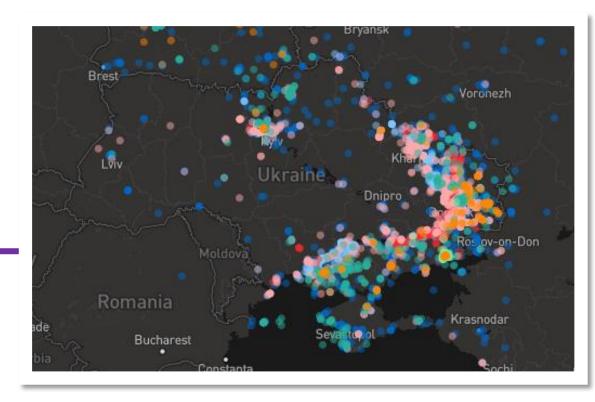


Covering the Ukraine - Russia Conflict

Data driven, social-media oriented, and keeping you safe

Adam Miner

Data scientist for the Associated Press



Russia-Ukraine Conflict Problem at hand

- Immense amount of social media data:
 - 60,000 useful Tweets and Telegrams since the start of conflict
 - Exponentially more raw social media out there
- Dangerous situations for journalists in Ukraine and Russia
 - Recently jailed Wall Street Journal reporter in Moscow¹





A Helpful Solution

- Built a Machine Learning model that:
 - Takes vetted, located social media posts
 - Clusters them into seven unique clusters
 - Displays via an interactive web app
- Repeatable and customizable
- Help your coverage:
 - Saves time by filtering relevant social media posts for you
 - Narratives for each cluster have already been generated and analyzed
 - Worldwide focused, regularly updating and robust dataset



How the Model Works (generally)

- 1. Gathers the data from five non-profit geolocation groups (Bellingcat, Ceninfores, Texty.ua, Defmon, Geoconfirmed)
- 2. Analyzes the text of the social media posts for relevance and importance of words within the entire dataset
- 3. Creates seven unique clusters to assign the social media posts to
- 4. Classifies new posts into one of these seven clusters

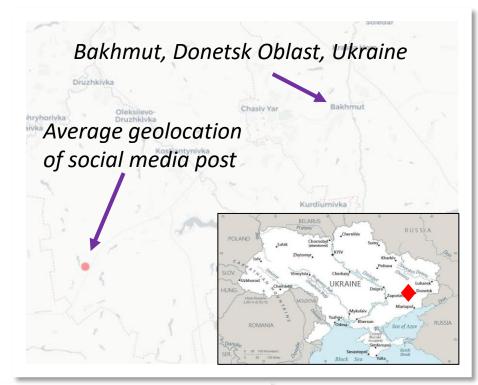
Clusters

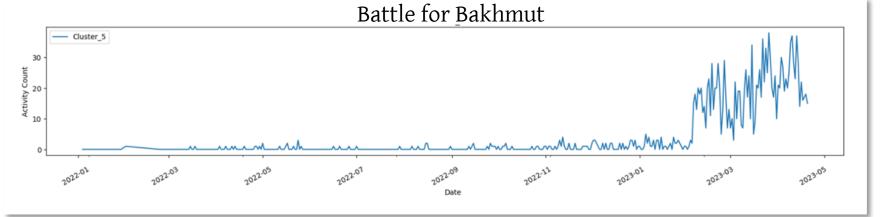
- Russian Movements and Activities
- Global Russian and Ukrainian Activities
- The Siege of Mariupol
- The Destruction Cluster
- Ukrainian Positions and Activities
- Battle for Bakhmut
- Satellite Imagery

Learn more about the clusters <u>at this</u> <u>site here!</u>

An Example: Battle for Bakhmut

- Not much coverage from social media, until Russia focused on taking the city in January 2023
- Social media activity may be indicative of a spike in conflict
- Tipping you off for stories, with an already extracted, vetted social media dataset to use
- Potential time saver while still allowing for good journalism coverage





Application Demo

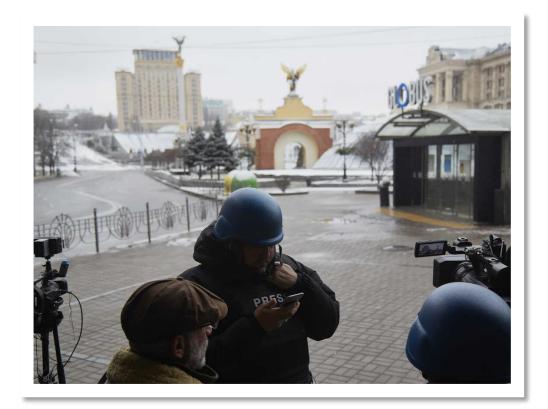
- Live site: https://extracting-and-clustering-posts-webapp.onrender.com/
- Prototype Prediction model for local demonstration



Future Work for AP

With a partnership opportunity:

- Collect more social media data from sources
- Fine tune model using your requested inputs
- Provide method to upload file of tweet texts, for batch classification
- Generate readouts of social media activity for each cluster on a recurring basis





Thank You



Adam Miner