

# Workshop 4

CNN with Pytorch and Fast RCNN for  
Object Detection

# Usefull links and materials for CNN

1. <https://www.youtube.com/watch?v=vT1JzLTH4G4&list=PLC1qU-LWwrF64f4QKQT-Vg5Wr4qEE1Zxk>
2. Famous CS231 course material - <http://cs231n.github.io/convolutional-networks/>
3. Types of Convolutions  
<https://towardsdatascience.com/a-comprehensive-introduction-to-different-types-of-convolutions-in-deep-learning-669281e58215>
4. <https://towardsdatascience.com/intuitively-understanding-convolutions-for-deep-learning-1f6f42faee1>
5. <https://towardsdatascience.com/a-comprehensive-guide-to-convolutional-neural-networks-the-eli5-way-3bd2b1164a53>

# Useful links and materials for Fast RCNN

1. Video course on object detection -

<https://www.youtube.com/watch?v=nDPWYwWRIRo>

2. Fast RCNN paper - <https://arxiv.org/abs/1504.08083>

3. Faster RCNN paper - <https://arxiv.org/abs/1506.01497>

4. Mask RCNN paper - <https://arxiv.org/abs/1703.06870>

5. Faster RCNN implementation with pytorch

<https://github.com/chenyuntc/simple-faster-rcnn-pytorch>