

## Data Appendix

### Introduction

This project aims to utilize the methodology outlined in "Protest Activity Detection and Perceived Violence Estimation from Social Media Images" by Wondonghyeon et al. to analyze photos from the Hong Kong protests [1]. Through this analysis, we seek to gain insights into protest dynamics and the perceived levels of violence during these events.

### Original Datasets Overview

- Entries: The dataset consists of 60 photographs during the Hong Kong protests.
- Variables:
  - The dataset contains the ImageName, protest, violence, sign, photo, fire, police, children, group 20, group 100, flag, night, and shouting features.
- Time Frame: The dataset was collected during the Hong Kong protests in 2019.
- Dataset CSV: The dataset was taken from the internet archive and the images were downloaded as a jpeg file [2].

### DF Variable Descriptions

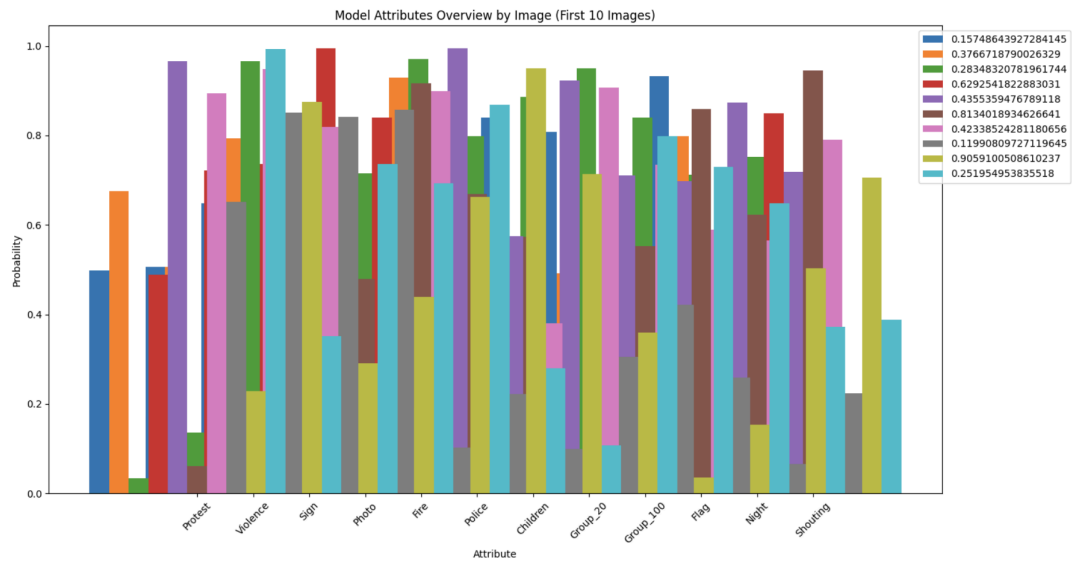
#### Data Dictionary:

Note: These are features so there was no variable type attributed to the data. The variable types below are in reference to the probability results.

Variable Name	Variable Type	Description
ImageName	pandas Series / String	The name of the image
Protest	pandas Series / Float64	The probability of a protest in the image
Violence	pandas Series / Float64	The probability of violence in the image
Sign	pandas Series / Float64	The probability of signs in the image
Photo	pandas Series / Float64	The probability of photos in the image
Fire	pandas Series / Float64	The probability of fire in the image
Police	pandas Series / Float64	The probability of police in the image

Children	pandas Series / Float64	The probability of children in the image
Group_20	pandas Series / Float64	The probability of there being more than 20 people in the image
Group_100	pandas Series / Float64	The probability of there being more than 100 people in the image
Flag	pandas Series / Float64	The probability of flags in the image
Night	pandas Series / Float64	The probability of it being night in the image
Shouting	pandas Series / Float64	The probability of shouting in the image

Detailed Statistical Analysis



References

[1] D. Won, Z. C. Steinert-Threlkeld, and J. Joo, "Protest Activity Detection and Perceived Violence Estimation from Social Media Images," in Proceedings of the 25th ACM International Conference on Multimedia, 2017.

[2] "HongKongProtests2019\_gallery\_001," retrieved from Archive.org, [Online]. Available: [https://archive.org/details/HongKongProtests2019\\_gallery\\_001/EC0SY18UEAA4HnU.jpg](https://archive.org/details/HongKongProtests2019_gallery_001/EC0SY18UEAA4HnU.jpg).