



POLITICAL ADS ON TV

DATASCI 200. FA 2022
JONATHAN PHAN
LEANNA CHRAGCHIAN
NOOR-UL-AIN ALI
ASKA ZAMAN

Questions of Interest

1. Where were the ads aired?

- Did a particular candidate air more than in some areas than others?

2. Who aired the most ads?

- Did candidates air ads against each other often?
If so, what are the trends?
- Which candidate got fact checked the most? Were their “pro” or “con” ads fact checked more for each of these candidates?

3. When were ads aired?

- Who aired the most during certain time periods?
- How long were the ads for during specific hours of the day?



Data Cleaning and Sanity Checks

	wp_identifier	network	location	program	program_type	start_time	end_time	sponsors	sponsor_types	race	cycle	subjects	candidates	type	message	air_count	reference_count	market_count
0	5643	KLAS	Las Vegas, NV	8 News Now at 5 PM	news	2016-09-09 00:12:59	2016-09-09 00:13:29	Hillary for America	Multiple	PRES	2016.0	Energy, China, Jobs	Hillary Clinton	campaign	pro	1916	0	6
1	5643	WNCN	Raleigh-Durham-Fayetteville, NC	North Carolina News at 500PM	news	2016-09-06 21:58:25	2016-09-06 21:58:55	Hillary for America	Multiple	PRES	2016.0	Energy, China, Jobs	Hillary Clinton	campaign	pro	1916	0	6
2	5643	KLAS	Las Vegas, NV	Face the Nation	news	2016-09-04 16:24:25	2016-09-04 16:24:55	Hillary for America	Multiple	PRES	2016.0	Energy, China, Jobs	Hillary Clinton	campaign	pro	1916	0	6
3	5643	WFLA	Tampa-St. Petersburg, FL	Days of Our Lives	not news	2016-08-30 17:59:20	2016-08-30 17:59:50	Hillary for America	Multiple	PRES	2016.0	Energy, China, Jobs	Hillary Clinton	campaign	pro	1916	0	6
4	5643	KSNV	Las Vegas, NV	The Tonight Show Starring Jimmy Fallon	news	2016-09-06 07:02:22	2016-09-06 07:02:52	Hillary for America	Multiple	PRES	2016.0	Energy, China, Jobs	Hillary Clinton	campaign	pro	1916	0	6

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wp_identifier    int64
network         object
location        object
program         object
program_type    object
start_time      object
end_time        object
sponsors       object

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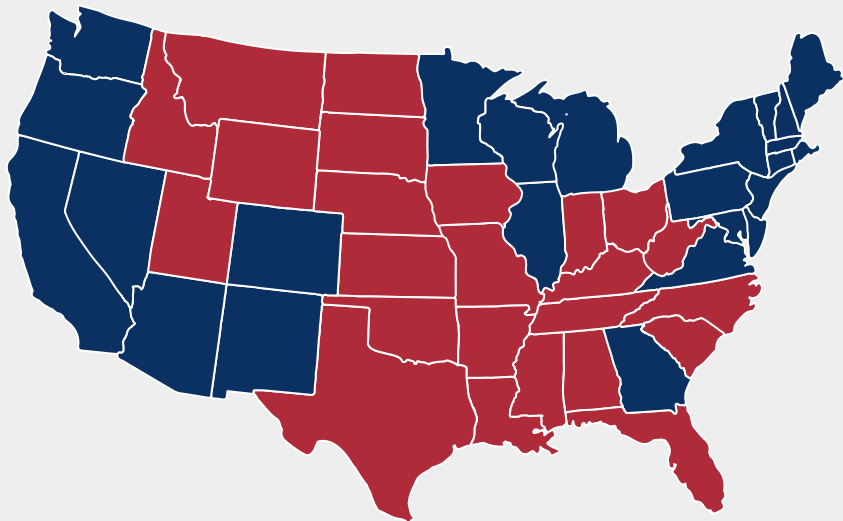
Donald J Trump For President
Donald J. Trump For President

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sponsors
22677
10493

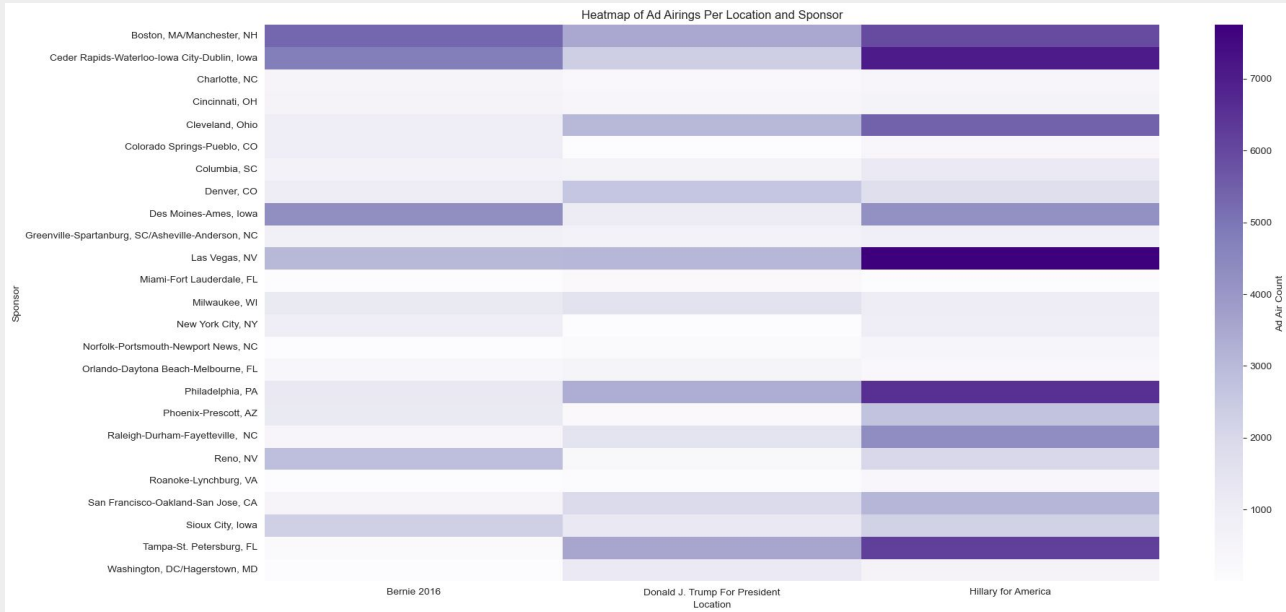
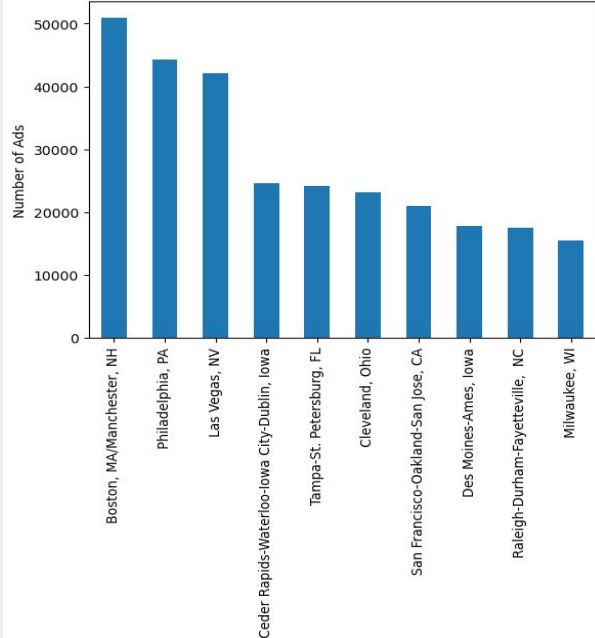
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WHERE?

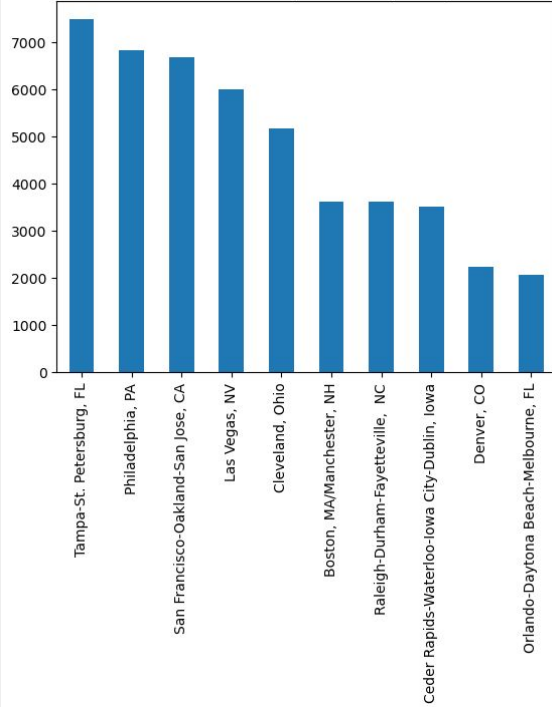
Top 3 Candidates and Locations with most Ads

Amount of Ads Aired per City

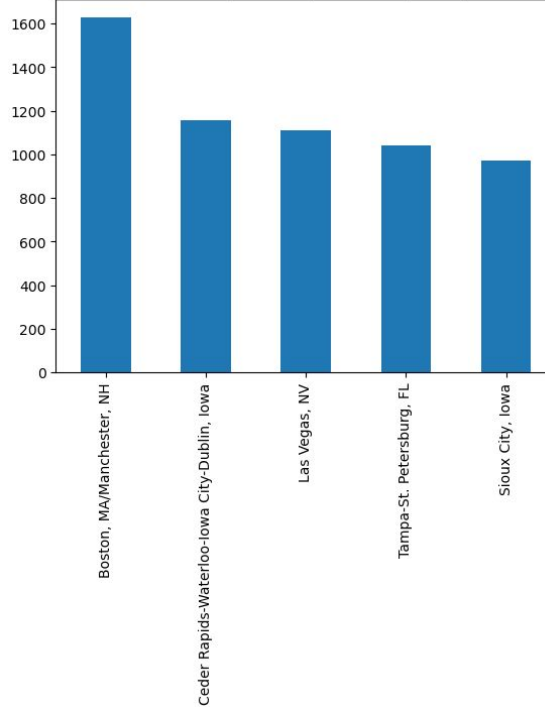


Where did ads about Donald Trump Air?

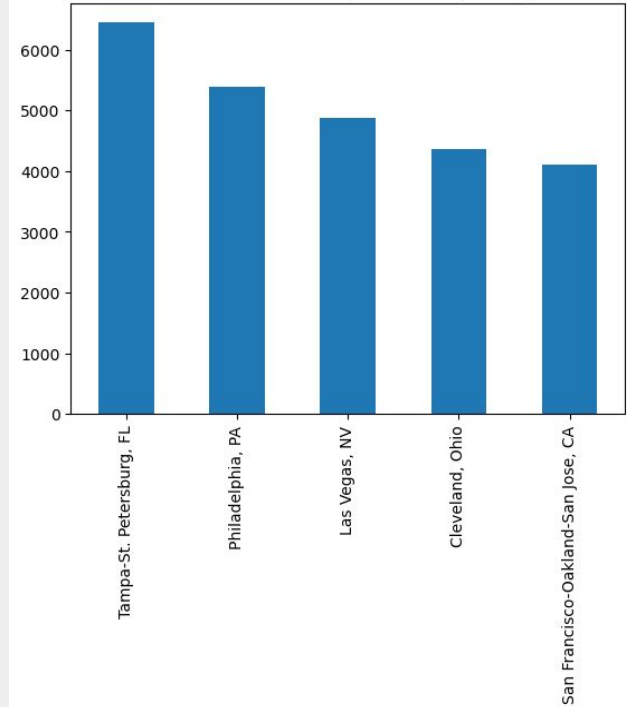
Amount of Trump Ads Aired per City



Amount of pro Trump Ads Aired per City

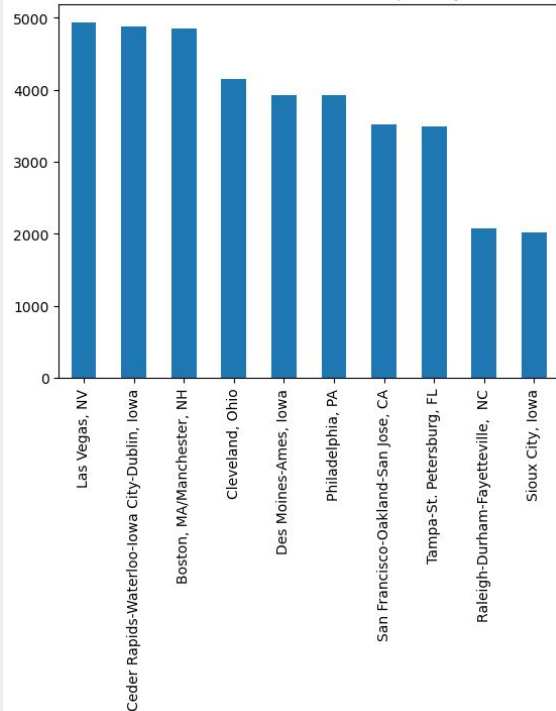


Amount of con Trump Ads Aired per City

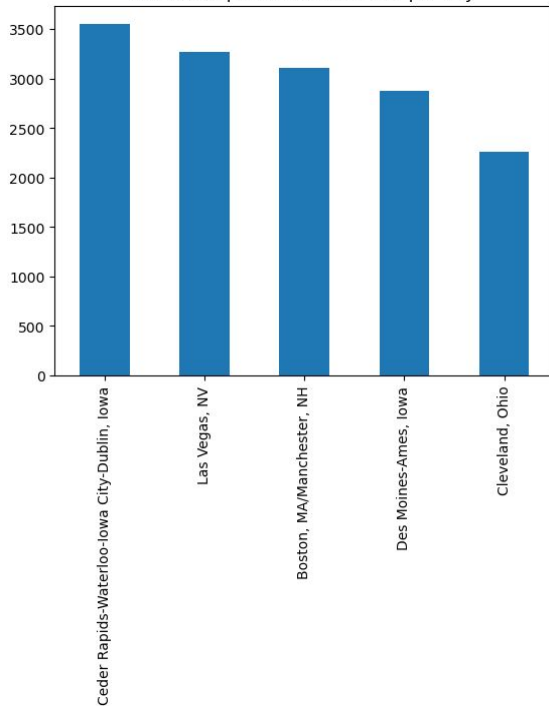


Where did ads about Hillary Clinton Air?

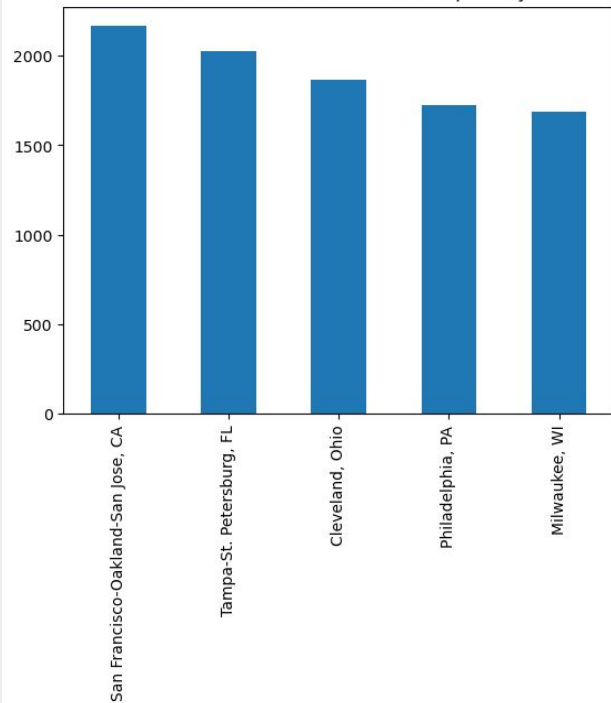
Amount of Clinton Ads Aired per City



Amount of pro Clinton Ads Aired per City



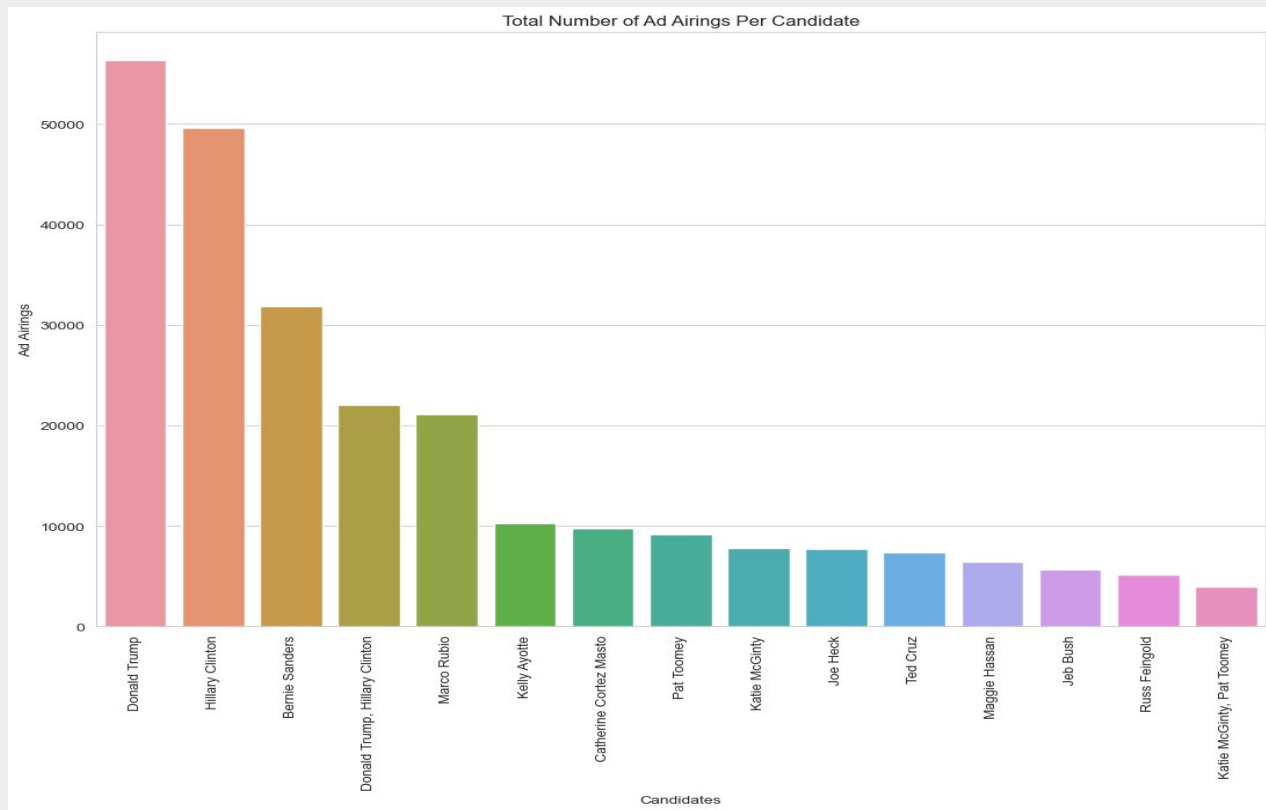
Amount of con Clinton Ads Aired per City



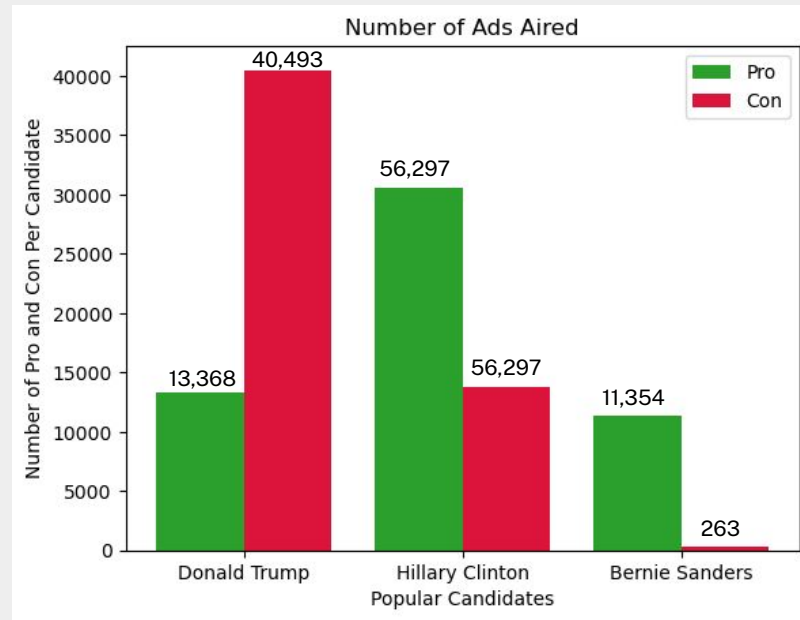
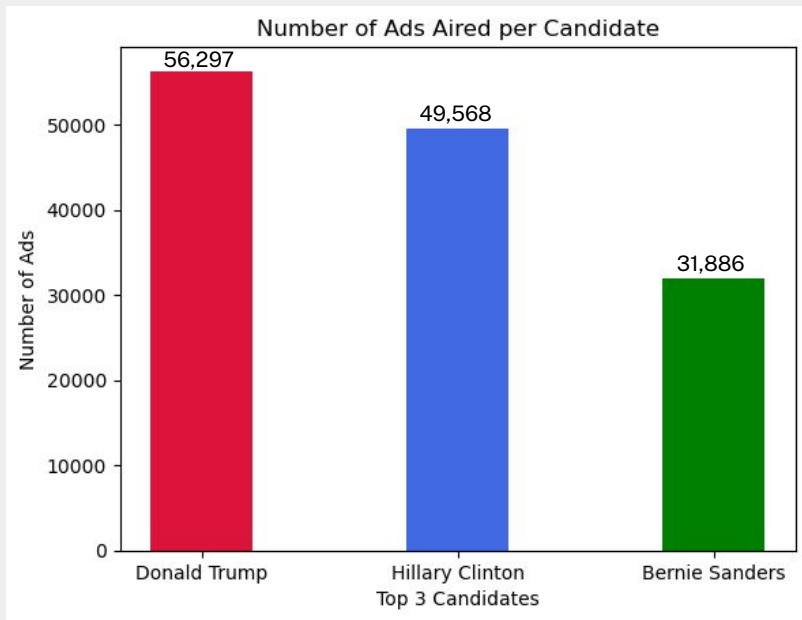


WHO?

All Candidate Campaigns by Amount of Ads

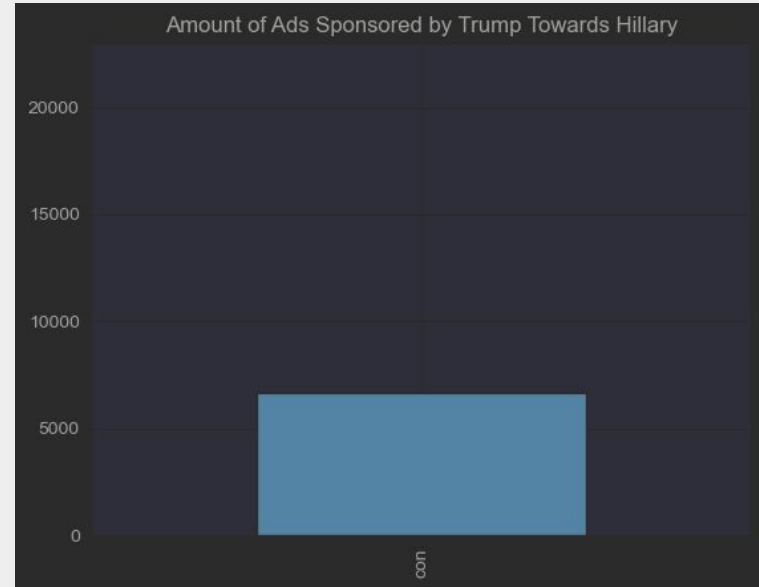
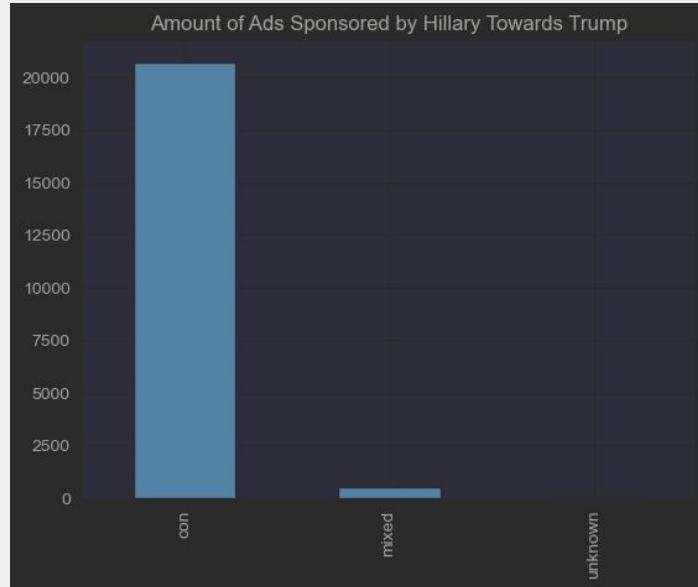


Number of Ads by Popular Candidate (Pro or Con)



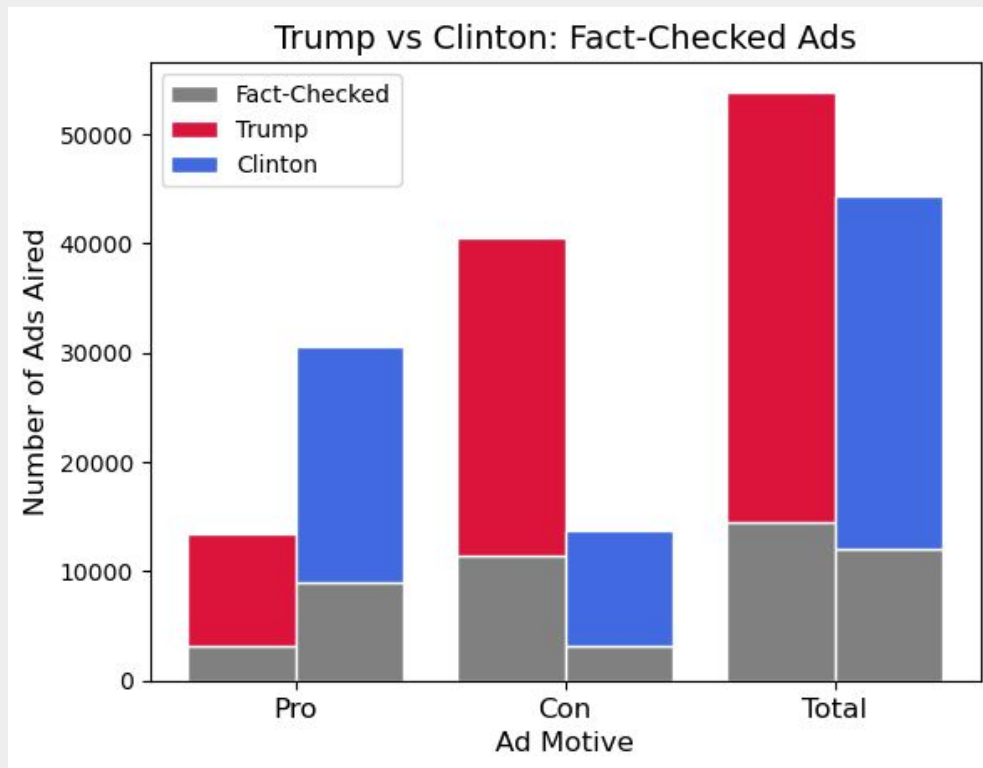
Amount of Ads Targeting Another Candidate

Ads Featuring Both Trump and Hillary and The Messages Per Sponsor			
candidates	message	sponsors	sponsors
Donald Trump, Hillary Clinton	mixed	Donald J. Trump For President	11086
		Hillary for America	8653
	pro	Hillary for America	3



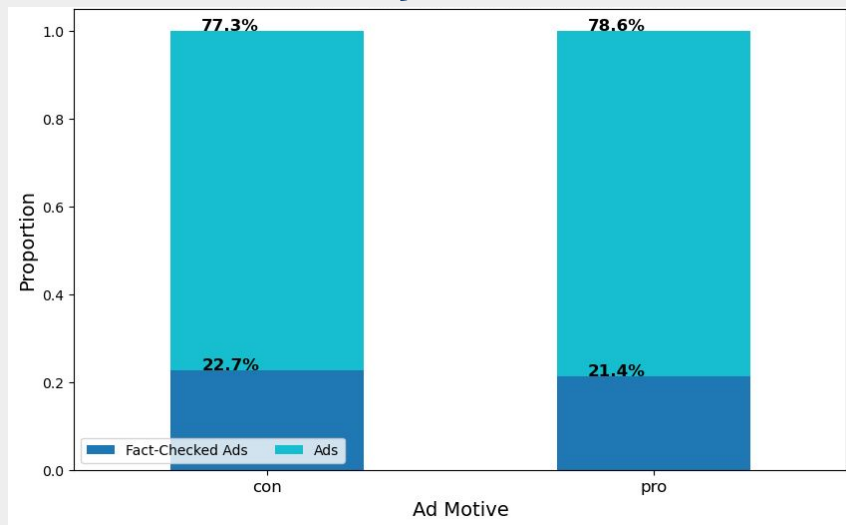
Number of Fact Checked Ads: Top Two Candidates

	Candidates	Fact-Checked Ads
0	Donald Trump	56297
1	Hillary Clinton	49568

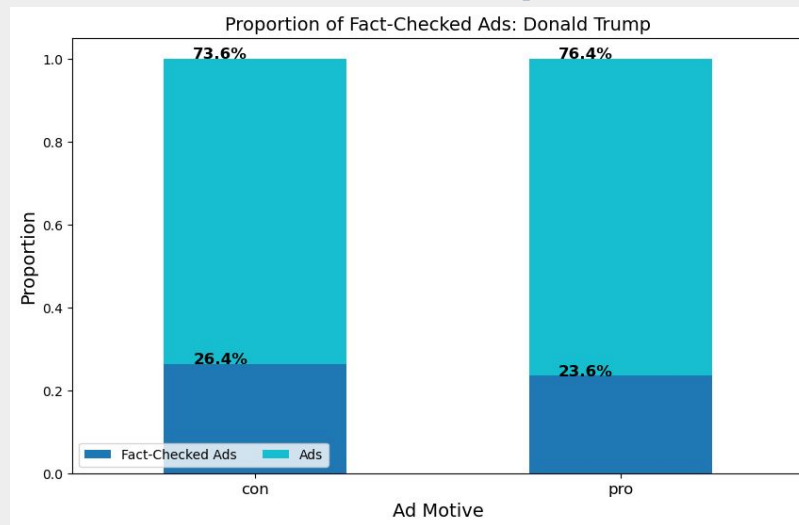


Proportion of Fact Checked Ads: Top Two Candidates

Hillary Clinton



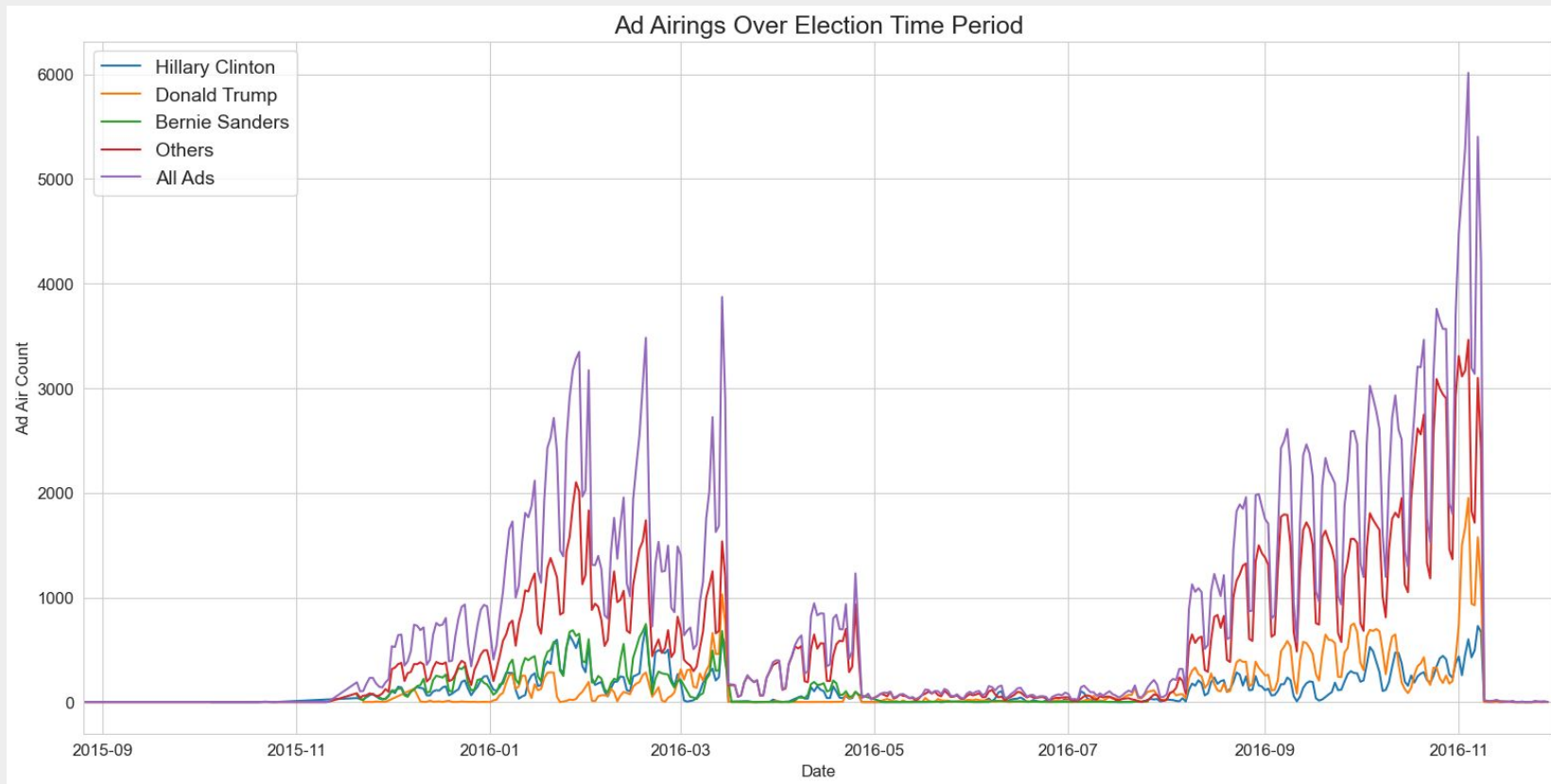
Donald Trump



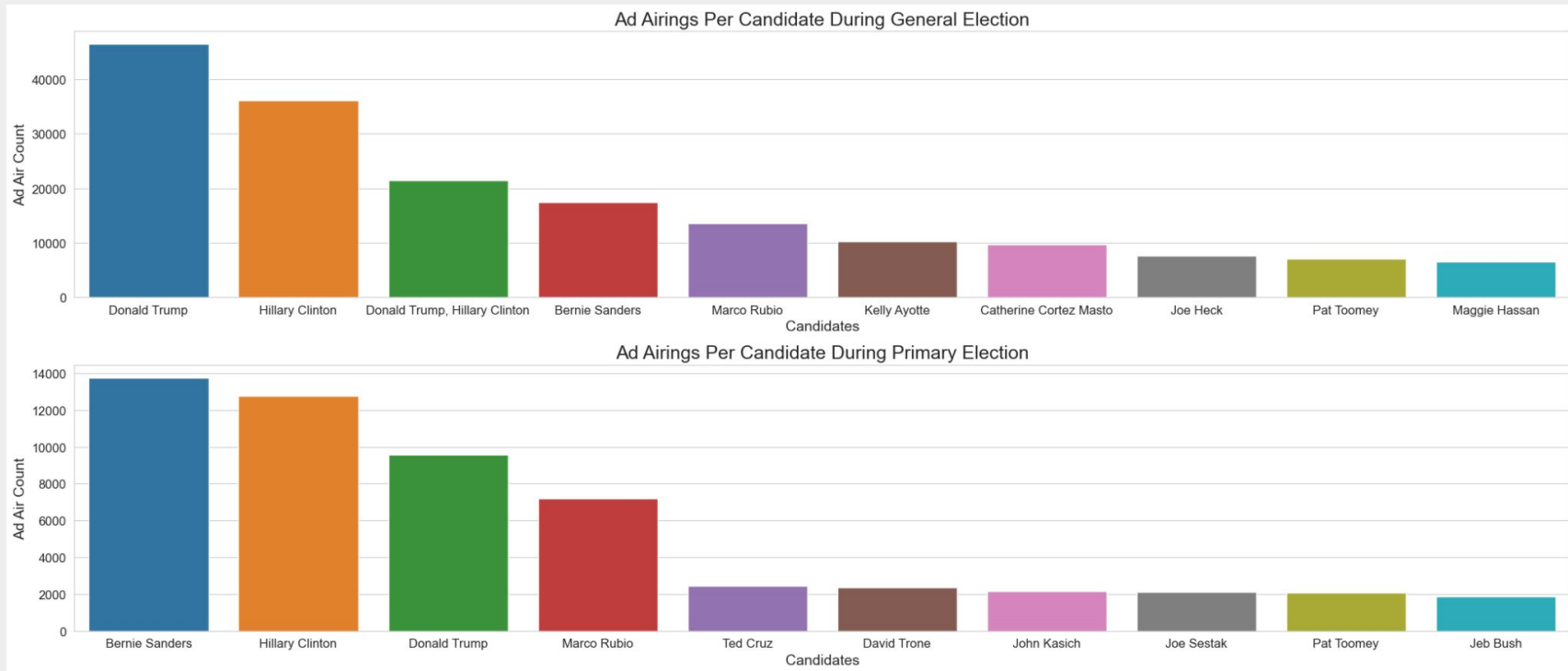


WHEN?

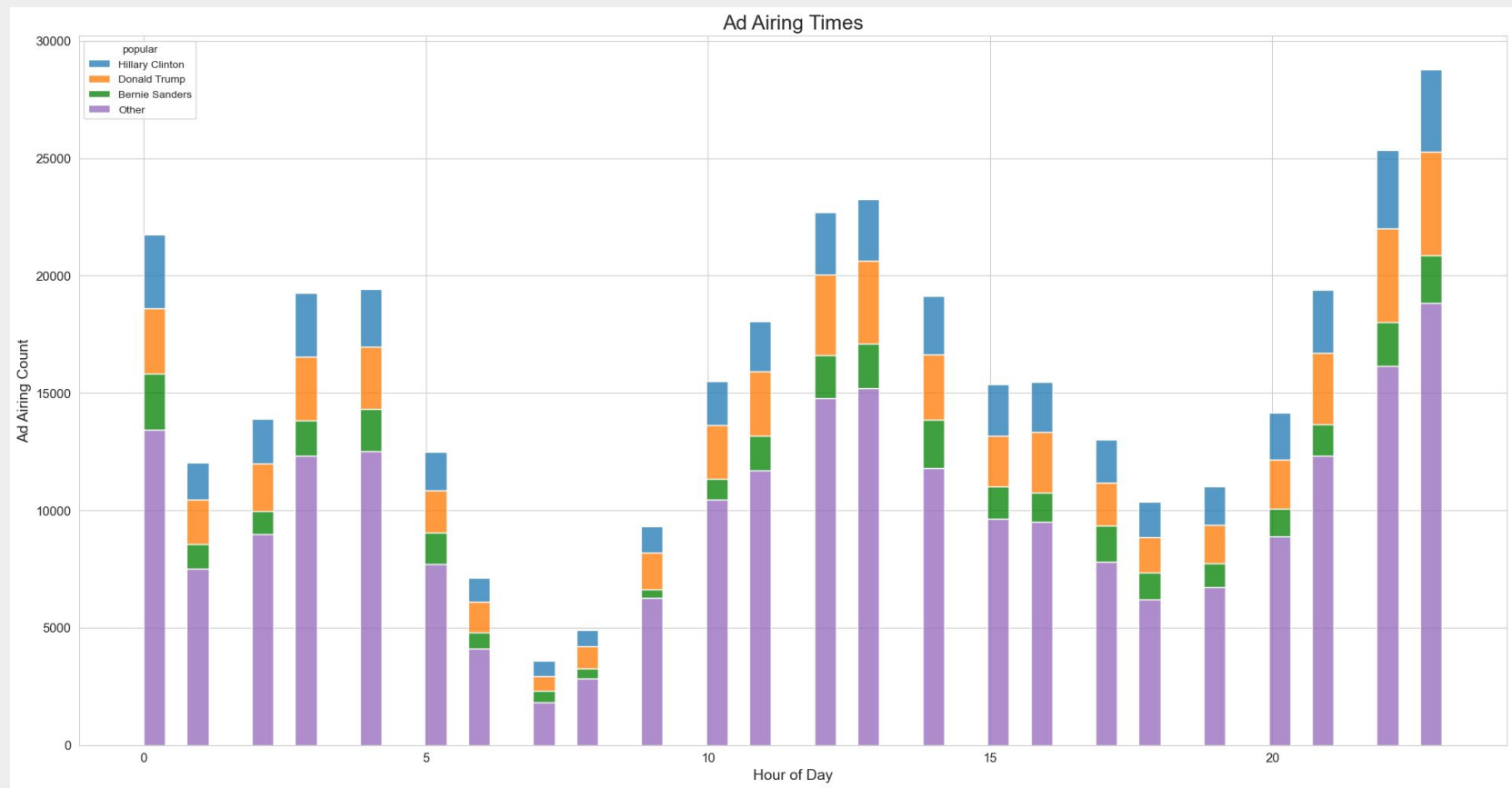
Amount of Ads per Candidate Over Time



Ad Timing: General Election vs Primary Election



Ad Timing: Hour of Day



Conclusion

WHERE

- Cities with the most ads aired appeared to be in metropolitan areas within influential swing states

WHO

- Trump had most negative ads
- Proportionally, Trump and Clinton had a close amount of Fact-Checked ads
- Alarming amount of non-fact checked ads circulating

WHEN

- More ads aired during general election
- Most ads aired late at night

THANK YOU!

Questions?



Appendix

	Ad_Length
mean	32.490627
min	14.000000
max	300.000000

