GAN read list

Main paper: https://arxiv.org/abs/1406.2661 **Generative Adversarial Networks**

Self-Attention Generative Adversarial Networks https://arxiv.org/pdf/1805.08318.pdf
https://towardsdatascience.com/not-just-another-gan-paper-sagan-96e649f01a6b

NIPS 2016 Tutorial: Generative Adversarial Networks https://arxiv.org/pdf/1701.00160.pdf

Which Training Methods for GANs do actually Converge?
https://avg.is.tuebingen.mpg.de/publications/meschedericml2018

Relativistic GAN https://arxiv.org/pdf/1807.00734.pdf https://ajolicoeur.wordpress.com/relativisticgan/
https://github.com/AlexiaJM/RelativisticGAN

Generative Adversarial Nets and Variational Autoencoders at ICML 2018
https://medium.com/peltarion/generative-adversarial-nets-and-variational-autoencoders-at-icml-2018-6878416ebf22

Relational inductive biases, deep learning, and graph networks https://arxiv.org/pdf/1806.01261.pdf

Theory:
Towards Principled Methods for Training Generative Adversarial Networks
https://arxiv.org/abs/1701.04862
Spectral Normalization for Generative Adversarial Networks https://openreview.net/forum?id=B1QRgziT-
Towards Understanding the Dynamics of Generative Adversarial Networks
https://arxiv.org/pdf/1706.09884.pdf
GAN Foundations https://www.cs.toronto.edu/~duvenaud/courses/csc2541/slides/gan-foundations.pdf
DEMYSTIFYING MMD GANS https://arxiv.org/pdf/1801.01401.pdf
Understanding Generative Adversarial Networks http://www.gatsby.ucl.ac.uk/~balaji/Understanding-GANs.pdf
Modified GANs https://casmls.github.io/general/2017/02/23/modified-gans.html
Learning in Implicit Generative Models https://arxiv.org/pdf/1610.03483.pdf
Implicit Generative Models https://casmls.github.io/general/2017/05/24/ligm.html
A NOTE ON THE EVALUATION OF GENERATIVE MODELS https://arxiv.org/pdf/1511.01844.pdf
Approximate Bayesian Computation https://casmls.github.io/general/2016/10/02/abc.html
On Unifying Deep Generative Models https://arxiv.org/pdf/1706.00550.pdf
How Generative Adversarial Networks and its variants Work: An Overview of GAN
https://pdfs.semanticscholar.org/2c78/0f3a61212d31af764212b471768ff9e15d96.pdf
DO GANS LEARN THE DISTRIBUTION? SOME THEORY AND EMPIRICS https://openreview.net/pdf?id=BJehNfW0-
Generalization and Equilibrium in Generative Adversarial Nets https://arxiv.org/pdf/1703.00573.pdf
Is Generator Conditioning Causally Related to GAN Performance? https://arxiv.org/pdf/1802.08768.pdf
A CLASSIFICATION–BASED PERSPECTIVE ON GAN DISTRIBUTIONS
https://arxiv.org/pdf/1711.00970.pdf
Thread by @goodfellow_ian: https://threadreaderapp.com/thread/978339478560415744.html
Pros and Cons of GAN Evaluation Measures https://arxiv.org/pdf/1802.03446.pdf

Math insights for GANs
https://www.youtube.com/watch?v=r3L3JT_TLTM

Wasserstein GAN
https://arxiv.org/pdf/1701.07875.pdf
https://www.alexirpan.com/2017/02/22/wasserstein-gan.html
https://paper.dropbox.com/doc/Wasserstein-GAN-GvU0p2V9ThzdwY3BbhoP7
https://www.reddit.com/r/MachineLearning/comments/5qxoaz/r_170107875_wasserstein_gan/
https://www.youtube.com/watch?v=OdsXPcBfO-c (Martin Arjovsky (WGAN) Interview)
Wasserstein GAN and the Kantorovich-Rubinstein Duality
https://vincentherrmann.github.io/blog/wasserstein/
Geometric Intuition on Improved Wasserstein GANs https://lernapparat.de/improved-wasserstein-gan/

Lipschitz Continuity, convexity, subgradients https://homes.cs.washington.edu/~marcotcr/blog/lipschitz/
From GAN to WGAN https://lilianweng.github.io/lil-log/2017/08/20/from-GAN-to-WGAN.html

Improved Training of Wasserstein GANs
https://arxiv.org/pdf/1704.00028.pdf
https://www.reddit.com/r/MachineLearning/comments/63dfun/r170400028_improved_training_of_wasserstein_gans/

Loss-Sensitive Generative Adversarial Networks on Lipschitz Densities
https://arxiv.org/abs/1701.06264
https://www.reddit.com/r/MachineLearning/comments/5u8aj3/r_losssensitive_generative_adversarial_networks/

ON THE REGULARIZATION OF WASSERSTEIN GANS https://arxiv.org/pdf/1709.08894.pdf
https://openreview.net/forum?id=B1hYRMbCW
Fisher GAN https://arxiv.org/pdf/1705.09675.pdf

DRAGAN https://arxiv.org/pdf/1705.07215.pdf https://128.84.21.199/pdf/1705.07215v1.pdf
https://openreview.net/forum?id=ryepFJbA-
https://github.com/kodalinaveen3/DRAGAN

Least Squares Generative Adversarial Networks https://arxiv.org/pdf/1611.04076.pdf
On the Effectiveness of Least Squares Generative Adversarial Networks
https://arxiv.org/pdf/1712.06391.pdf
https://wiseodd.github.io/techblog/2017/03/02/least-squares-gan/
https://www.reddit.com/r/MachineLearning/comments/5wgrgd/r_161104076v2_least_squares_generative/

PROGRESSIVE GROWING OF GANS FOR IMPROVED QUALITY, STABILITY, AND VARIATION Paper
http://research.nvidia.com/sites/default/files/publications/karras2017gan-paper.pdf
https://www.reddit.com/r/MachineLearning/comments/795jln/r_progressive_growing_of_gans_for_improved/
PyTorch implementation of "Progressive growing of GANs (PGGAN)
https://github.com/nashory/pggan-pytorch/tree/f26d9a3209fa2ae6e78e0cc05a3a8781d2146698

Towards the Automatic Anime Characters Creation with Generative Adversarial Networks
https://arxiv.org/pdf/1708.05509.pdf
https://github.com/bhpfelix/PyTorch-Face-Generator-SRResNet-based-ACGAN-DRAGAN
https://github.com/mchong6/Draw-Anime-GAN

Self-Attention Generative Adversarial Networks https://arxiv.org/pdf/1805.08318.pdf

GLOW https://blog.openai.com/glow/

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Relativistic GAN https://arxiv.org/pdf/1807.00734.pdf https://ajolicoeur.wordpress.com/relativisticgan/
https://github.com/AlexiaJM/RelativisticGAN

Activation Maximization Generative Adversarial Nets https://openreview.net/forum?id=HyyP33gAZ&noteId=HyyP33gAZ

Attentive Generative Adversarial Network for Raindrop Removal
from A Single Image https://arxiv.org/pdf/1711.10098.pdf

Why does deep and cheap learning work so well?* https://arxiv.org/pdf/1608.08225.pdf

GAGAN: Geometry-Aware Generative Adversarial Networks

http://openaccess.thecvf.com/content_cvpr_2018/CameraReady/4208.pdf

Taskonomy: Disentangling Task Transfer Learning https://arxiv.org/pdf/1804.08328.pdf