Project Summary

Mormon Regression

Christopher Mertin

This proposed project idea comes from two sources: (1) After living in Utah for a year, I'm able to identify how mormon someone is based on subliminal facial features. (2) There was published research in which people attempted to identify mormons based on facial features [1]. In the results, the subjects were able to identify mormons *slightly* better than chance, making it statistically significant – but not by much. I hope for this project to be better not only identifying mormons, but using other various techniques.

The data will be downloaded from Tinder [2], where I will then try to extract data from the images themselves. The techniques that are to be used are:

1. Unsupervised clustering on people from Utah and from various other states in the U.S.
2. Unsupervised clustering on people just from Utah for underlying structure in the data
3. Logistic Regression to come up with a value for "how mormon" the photo is
4. Use of a Convolutional Neural Network to see if it can identify mormons
5. Use of techniques such as eigenfaces try to tell "how mormon" someone's heritage is

The hopes of this project are to be able to identify how mormon someone's heritage is based on their appearance in photos.

References cited

[1] Nicholas O. Rule, James V. Garrett, and Nalini Ambady. On the perception of religious group membership from faces. *PLOS ONE*, 5(12):1–10, 12 2010.

[2] Charlie Wolf. Pynder: Python Client for Tinder API. `https://github.com/charliewolf/pynder`.