

StreetStyle: Exploring world-wide clothing styles from millions of photos

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StreetStyle Dataset Statistics

Size:

- Total: 27084 entries
- 23908 Distinct Instagram Posts

Fields Associated With Each Image:

- City ID
- Month ID
- Upload Time
- Upload Location
- Bounding Box Coordinates
- Image Size
- Attribute Annotations



Original Image



Cropped Image

Cities in the dataset

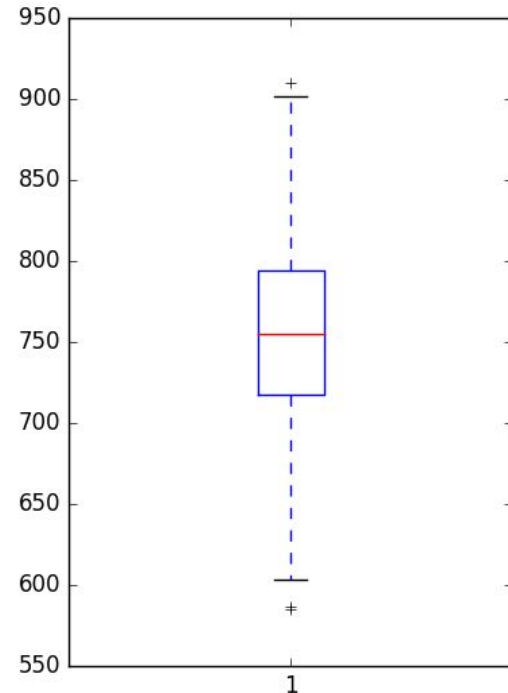
- Bangkok
- Beijing
- Berlin
- Bogotá
- Budapest
- Buenos Aires
- Cairo
- Delhi
- Dhaka
- Guangzhou
- Istanbul
- Jakarta
- Karachi
- Kiev
- Kolkata
- Lagos
- London
- Los Angeles
- Madrid
- Manila
- Mexico City
- Milan
- Moscow
- Mumbai
- New York City
- Osaka
- Paris
- Rio de Janeiro
- Rome
- São Paulo
- Seoul
- Shanghai
- Sofia
- Sydney

- Tianjin
- Tokyo

Missing Cities:

- Austin
- Chicago
- Johannesburg
- Nairobi
- Seattle
- Singapore
- Toronto
- Vancouver

Number of Samples in Each City



Median: 755 Samples

Examples from the dataset

Clothing Category

Shirt



Outerwear



T-shirt



Dress



Tank top



Suit



Sweater



Neckline Shape

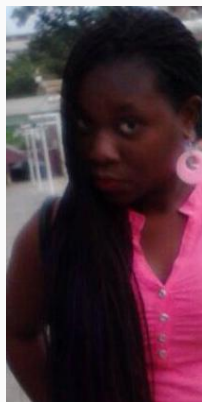
Round



Folded



V-shape



Sleeve Length

Long Sleeve



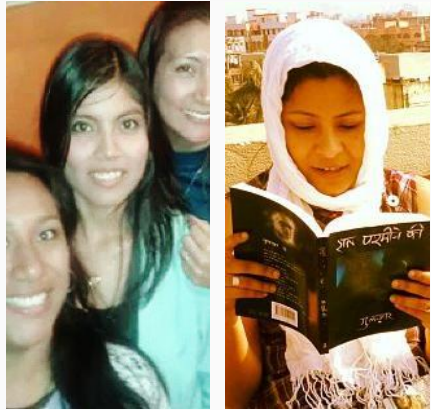
Short Sleeve



No Sleeve



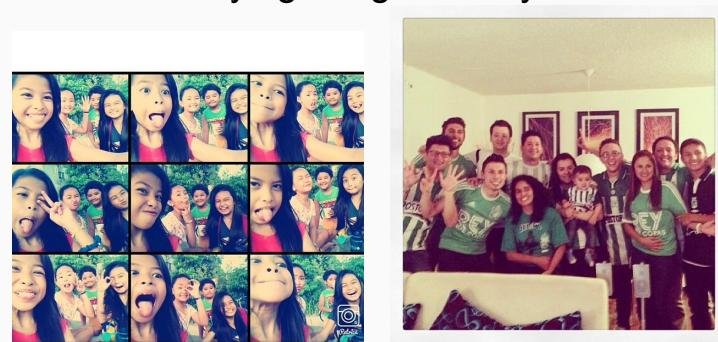
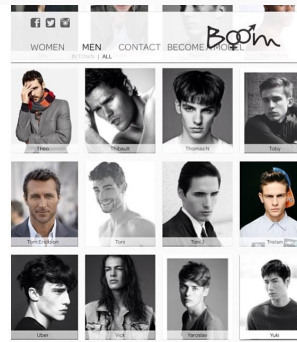
Style In The Wild



Multiple People & Occlusions

Variation in Pose

Varying Image Quality



Cultural Holidays

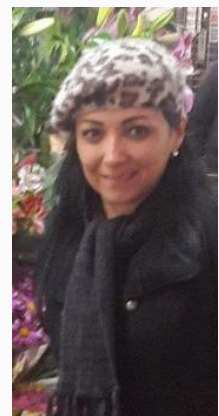
Variety of Sources

Co-occurrence Trends Using Conditional Probabilities

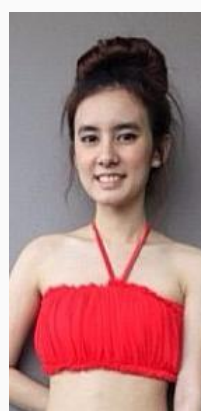
Style based



Functionality based



Reasonable Dependencies



Attributes Occur Outside of Bounding Boxes



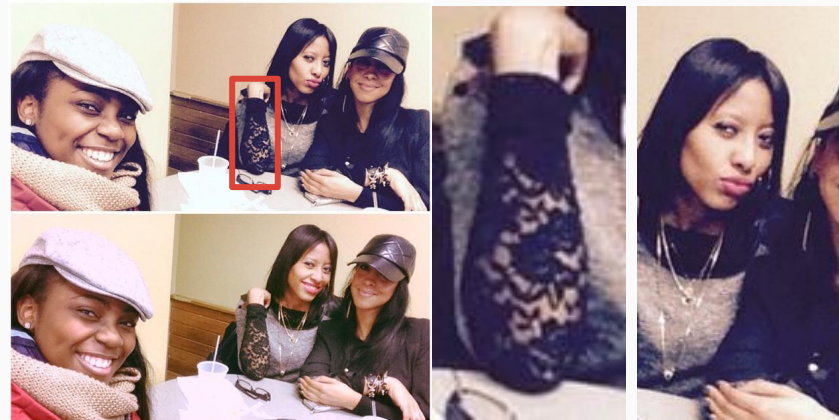
Sleeve Length: Short Sleeve



Label: Dress Category



Sleeve Length: Long Sleeve



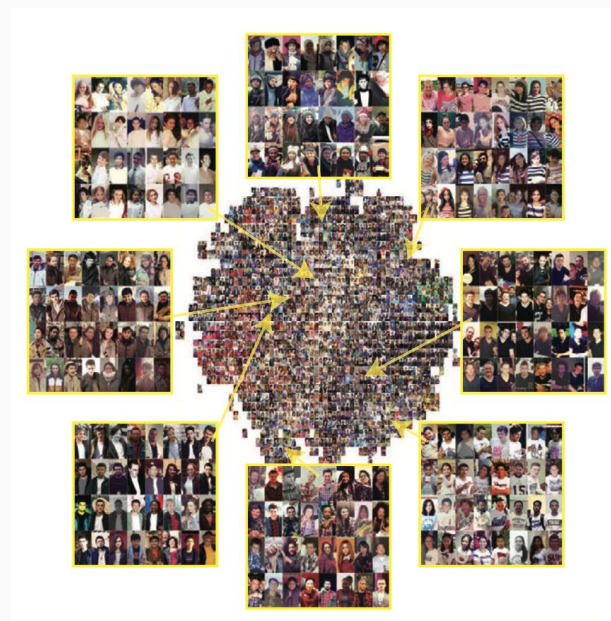
Label: Floral Clothing Pattern

The paper has the following theme:

1. Need large data to find trends
2. Large data tough to label
3. Label 27K images
4. Train a CNN to generate features, cluster to find trends

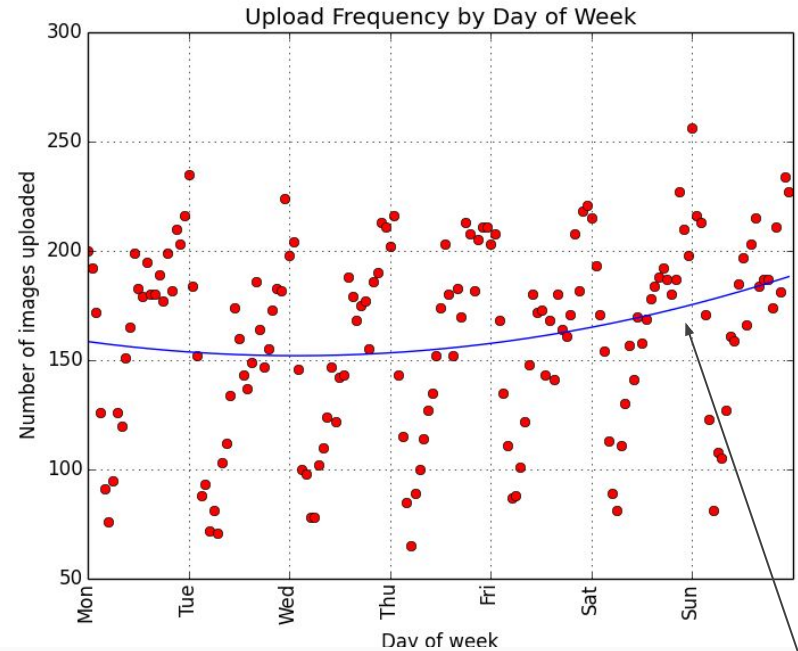
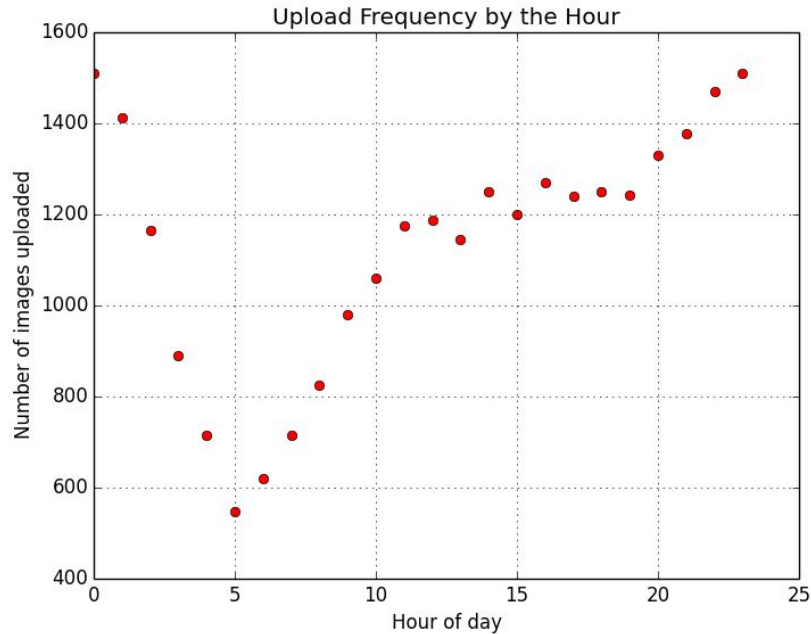
However...

1. We don't have access to code
2. We don't have access to the large dataset (>10 million images)
3. We do have access to the labeled 27K images



These set of experiments attempt to expose possible interesting trends in the dataset that could be explored!

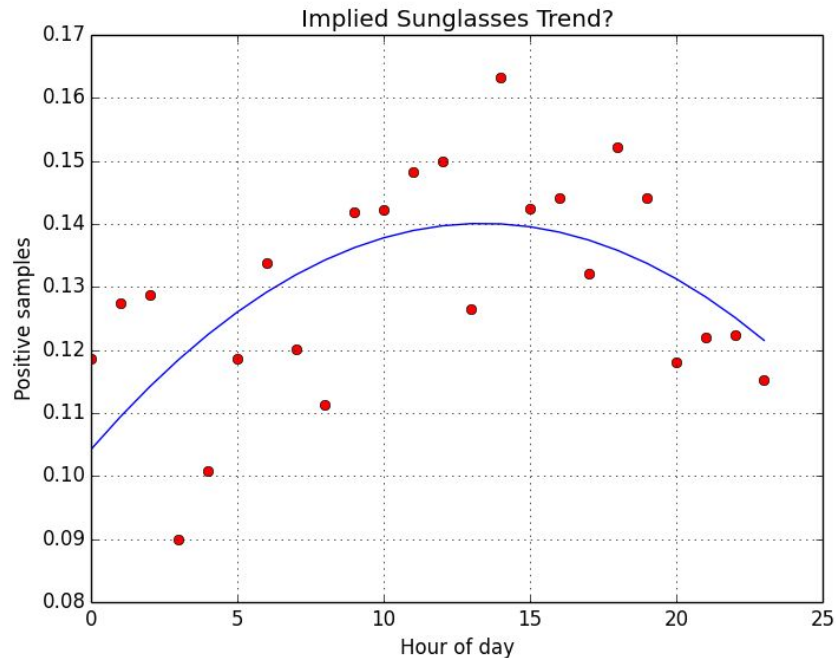
Image Upload Trends



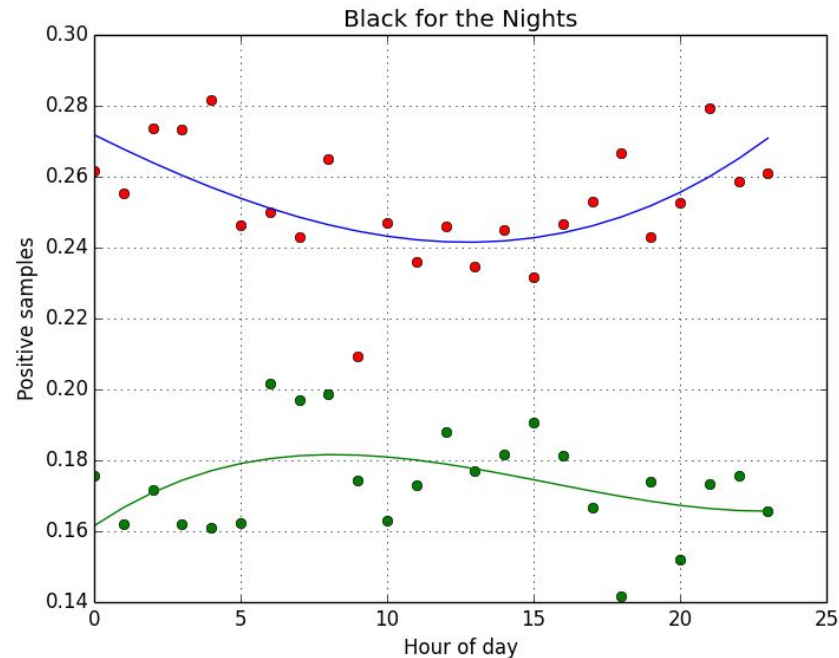
Slight increase in uploads on weekends!

We normalize all results by the average upload frequency to observe true trends.

Daily Trends

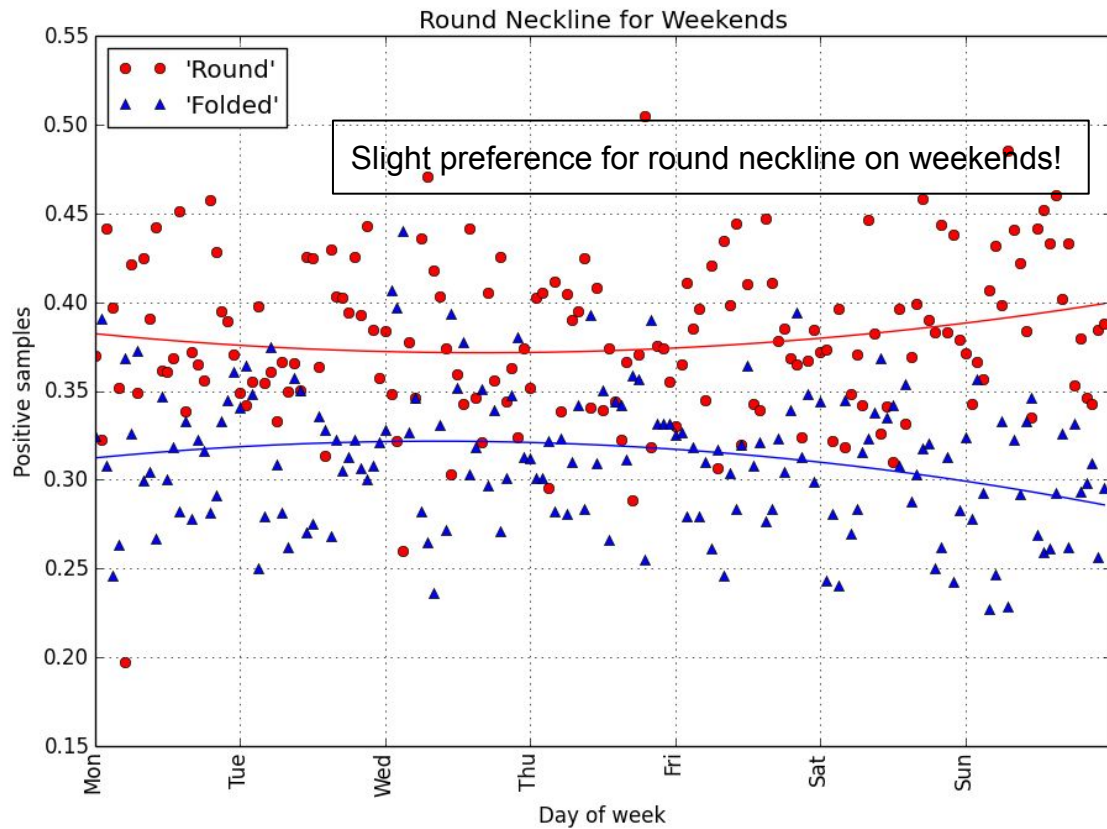


Higher fraction of glasses during day time might suggest about 3% presence of sunglasses!

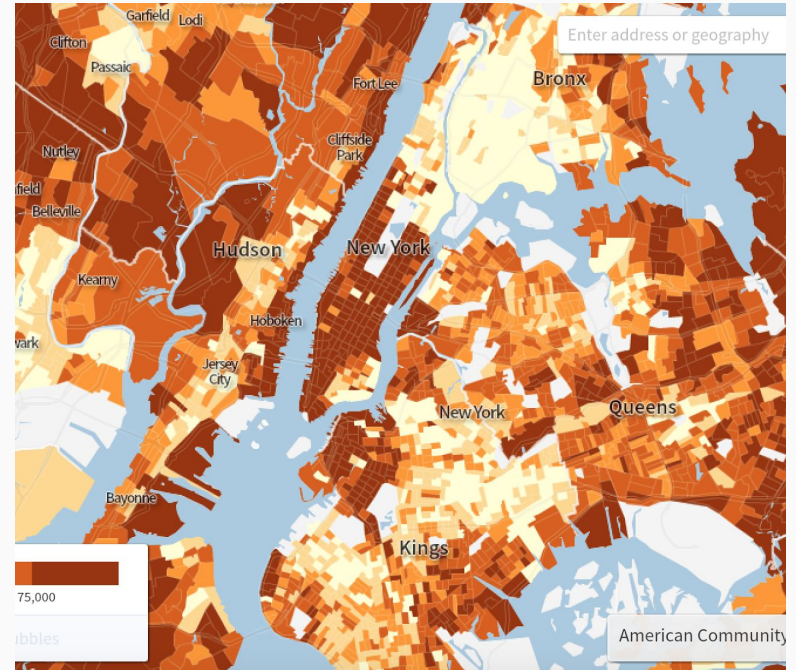
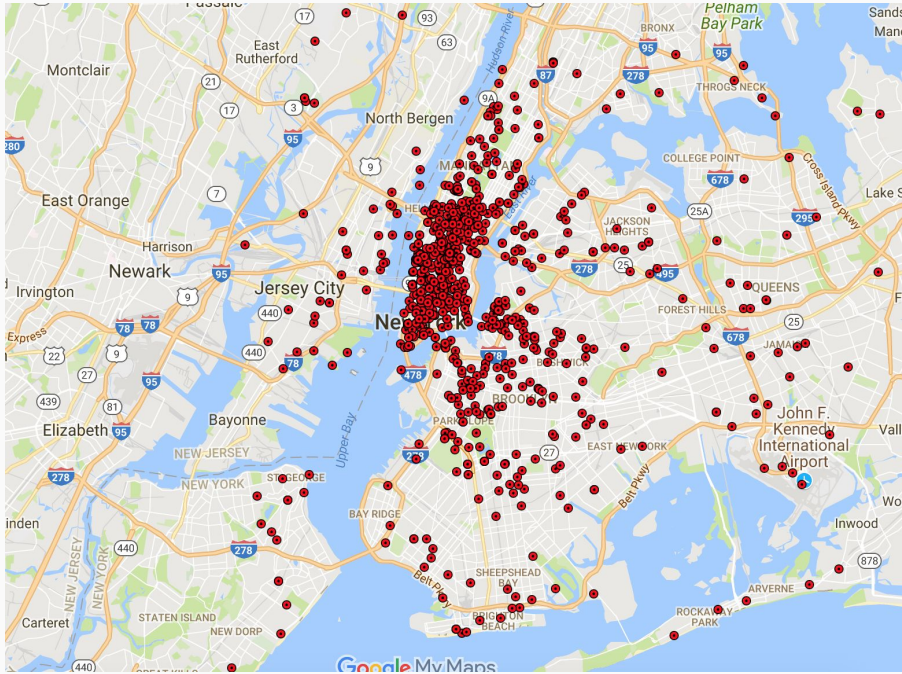


Black color appears to be more popular at night.

Weekly Trends

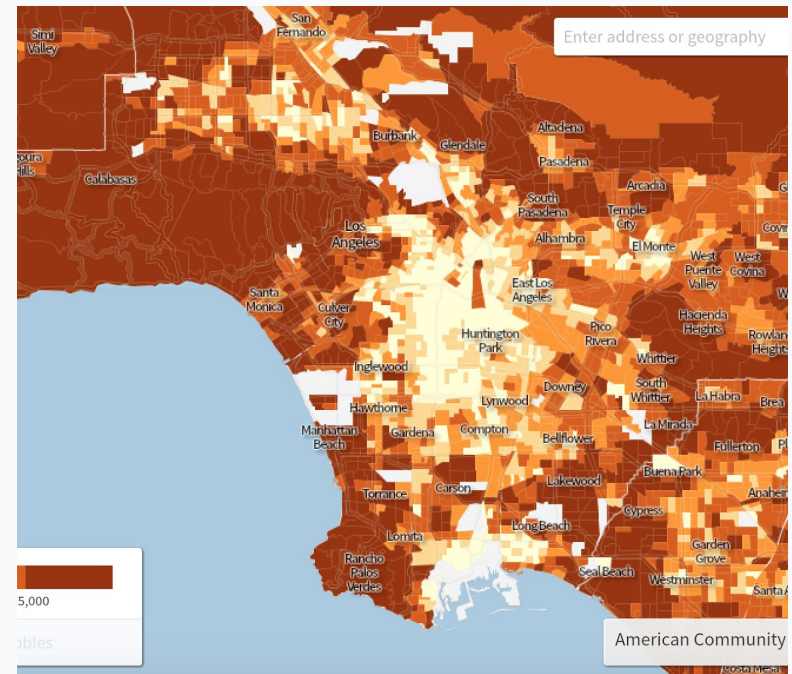
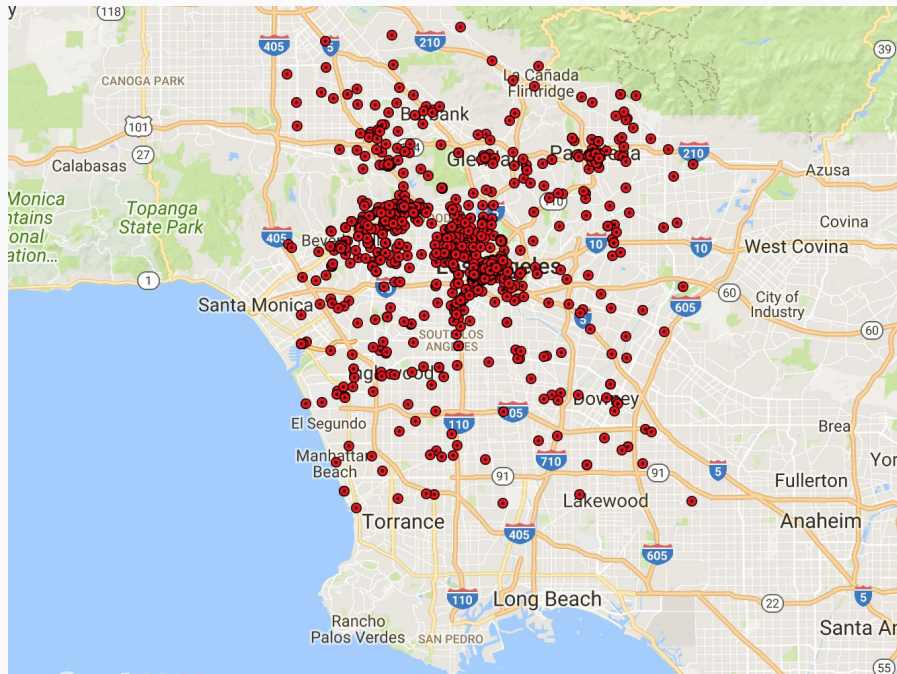


Instagram and Demographics (NYC)



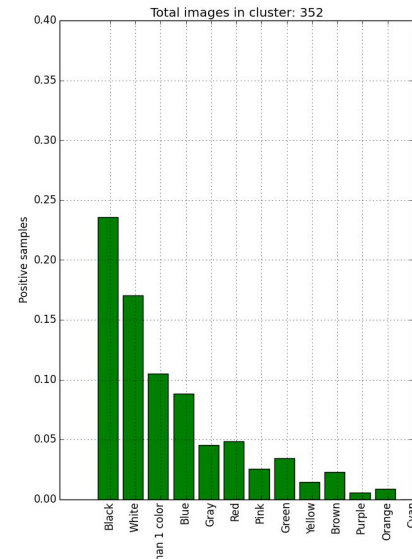
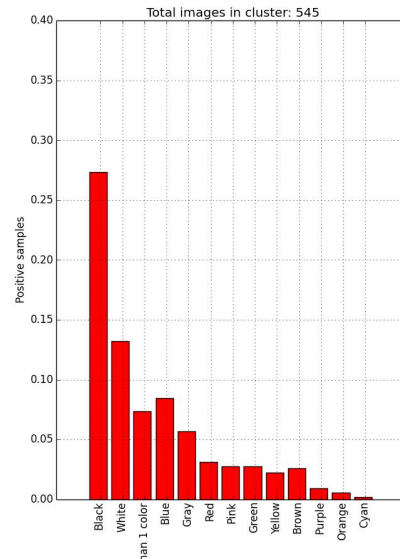
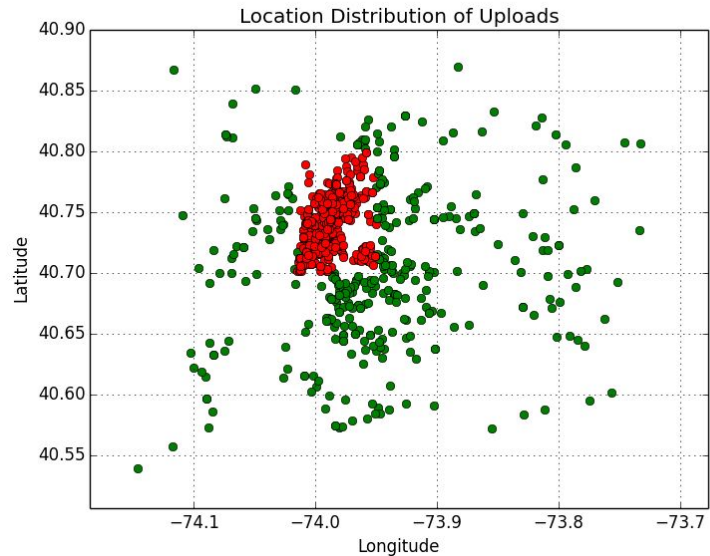
Instagram uploads, population density, and median income are all positively correlated.

Instagram and Demographics (LA)



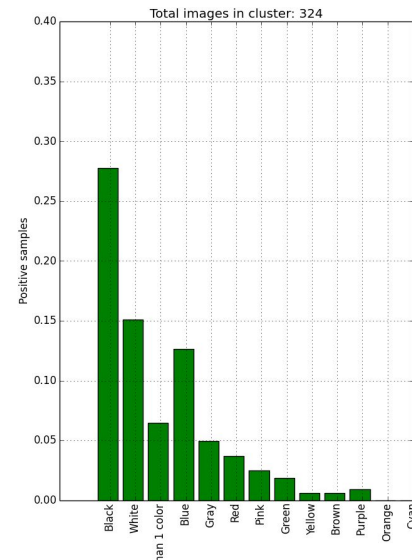
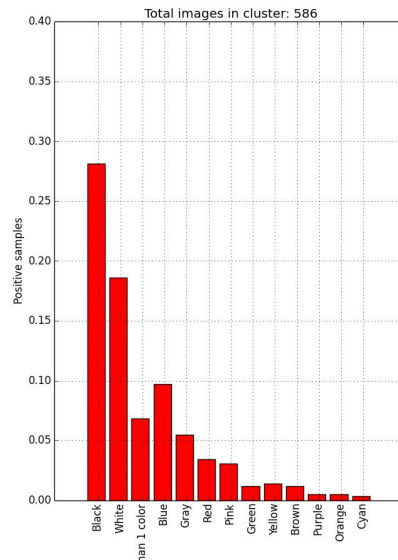
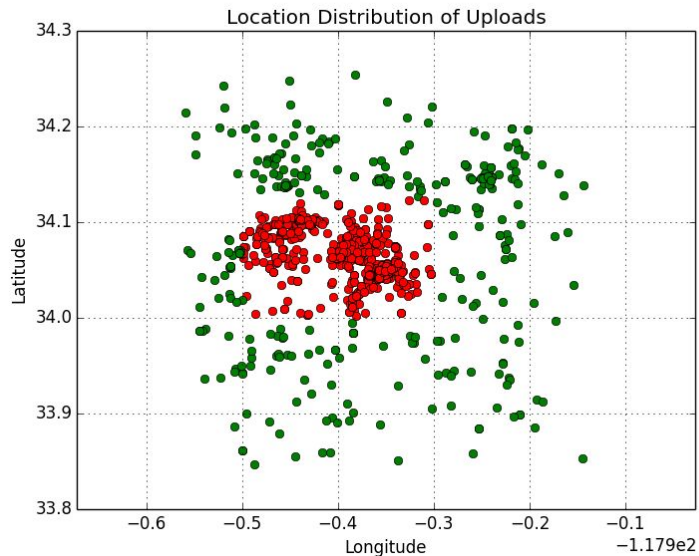
Instagram uploads and population density are positively correlated, but the median income is negatively correlated!

Intra-city Trends (NYC)



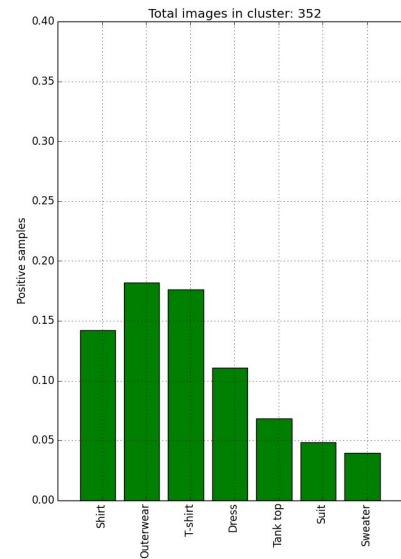
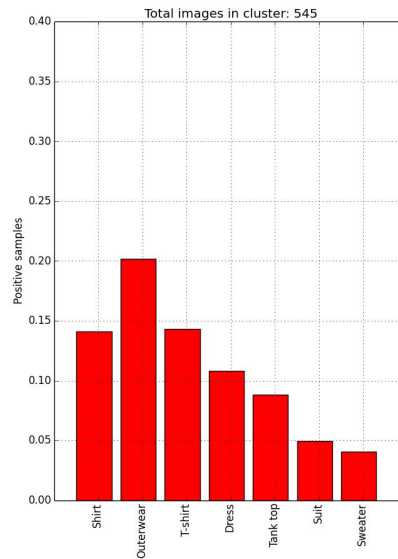
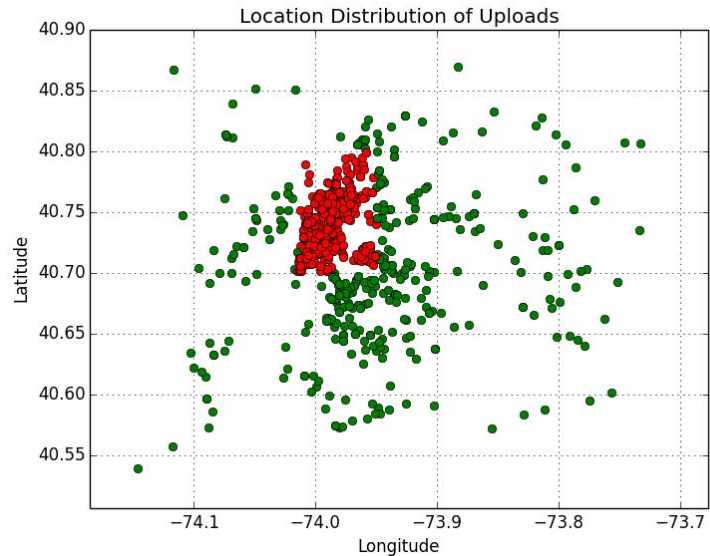
- Black dominates the Manhattan region
- White and multiple colors comparatively more trendy elsewhere

Intra-city Trends (LA)



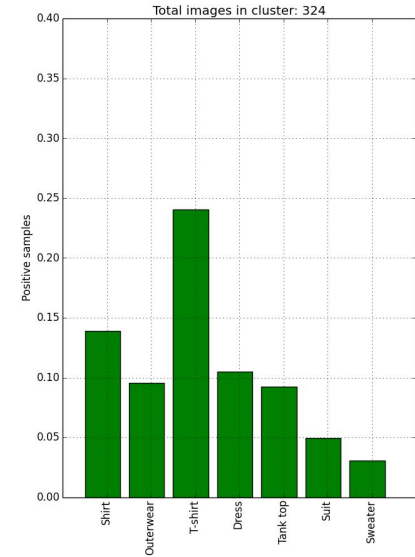
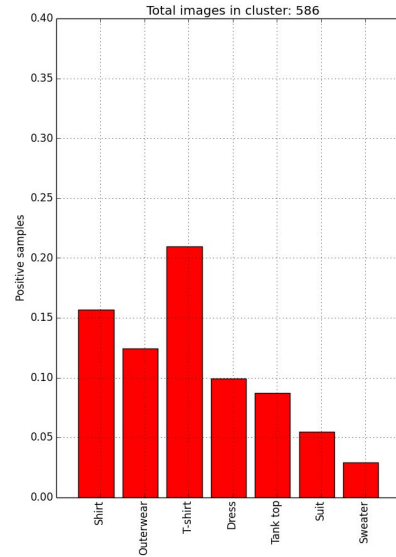
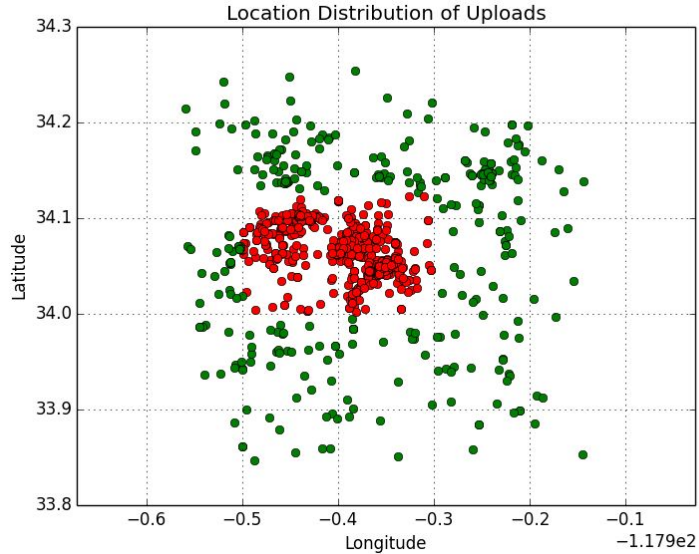
- Black and white predominant in downtown region
- Blue comparatively more popular elsewhere

Intra-city Trends (NYC)



- T-shirts more popular elsewhere, as compared to Manhattan

Intra-city Trends (LA)



- T-shirts more popular elsewhere, as compared to downtown area

Thanks for listening!

Check out our code at:

<https://github.com/angelaslin/street-style-experiment>