

Adrian Marinovich
Springboard Data Science Career Track
Capstone Project #1 - Data Story
October 10, 2018

Project: Detection of smiles in images of faces

The data story portion of this project has already largely been told in the data wrangling assignment, which involved aggregation, classifying and viewing of the images. The questions are answered below, and reference given to the Jupyter notebook for the data wrangling project.

1. *Ask the following questions and look for the answers using code and plots:*

1. *Can you count something interesting?*

The number of images per smile and non-smile group, and the pixel dimensions for each image are noted in the Jupyter notebook.

2. *Can you find trends (e.g. high, low, increasing, decreasing, anomalies)?*

3. *Can you make a bar plot or a histogram?*

4. *Can you compare two related quantities?*

5. *Can you make a scatterplot?*

Until the next steps involving machine learning are implemented, the answers to questions 2 through 5 are no, for the time being. After machine learning, some or all of these questions may be appropriate.

6. *Can you make a time-series plot?*

No.

2. *Looking at the plots, what are some insights you can make? Do you see any correlations? Is there a hypothesis you'd like to investigate further? What other questions do the insights lead you to ask?*

As noted above, these questions will be revisited once the next steps involving machine learning are implemented.

3. *Now that you've asked questions, hopefully you've found some interesting insights. Is there a narrative or a way of presenting the insights using text and plots that tells a compelling story? What are some other trends/relationships you think will make the story more complete?*

At this stage, the presentation of the images of smiling and non-smiling faces in the data wrangling Jupyter notebook presents the best current insights into the data, without doing the next steps in machine learning.

Submit a link to the document.

https://github.com/adriatic13/springboard/blob/master/dsct_capstone1/Adrian_Marinovich_Cap1_smiles_data_wrangling.ipynb