Tercer entregable

* 1. What is the task?
     + Convert a monet image (and we are also trying other styles to see what comes out) to a photo-realistic image.
  2. Which pre-trained model are you using and why?
     + We are using CycleGAN but with the pix2pix implementation in pytorch, so it is a combination of both. We are using this model in order to achieve a more precise outcome and because it was a very interesting use case, because who hasn’t gone into a museum and wondered how that painting would look in reality. We also found it particularly interesting for real use cases, maybe it would be useful for a museum to know where the painter stood while he painted a masterpiece, and maybe in the future it could be applied to face paintings.
  3. In general terms, explain the neural network architecture of the pre-trained model you used.
* This network contains two stride-2 convolutions, several residual blocks, and two fractionally strided convolutions with stride ½.
* We use 6 blocks for 128 × 128 images and 9 blocks for 256 × 256 and higher resolution training images.
* We use instance normalization. For the discriminator networks we use 70 × 70 PatchGANs [22, 30, 29], which aim to classify whether 70 × 70 overlapping image patches are real or fake. Such a patch-level discriminator architecture has fewer parameters than a full-image discriminator and can work on arbitrarily-sized images in a convolutional way.
* The model is here: https://github.com/junyanz/pytorch-CycleGAN-and-pix2pix/blob/master/models/networks.py
  1. Model pipeline diagram.

A screenshot of a cell phone

Description automatically generated