Final Project Proposal Swap Critique

Please make this document anonymous.

Team name: *Visioneers*
TA name: *Anh*

Critique for project of team name: *LE(t's)GOOOOOOOO!*

Note: Please email your completed critique to your team's TA.

Critique Instructions

You should have received an email from the TAs with an anonymous proposal from another team.

Please read the other team's proposal, and analyze it to list what you think are the three most important potential socially-responsible computing concerns with their project.

These could be direct responses to their answers to the SRC prompts, new aspects that you think the team missed, or something else. Each concern should be stated and justified in a paragraph.

Critique

1. State the concern. Justify the concern.
   One concern we have is that the dataset might be biased – at least from first glance, it seems like a a good amount of the dataset contains images of just white people. Doing some analysis of the dataset to see what biases it may contain would be a good idea. You may want to look at gathering data from other datasets as well, if you discover your current dataset contains bias. Also suggest looking at what research has been done into bias in facial recognition, and perhaps implementing some of the de-biasing methods that have been researched.

2. State the concern. Justify the concern.
   Another concern is that using a pretrained model might not be the best for this task (unless the pretrained model was designed specifically for facial recognition). There are lots of nuances in facial expressions so if the model were to be used by people who struggle with those nuances it might not be super reliable. Though it seems that there are pretrained models out there, such as VGGFace.

3. State the concern. Justify the concern.
   Another concern is privacy related. For the model to be of utility to those who struggle with emotion recognition, those individuals would have to take a picture or video of someone and get the model to classify the person's emotion. However this could be a violation of others' privacy if they don't want to be recorded or photographed.

4. One application that could push the project further is to classify people's emotions in Youtube videos / TV shows / movies. This could help people who struggle to recognize emotions and also help them learn more about recognizing emotions. It would also require facial detection and being able to create some kind of bounding box around people's faces with their corresponding emotion labelled on it. You could implement a demonstration application that takes video from your laptop's camera and detects and classifies faces.