

Homework 08

200 pts - 2 Parts, 100pts each.

Both parts are due the by Friday Dec 4th (officialy) but I will take the homeowrk up till the 11th of Dec.

This should be an easy project.

Part 1 - Reading

Read the articles

<https://www.nytimes.com/interactive/2020/11/21/science/artificial-intelligence-fake-people-faces.html>

<https://www.kdnuggets.com/2020/03/generate-realistic-human-face-using-gan.html>

Go to <https://thispersondoesnotexist.com/> and refresh the page until you generate a “bad” face - one that you can easily identify as a fake. Save the known fake and turn in the image. (Right click on the image, or on Mac - control-click, then use “Save As” or “Save Image As” to save the file).

Part 2 - Go and Run a Learning Program

Download and run the classification program - Train it (will take 15 mints on most laptop speed systems).

The code can be found in: <https://github.com/Univ-Wyo-Education/F20-1015/tree/master/Lectures/24/cat-dog> from Lecture 24.

Look at the file “Makefile” to see the commands to run this.

The first target is called “train” - the line after that is how to run the training. At the powershell prompt in the directory where you have the 2 python chunks of code, or at a shell prompt you can run this. Or you can direct VSCode to open the directory where you have downloaded the code. Then tell it to run the “train-model.py” first. This will take some time to run. Then...

The second of the targets for make is “run” - the line after that is how to run the trained model. Tell VSCode to run the trained model.

Run a classification and dee if the results are what you expect.

Write a sentence or two on the results and why you got the results that you got. (Good or bad results).