



Conditional GAN & Controllable Generation



Video: Welcome to Week 4
1 min



Video: Conditional Generation: Intuition
2 min



Video: Conditional Generation: Inputs
4 min



Programming Assignment: Conditional GAN
3h



Reading: (Optional) The Conditional GAN Paper
30 min



Video: Controllable Generation
3 min



Video: Vector Algebra in the Z-Space
3 min



Video: Challenges with Controllable Generation
2 min



Video: Classifier Gradients
2 min



Video: Disentanglement
4 min



Programming Assignment: Controllable Generation
3h



Reading: (Optional) An Example of a Controllable GAN
1h 30m



Reading: Works Cited
5 min



Video: Conclusion of Course
1



Works Cited

All of the resources cited in Course 1 Week 4, in one place. You are encouraged to explore these papers/sites if they interest you—the first paper has already been included as an optional reading! They are listed in the order they appear in the lessons.

From the videos:

- Interpreting the Latent Space of GANs for Semantic Face Editing (Shen, Gu, Tang, and Zhou, 2020):
<https://arxiv.org/abs/1907.10786>

From the notebooks:

- MNIST Database: <http://yann.lecun.com/exdb/mnist/>
- CelebFaces Attributes Dataset (CelebA):
<http://mmlab.ie.cuhk.edu.hk/projects/CelebA.html>

Mark as completed

