## GAN

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 ${\bf Code\ is\ found\ at\ https://github.com/axel-ponten/advanced-deep-learning-VT25/tree/main/GAN}$ 

I implemented a GAN with a generator and discriminator. The generator takes a random noise vector as input and generates an image, while the discriminator takes an image as input and outputs a probability of whether the image is real or fake. The GAN is trained using the MNIST dataset, which consists of handwritten digits. I used MLPs with leaky ReLU for this. I could not get it to converge, so the output was still just noise.