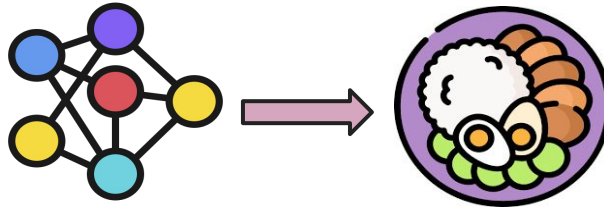


AI-SYNTHETIC DISH



IMAGES



Students:

Marco Cáceres, **RA:** m239281
Rafael Pedrosa, **RA:** r273034
Kevin Inofuente, **RA:** k272316

Professora: Paula Costa

MOTIVATION

- In recent years, AI-generative synthetic images has reached such high quality that humans can hardly distinguish them from real pictures. As students, we found very interesting to review current literature and proposed innovations of GANs to achieve such results.
- We selected AI-synthetic dish images as focus of our study. The motivation behind that is to propose a cheaper alternative for food service advertisement.



CURRENT STATUS

- Dataset exploration
- Papers studied
- Networks tested

DATASETS

- Food 101
 - Mostly good quality images, some of poorer quality
 - Many different kinds of food might make training harder
 - Less images of a given food
- ChineseFoodNet
 - Webpage leads to a dead link, owners did not respond

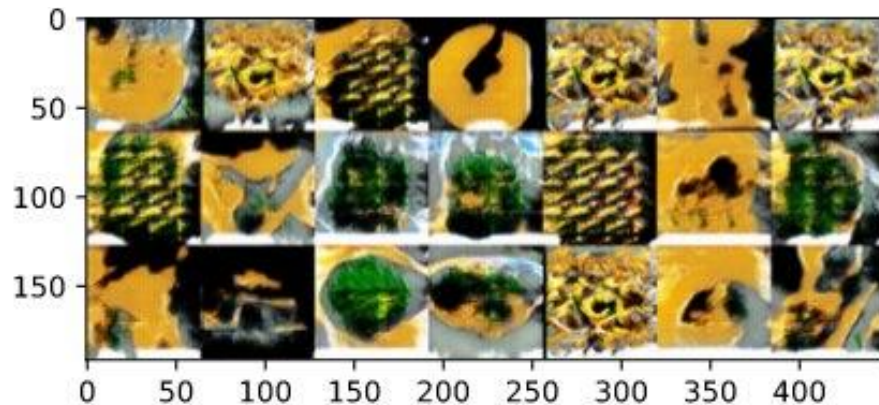
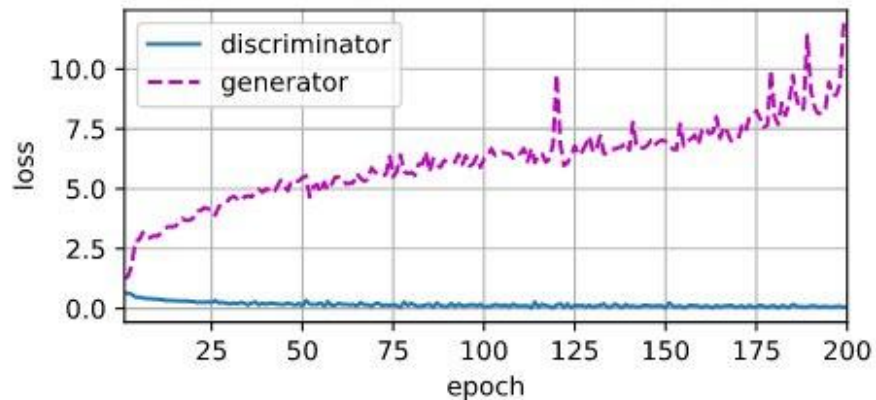
PAPERS STUDIED

- Easier to find research on classification rather than generation

NETWORKS TESTED

- GAN 1
 - Problems with discriminator being much more powerful than generator

loss_D 0.071, loss_G 11.869, 1184.9 examples/sec on cuda:



NETWORKS TESTED

- GAN 2
 - Although discriminator was not so as better as the generator, images still looked strange

