# SimPPL Network Science Reimagined.



#### Demo - Parrot.report

There's a really nice demo of Parrot Report online so I'll leave the link on here and please feel free to contact me about the rest of the presentation.

#### We Make Auditing Easier



#### Identification

What information is being shared online?

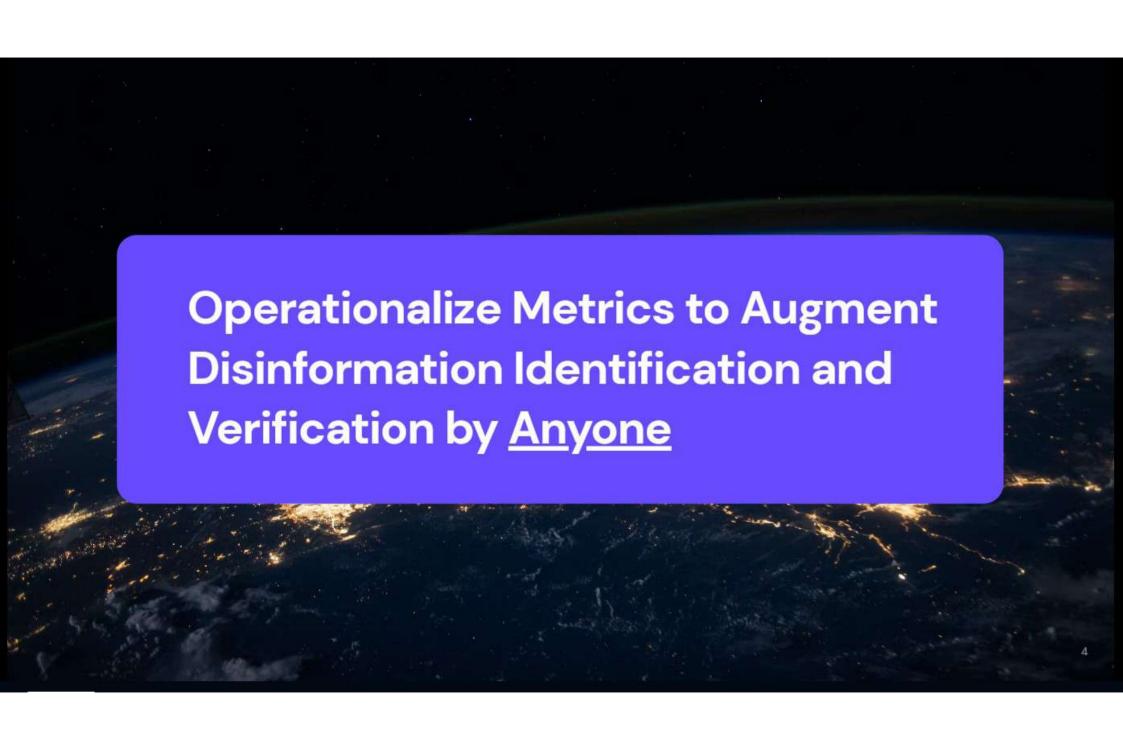


Is this misleading?
Is this coordinated?



#### Actioning

What can we do to limit its harms?



#### RT.com and Sputnik News

Known sources of disinformation and influence operations.

We track 8000 articles posted since 2021.

Some believed to be \*manipulated\*.

**GEC Special Report** 

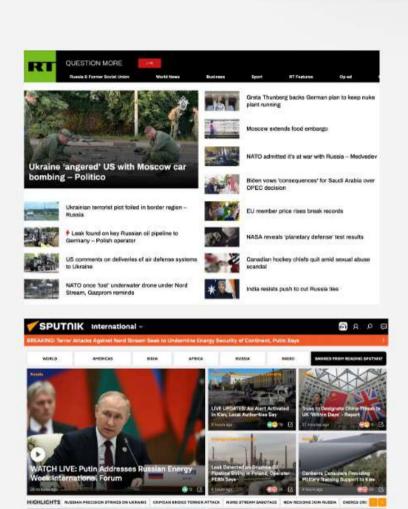
KREMLIN-FUNDED MEDIA:

#### RT AND SPUTNIK'S

ROLE IN RUSSIA'S DISINFORMATION AND PROPAGANDA ECOSYSTEM EU bans RT, Sputnik over Ukraine disinformation

By Foo Yun Chee

Weaponising news: RT, Sputnik and targeted disinformation

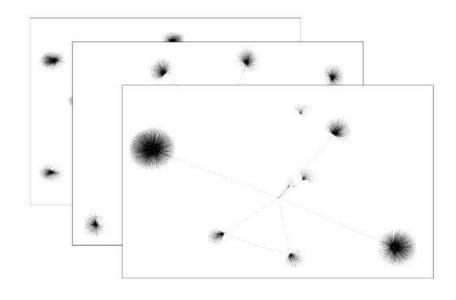


Russia's Special Operation in Ukraine

Donbass, Genocide, 2014-2022

### How to help Identify Manipulative Narratives?

headline	publication_date	article_content	article_url	source
Great Britain Imposes Sanctions Against Sputnik's Head Anton Anisimov	2022-03-31	London has expanded its sanctions list by making 14 additions, the web site of the British government says (text truncated)	https://sputniknews.co m/20220331/great-brit ain-imposes-sanctions -against-sputniks-hea d-anton-anisimov-109 4354237.html	sputnik
Hindu Group Marches to Support Russian Military Op, Slams Zelensky as Ukraine's No1 Enemy - Video	2022-03-31	Although the US and its allies imposed sanctions on Russia in response to the military operation in Ukraine, India's government has refused to give in to pressure	https://sputniknews.c om/20220331/hindu- group-marches-to-su pport-russian-military -op-slams-zelensky- as-ukraines-no1-ene myvideo-1094367 263.html	sputnik
US tells citizens in Russia and Ukraine to leave immediately	2022-03-31	State Department says Russia is targeting Americans after basketball star is jailed on drug charges	https://www.rt.com/ russia/553074-stat e-department-ame ricans-leave-imme diately/	rt



**RT and Sputnik News Articles** 

Understand the spread of the post

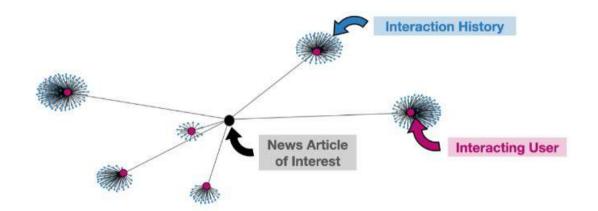
#### Collect Real-time Data

Tweets about the Article

Accounts Posting the Tweets, Account Tweet History, Metrics

Account Followers,
Account Followers Tweet History

Favoriting, Retweeting, and Quote Tweeting Accounts

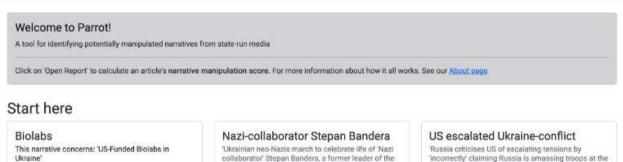


#### **Parrot Report**

Analyze the spread of unreliable narratives through coordinated networks!

Graph-based estimators of influence networks

Scores and summaries for practitioners to utilise downstream



How Western Press

27 million Soviet citizens lost their lives

collaborators as fr.,, 09 Jan, 2022

Years on War i...

08 May, 2021

Organization of Ukrainian Nationalists'

Parrot % Home Dashboard About

Russia makes new claims on US-financed biolabs in Uk...

Open report

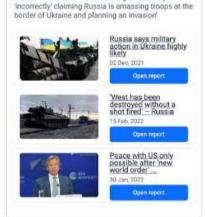
Open report

US-funded labs in
Ukraine dealt with bat

to open up about 'biolabs' in U...

coronavirus...

07 Mar. 2022



#### Content-level analysis can't tell apart coordination



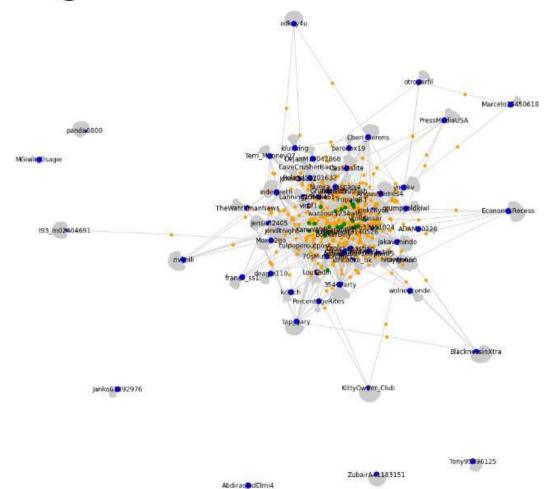


#### Find Interesting Groups: Signal from Noise

Accounts that share potentially manipulated narratives (RT, Sputnik)

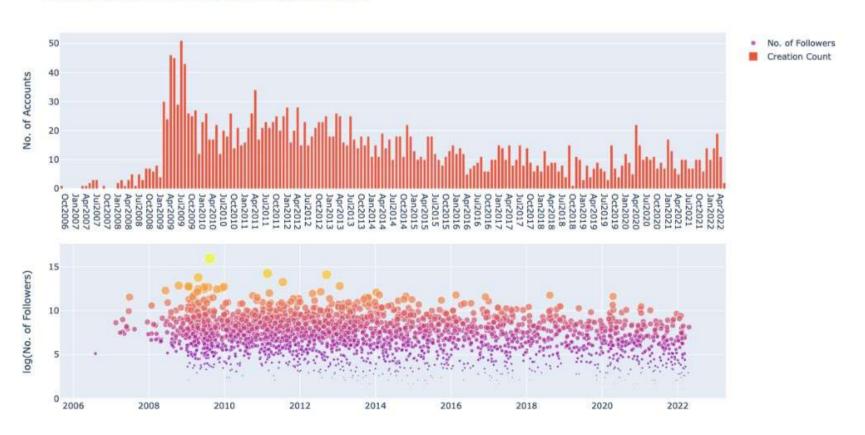
Accounts that follow 1 - 3 blue accounts

Accounts that follow 4+ blue accounts

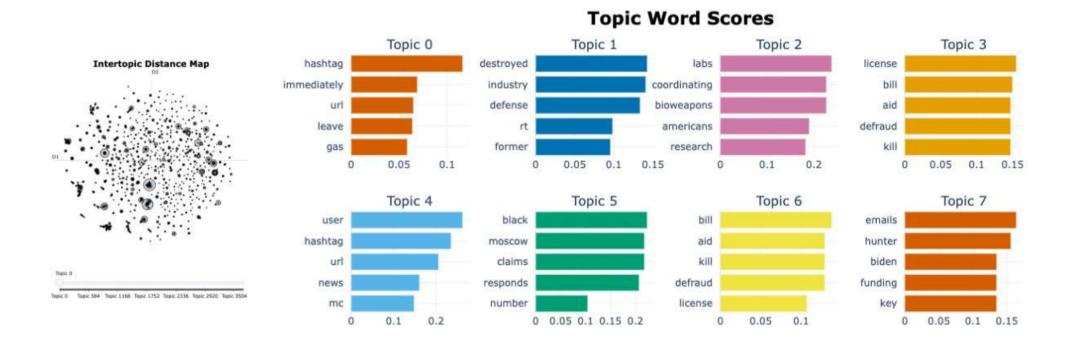


# Lots of Influential Accounts Created Early On

Account Creation Month and Follower Count for Users



# Identify Narratives Among these Groups

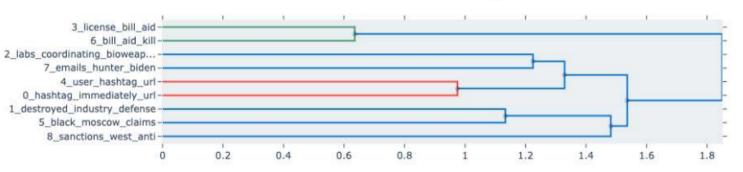


#### **Find Connections between Narratives**

#### **List of Topics**

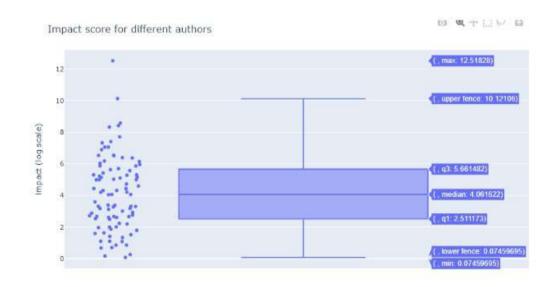
pic_size	top_10_words tte	@topic_nr =
662	impeachment, democrats, impeaches, impeach, republicans, bidens, inquiry, obstruction, quid, impeaching	0
520	normandy, agreements, minsk, format, contact, lugansk, ceasefire, donbass, agreed, subgroups	1
499	imposed, sanctions, embargo, agricultural, imports, products, introduced, restrictions, goods, exports	2
485	think, really, do, don, sort, necessarily, certainly, perhaps, kind, going	3
488	civilians, militants, shelling, joins, jihadists, hama, injured, killing, residential, killed	4
462	it, but, is, understand, this, rather, that, serious, confrontation, not	5
444	mazi, mazis, wwii, collaborators, mationalists, upa, galicia, heroes, bandera, mazism	6
425	nord, stream, pipeline, uniper, project, engie, wintershall, allseas, omv, liquefied	7
419	proposals, guarantees, eastward, eastwards, expansion, written, nato, ryabkov, expand, alliance	8
415	exercises, drills, troops, military, presence, exercise, rotational, zapad, deployment, deployed	9
401	votes, timoshenko, poroshenko, elections, vote, election, rada, petro, party, parliament	10
398	prepayment, cubic_x, maftogaz, cubic, gazprom, gas, gas_x, settinger, prodam, transit	11
383	jit, mh, buk, crash, downed, malaysian, dutch, dubinsky, dsb, malaysia	12
355	issg, sar, syrian, jabhat, nusra, settlement, damascus, syria, al, astana	13
338	invasion, imminent, invade, hysteria, amassing, reports, incursion, kremlin, massing, troops	14
329	lethal, assistance, stinger, equipment, javelin, provide, aid, providing, portable, systems	15
285	precision, konashenkov, artillery, destroyed, civilian, residential, donetsk, dpr, forces, civilians	16
272	match, midfielder, finals, tournament, football, lewandowski, game, fans, league, cristiano	17
269	membership, alliance, nato, joining, bloc, join, hoop, jaap, accession, scheffer	18
269	crosstalking, soundcloud, rttv, crosstalk, clear, sleboda, talk, political, babich, podcast	19

#### **Hierarchical Clustering**



#### Identify the most "Impactful" Accounts

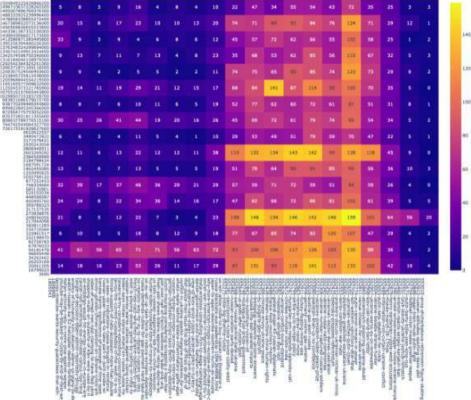
	username	followers_count
44	RT_com	3087851
49	SputnikInt	356111
47	ZANewsFlash	29907
23	AdsumP	21122
80	MendesOnca	14952



Impact = Mean Toxicity x log(follower count)

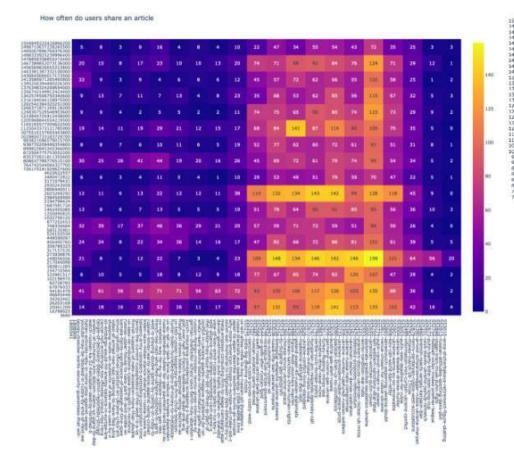
# Some User Groups Share a LOT of Articles

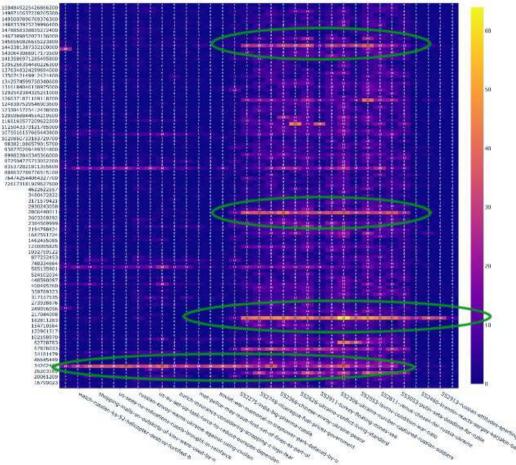
How often do users share an article



# **Analysis Reveals Coordination Patterns**

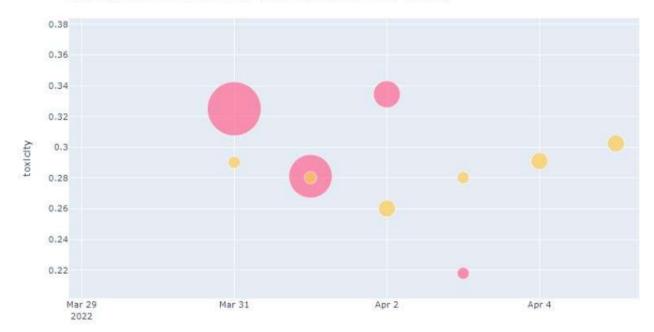
How often do users share an article





#### Identify Candidate Narratives with Unusual Trends

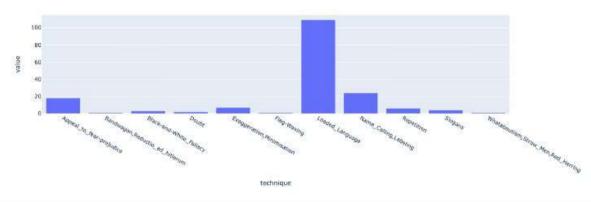


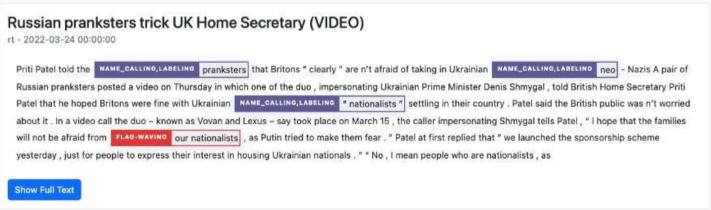


Ukraine Aid Bill is a License to Kill

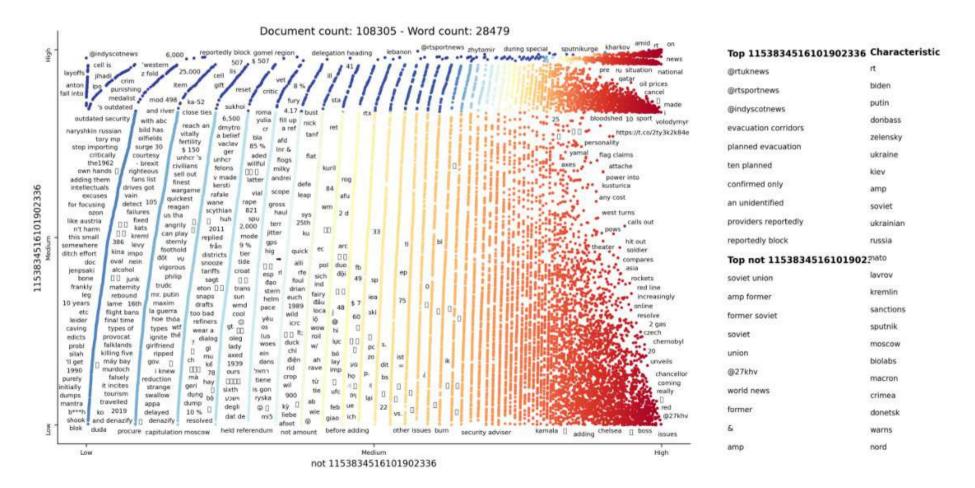
Russian Officials Speculating on FIFA Decision

# Detecting Propaganda in the Content





#### Account-level Analysis of Interaction Likelihood



# **Team**



Swapneel Mehta Ph.D. @ NYU Data Science









Founder



Shwe Han DS @ B of A



Jay Gala Resident @ IIT Madras



Deep Gandhi MSc. @ UAlberta



Dhara Mungra DS II @ Bombura



Raghav Jain NLP @ IIT Patna

Founding Team



Jhagrut Lalwani Ex - Goldman Sachs



Shwetanshu Singh DS @ Leaf Logistics









Harshit Agarwal Health ML @ Twitter





Early Team / Tech. Advisors