Deep Learning Resources

Some interesting papers:

1. You Only Look Once: Unified, Real-Time Object Detection : https://arxiv.org/pdf/1506.02640.pdf
2. FaceNet: A Unified Embedding for Face Recognition and Clustering : https://arxiv.org/pdf/1503.03832.pdf
3. A Neural Algorithm of Artistic Style : https://arxiv.org/pdf/1508.06576.pdf
4. A Style-Based Generator Architecture for Generative Adversarial Networks : https://arxiv.org/pdf/1812.04948.pdf
5. Everybody Dance Now : https://arxiv.org/pdf/1808.07371.pdf
6. Language Models are Few-Shot Learners : https://arxiv.org/pdf/2005.14165.pdf

Additional resources:

- What are GAN's : https://machinelearningmastery.com/what-are-generative-adversarial-networks-gans/
- Object detection : Detectron2: A PyTorch-based modular object detection library : https://ai.facebook.com/blog/-detectron2-a-pytorch-based-modular-object-detection-library-/
- A nice webinar on object detection using detectron : https://www.youtube.com/watch?v=h94nt5pwgyU
- The corresponding colab notebook to the above webinar where you can experiment with the code : https://colab.research.google.com/drive/1R2OSjiBuJszxiGx9MTH_KuhNtXIz_CAD?usp=sharin
- A nice website to check for the associated code for the research paper that you are interested : https://paperswithcode.com/
- To experiment with different hyper parameters and to track each experiments :

1. Tensorboard : It enables tracking experiment metrics like loss and accuracy : https://www.tensorflow.org/tensorboard/get_started
2. Neptune Ai : https://neptune.ai/

- How to use tensorboard and varying the different hyper-parameters in a CNN network. : https://neptune.ai/blog/tensorboard-tutorial
- Annotate custom data for object detection : https://github.com/tzutalin/labelImg