Facial recognition

Data collection

• We collected our own data by taking frontal facial images of ourselves and celebrities

Information about facial recognition read from

• https://www.pyimagesearch.com/2018/06/18/face-recognition-with-opencv-python-and-deep-learning/

• https://towardsdatascience.com/real-time-face-recognition-an-end-to-end-project-b738bb0f7348

• https://www.youtube.com/watch?v=jG3bu0tjFbk

• http://scipy-lectures.org/advanced/image\_processing/

• https://www.youtube.com/watch?v=PmZ29Vta7Vc

• https://coding-robin.de/2013/07/22/train-your-own-opencv-haar-classifier.html

• https://www.promptcloud.com/blog/how-to-scrape-instagram-data-using-python/

Tools used:

• Requirements for imports are OpenCV, Pillow, Pickle, Os, numpy glib, requests

• We used OpenCV features to help with this project

• We used “haarcascade\_frontalface\_default.xml” to help detect faces in the webcam

• We used faces-train.py to train the algorithm and to create our own yml file

To make the facial recognition more accurate,

• We converted colored images to grey to reduce color bias

• We used gradient vectors to to avoid lighting bias

Extra features

• Detects a face and if that face is trained, will show the Instagram stats of that person

• It shows, Name, Username, Followers, Following, and Posts

Folder Outline

- data set, names of insta account,

- encode\_faces.py

-encodingss.pickle

-Insta\_Info\_scraper.py

-users.txt