

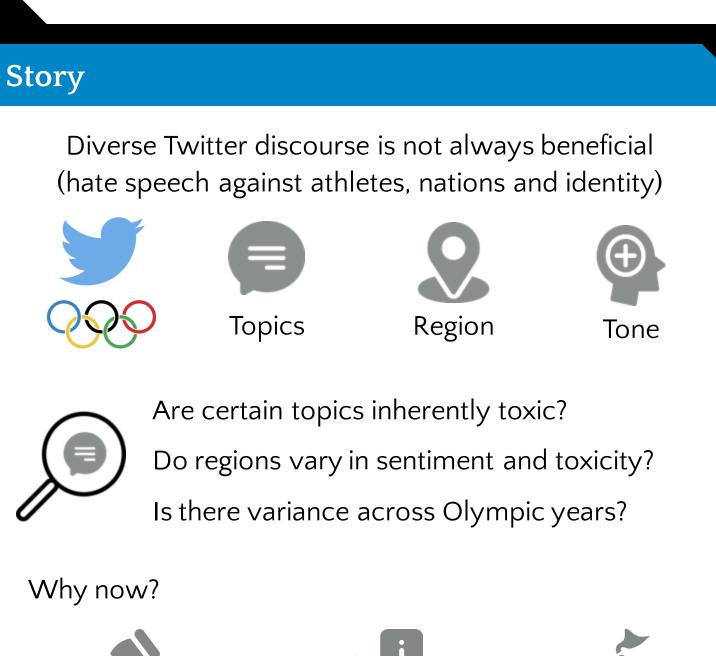
An Analysis of Twitter Discourse During the Tokyo 2020 and Beijing 2022 Olympics

Jordan Rodrigues & Naman Bhargava Georgia Institute of Technology



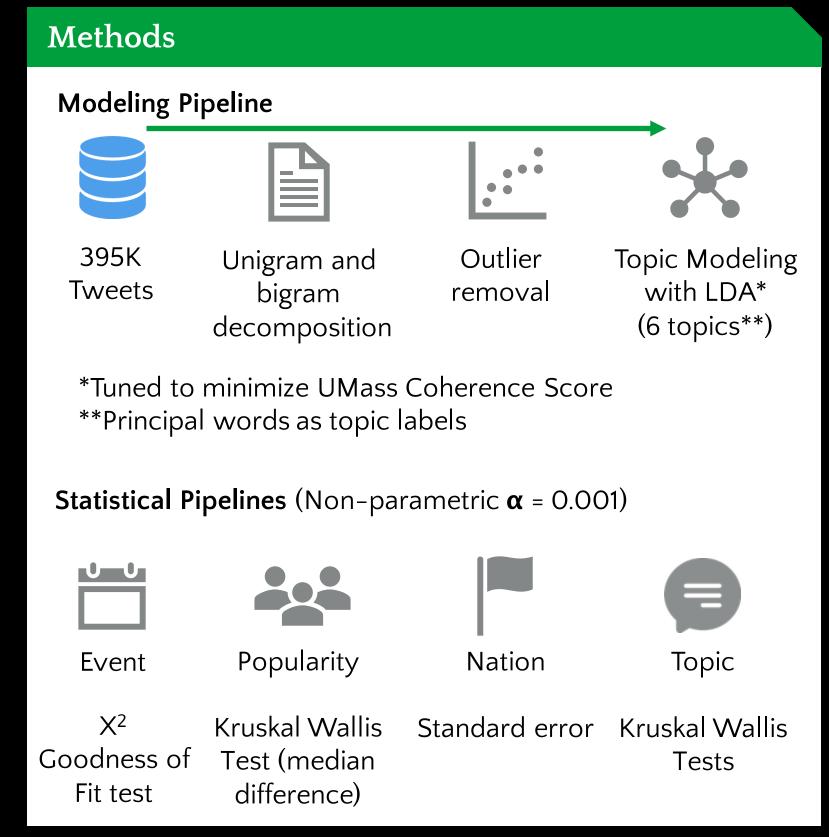




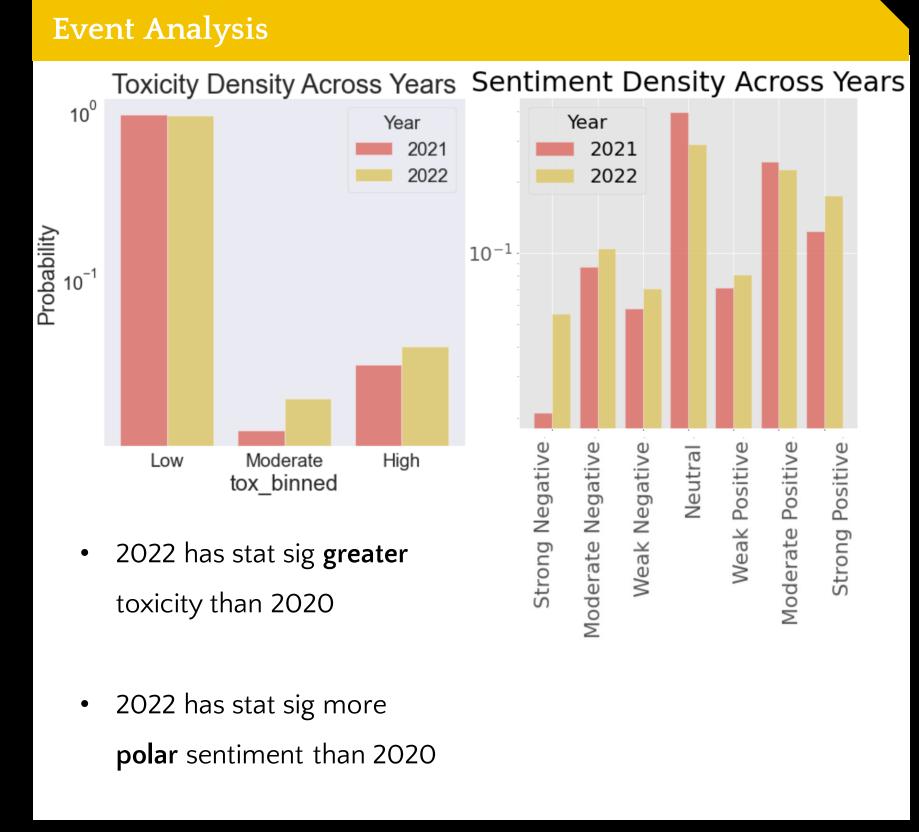


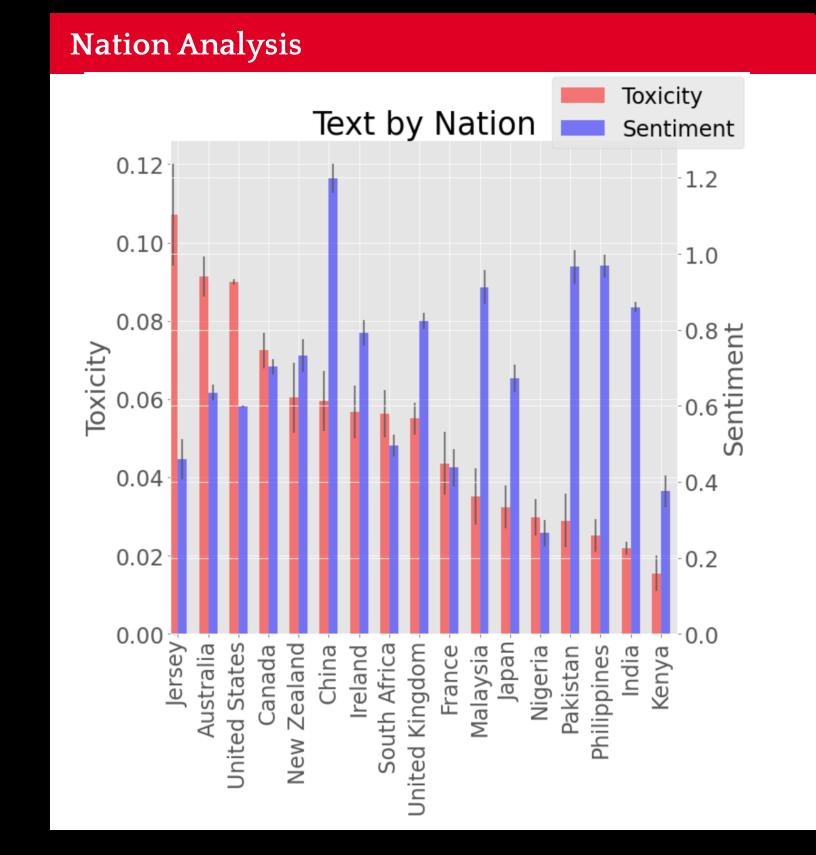
Account Action

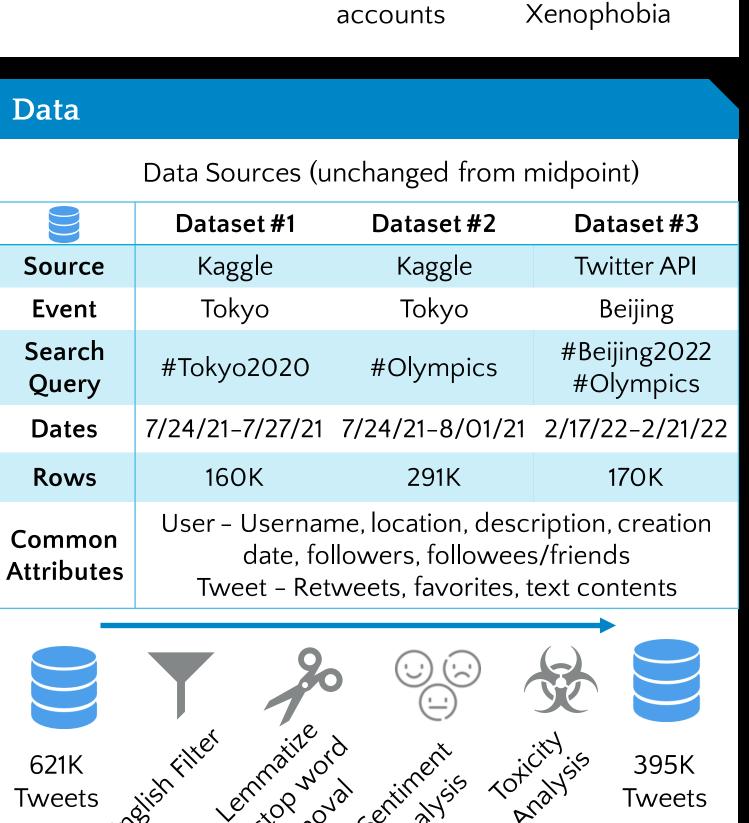
Increase



Sentiment polarization increases in 2022







Government

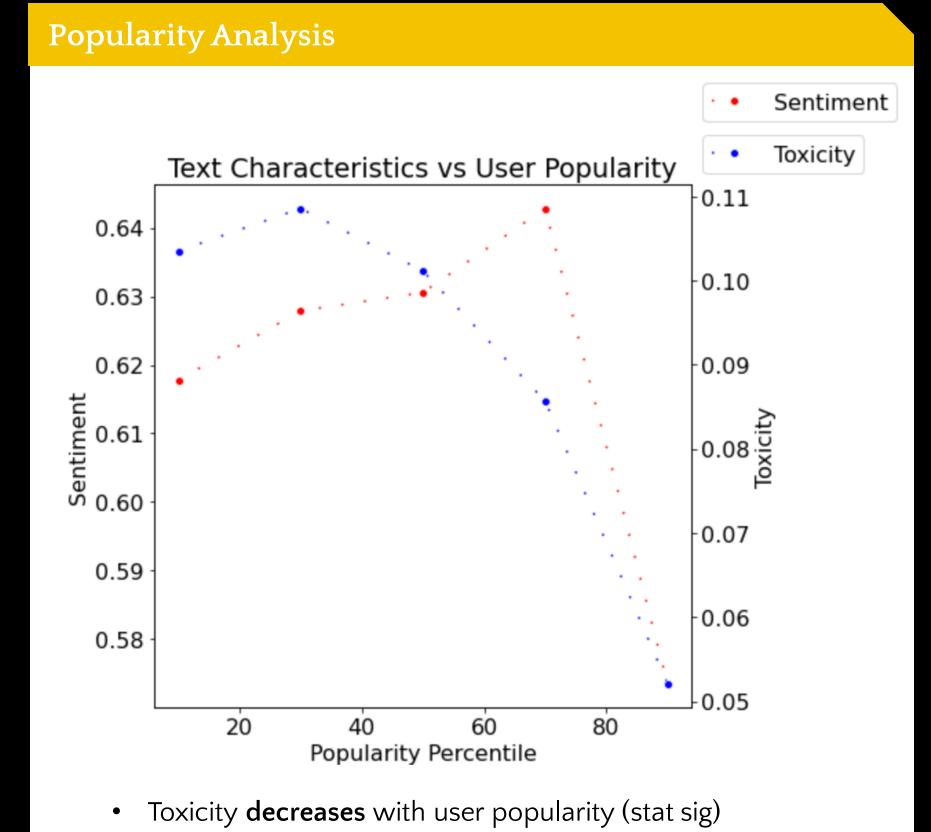
sponsored bot

	Datase	et #1	Dataset #2	Datas	set #3		compared to 2020		
Source	Kagg	Kaggle Kaggle		Twitte	Twitter API				
Event	Toky	/0	Tokyo Beijing		ing	5	People are generally positive with low toxicity,		
Search Query	#Tokyo2020 #C		#Olympics	#Beijing #Olym			and toxicity is unattractive	·	
Dates	7/24/21-7	/21-7/27/21 7/24/21-8/01/21 2/17/22-2/21/22							
Rows	160	K	291K 170K		K		Countries have different sentiment and toxicity		
Commor ttribute	User - Username, location, description, creation date, followers, followees/friends Tweet - Retweets, favorites, text contents						with some correlated with event performance		
							Topics can have significantly different toxicity associations		
621K weets	Agish Filter matite ord ment of icity is 395K Tweets						Results and modeling pipeline can inform future moderation to control toxicity in global events		
	Followers	Friends	Toxicity	Sentiment	Char		Low Toxicity	High Toxicity	
Mean	97K	1.4K	0.05	0.16	114	- Sent.	Sports can be so cruel at	Annoying c*nt stop	
STD	1.2M	7K	0.18	0.43	62	Serit.	times #TableTennis	whistling in the crowd	
Min Max	0 78M	0 773K	0	-1 1	955	+ Sent.	Congratulations Mirabai proud of you	That was so f*cking awesome!!!	

Key Findings

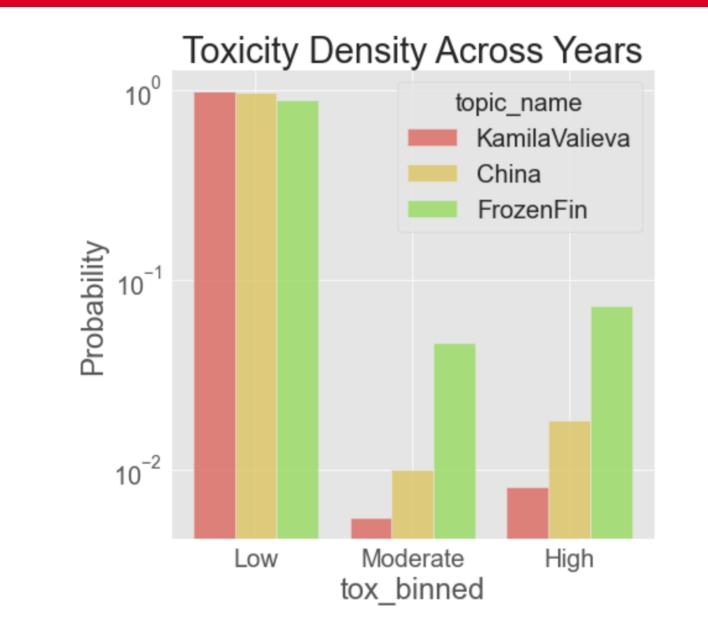
COVID-19

Induced



- Positivity increases with popularity (stat sig)
- Extremely popular users use more **neutral** sentiment
- Avg. users have positive sentiment and low toxicity

Topic Analysis



Topics Summary

U_Mass Coherence Score: -3.3

Kamila Valieva - figure_skating, win_gold, kamila_valieva, China – Taiwan, Propaganda, Sovereignty, rebuked_china FrozenFin – frozen_penis, finnish, skier_suffers Ceremony - ceremony, closing, yuzu, dwen, eileen_gu