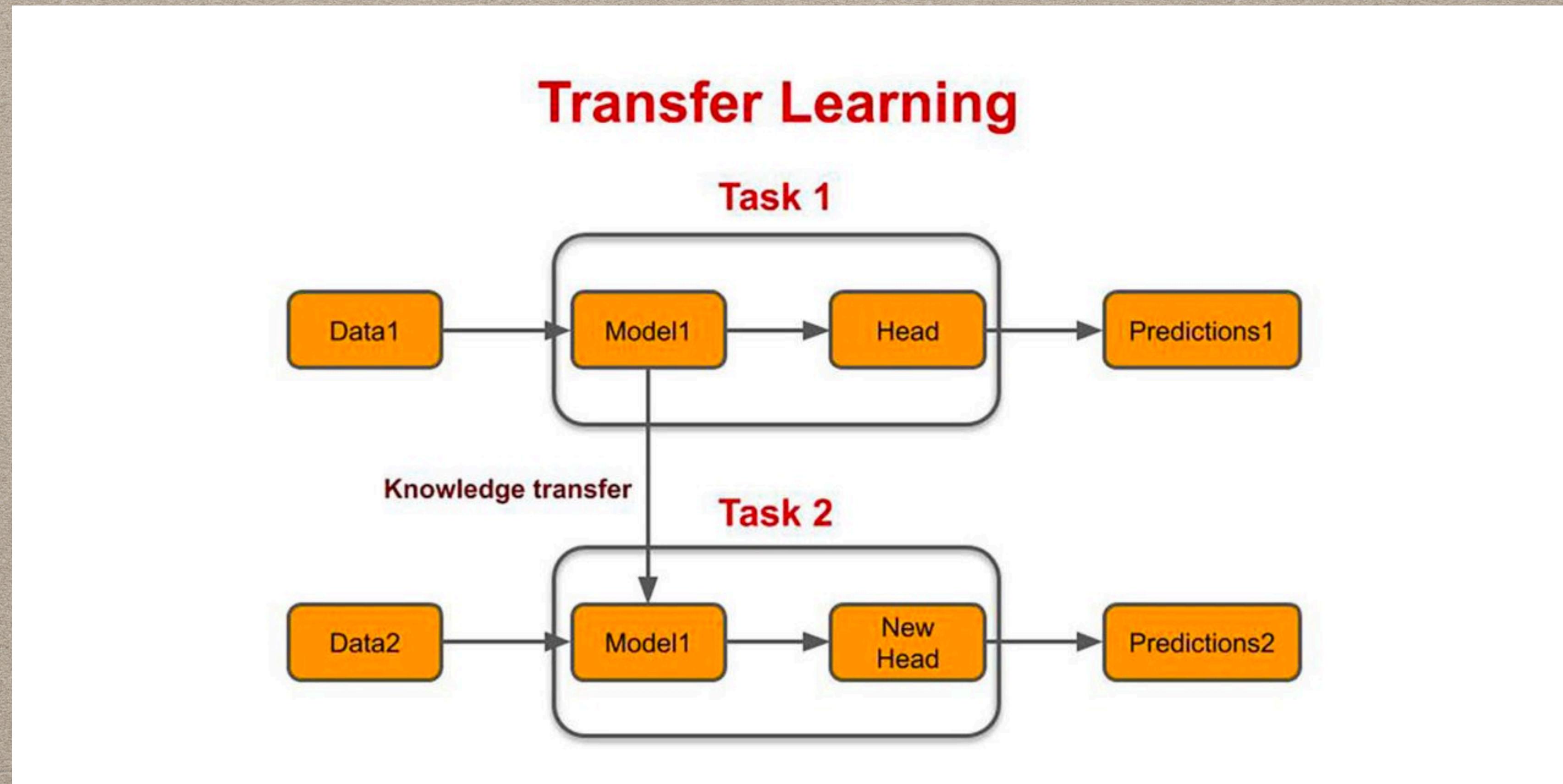
AGENDA FOR SESSION 7

- *Transfer Learning*
- *Why do we do Transfer Learning*
- *Architectures in Deep Learning*
- *LeNet*
- *VGG16*
- *AlexNet*
- *InceptionV3*
- *Python Lab*



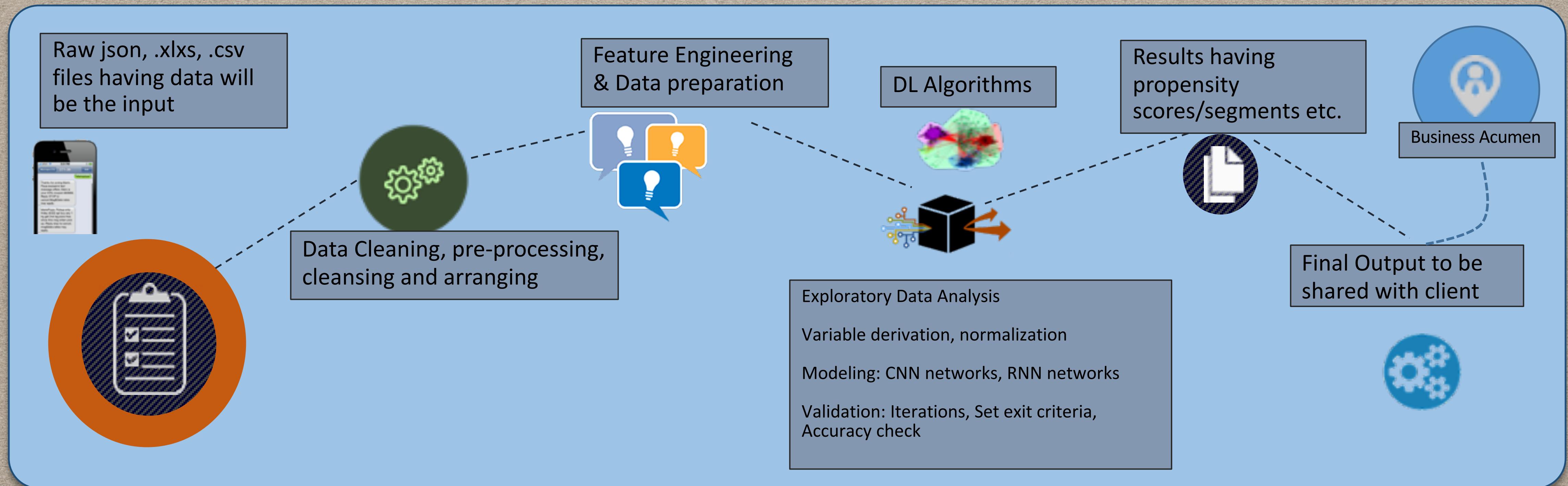
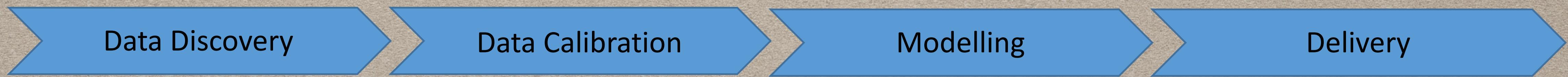
WHAT IS TRANSFER LEARNING

Instead of training neural networks from scratch we use transfer learning

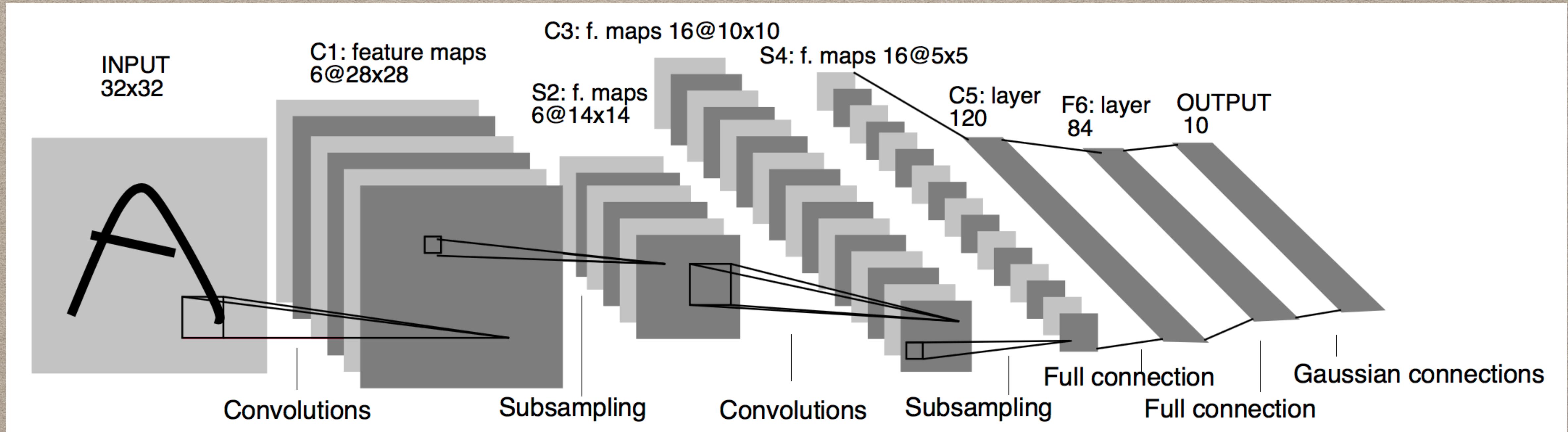


WHY SHOULD WE USE TRANSFER LEARNING

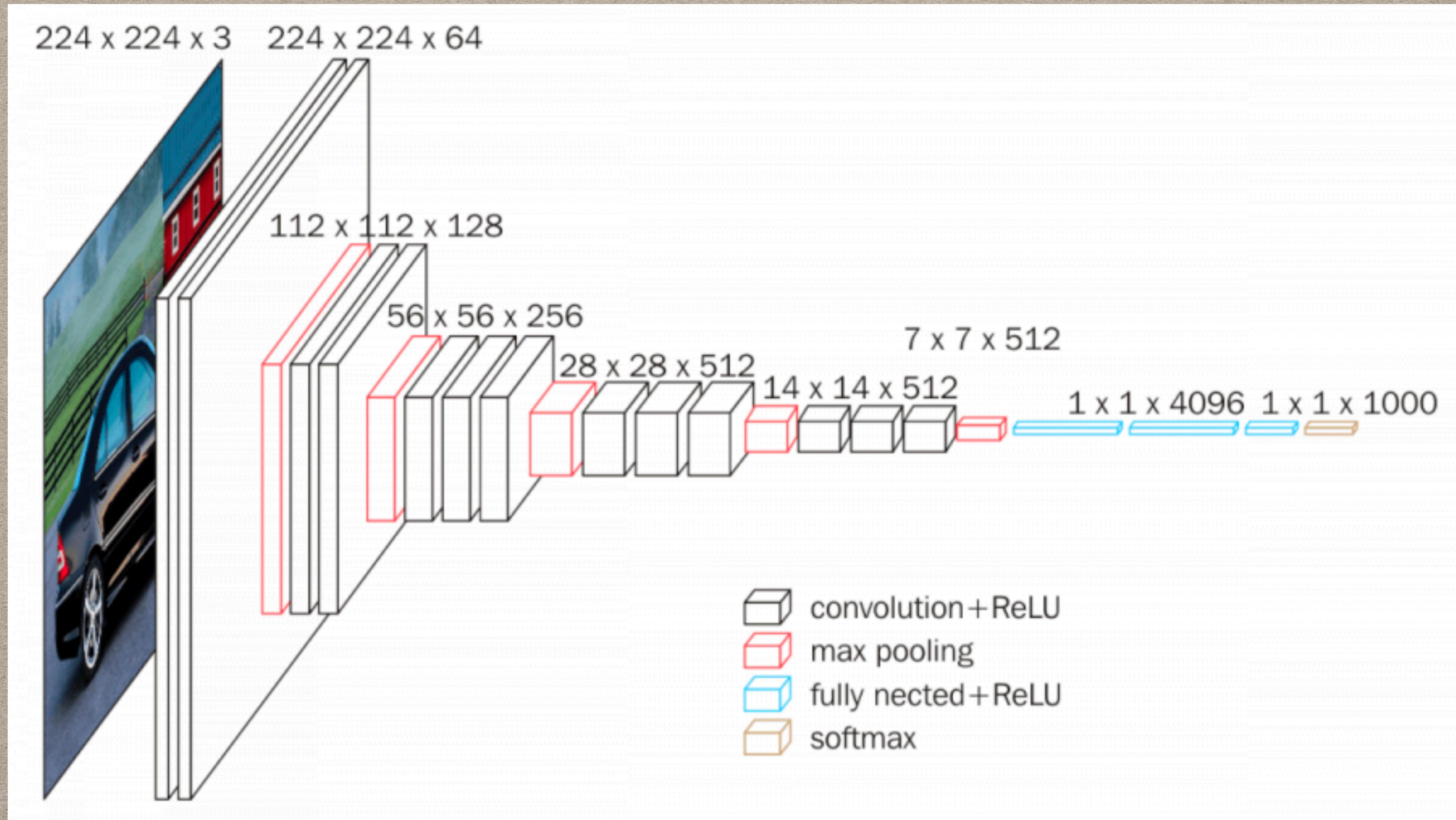
Let discuss the use of transfer learning with the help of a case study



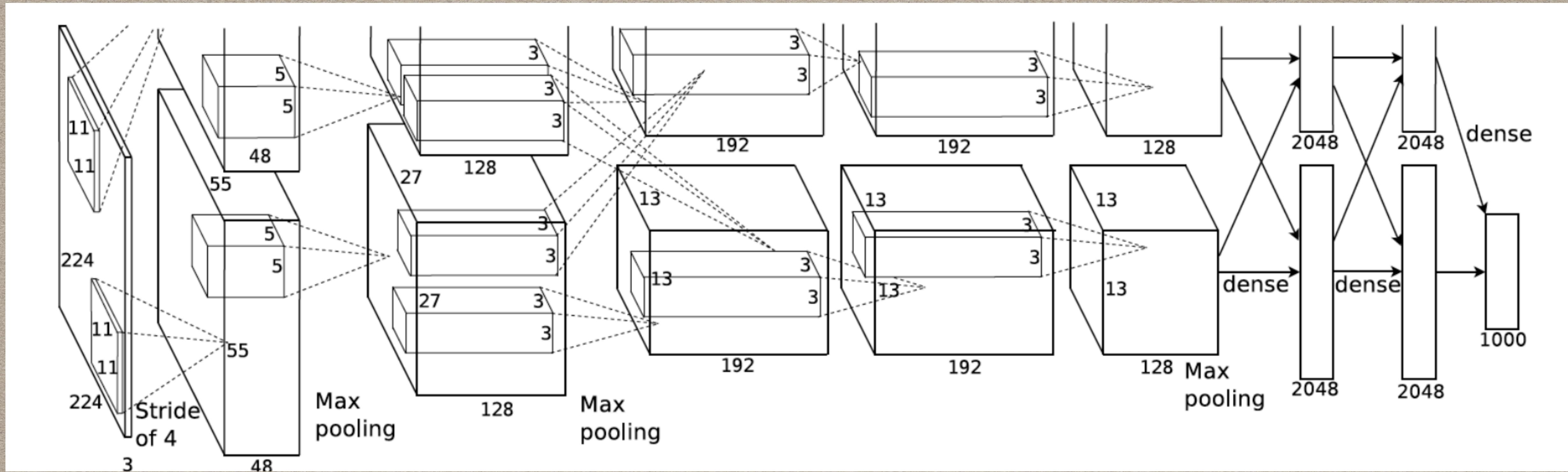
LENET ARCHITECTURE



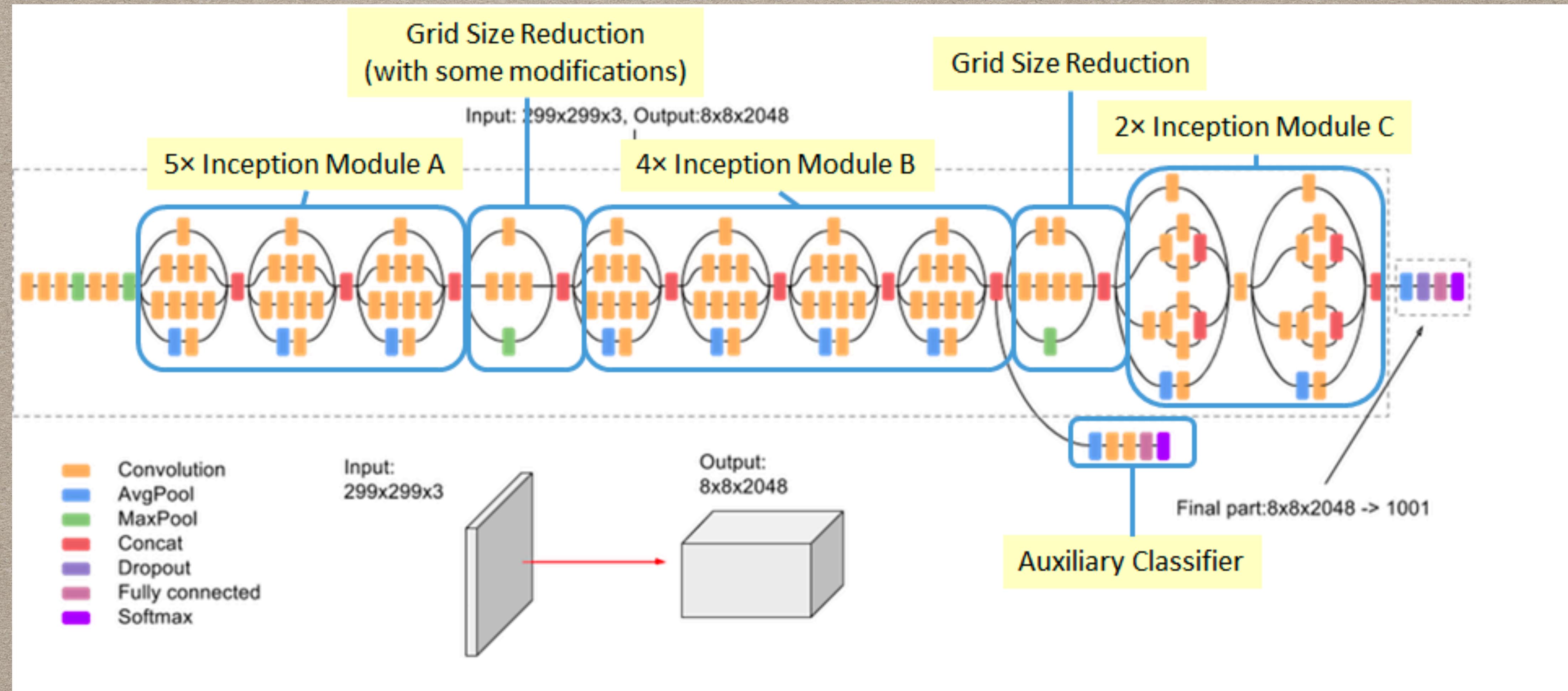
VGG16 ARCHITECTURE



ALEXNET ARCHITECTURE



INCEPTION NETWORK



TIME TO HIT THE LAB

QUESTIONS PLEASE!

github.com/vverdhan



Thanks

