

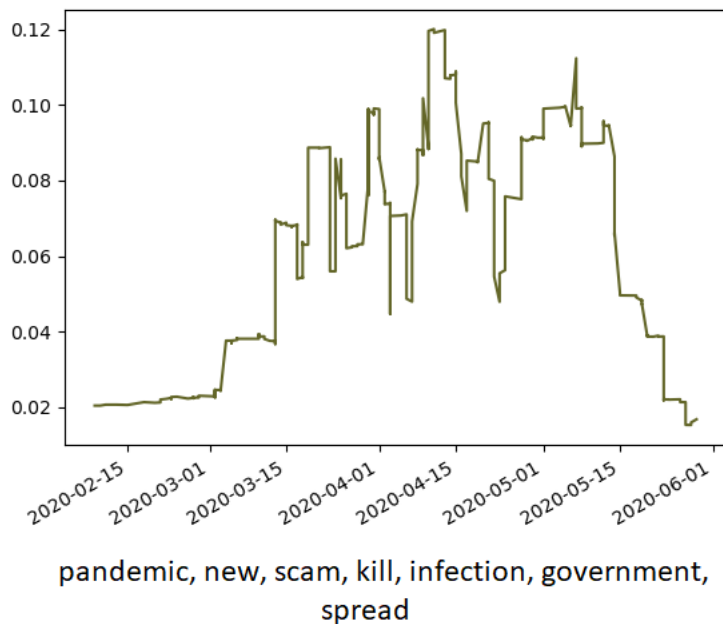
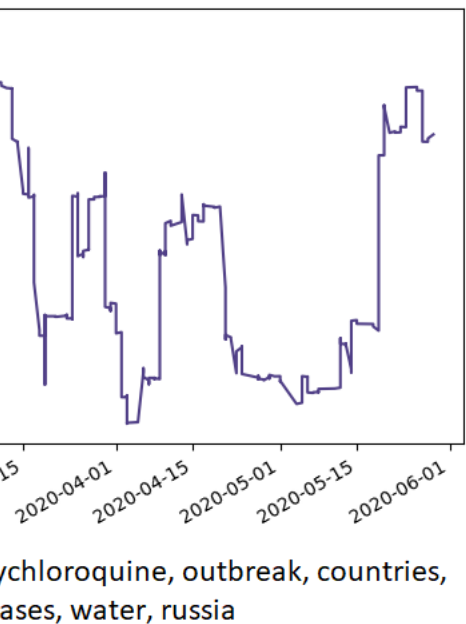
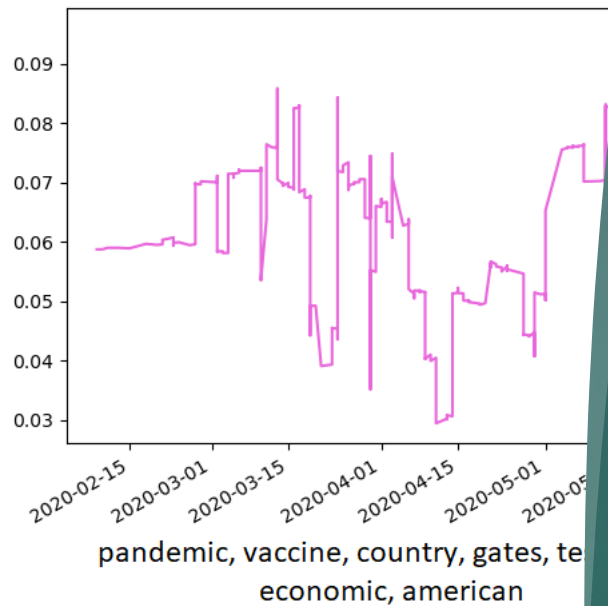
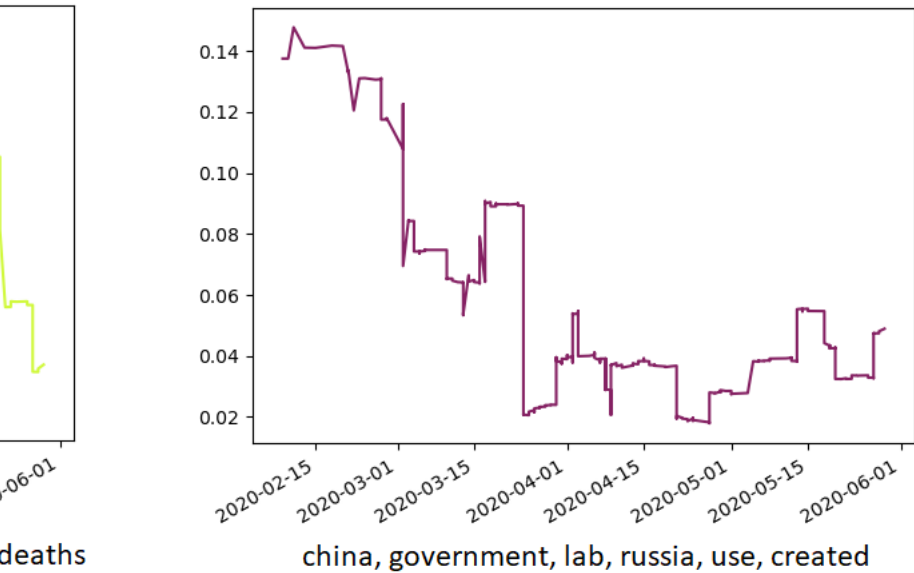
Narrative Trends of COVID-19 Misinformation

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COSMOS

Collaboratorium for Social Media and Online Behavioral Studies



What

REPRESENTATION OF
DISCUSSION TOPICS

Why

- Help policy-makers make informed decisions
- Quickly visualize large data set over time
- Automatically discover latent topics
- Derive meaning from large text corpus
- Useful for journalists, political scientists, sociologists, ...
- Quickly visualize large data set over time

Dataset

- ▶ 243 unique misinformation narratives
- ▶ Manual collection from multiple news aggregators
- ▶ Publicly available at our [COVID response website](#)

COVID-19 MISINFO

This website educates about COVID-19 misinformation and provides tips on how to identify it.

Misinfo Tips Reports Press

Search...

612 Known Misinfo

False Claim: New evidence ties COVID-19 creation to research funded by Facebook.

Updated Date: 10/28/2020 | Reviewed By: staff/ter

False Claim: The COVID-19 vaccine "went out for distribution" in Helsinki 5 days before the FDA even said they were going to approve it.

Updated Date: 10/28/2020 | Reviewed By: staff/ter

False Claim: Doctors and nurses who administer the coronavirus vaccine can be "tested as war criminals."

Updated Date: 10/27/2020 | Reviewed By: staff/ter

More...

52 Tips to Spot Misinfo

Tip: Contact tracing will not cost money. Avoid giving personal bank account information over the phone or buying gift cards to pay in-person artists for fake contact tracing attempts.

Updated: 10/28/2020 | Reviewed: staff/ter

Tip: Avoid clicking on links in emails and text messages unless you signed up to receive the messages.

Updated: 10/28/2020 | Reviewed: staff/ter

Tip: If you receive an unsolicited email or text message from a potential contact tracer, verify its authenticity by contacting the Arkansas Department of Health at ADH.Coronavirus@arkansas.gov or call (800) 852-7847.

Updated: 10/28/2020 | Reviewed: ADH Office

More...

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Center for Social Media and Online
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REPORT
SCAM

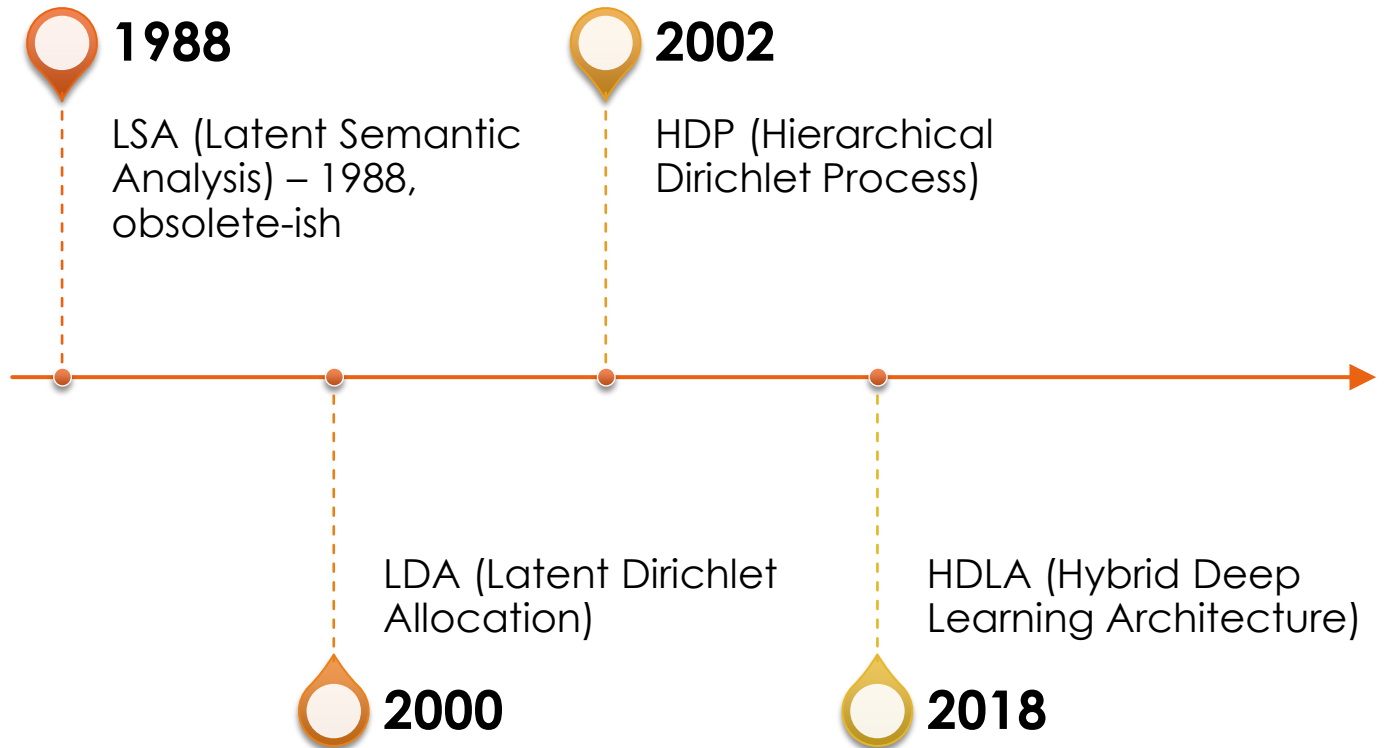
Updated 10/28/2020 10:28 AM




COVID-19 Response Website Demo

Topic Modeling

- ▶ In natural language processing, topic modeling is a statistical model that allows for the discovery of abstract “topics” within a corpus of documents
- ▶ The corpus is divided into n “topics”, each defined as a set of words that best represent one underlying theme of the corpus.

Models



	Topic 0	Topic 1	Topic 2
	0.000	0.000	0.999
	0.999	0.000	0.000
	0.000	0.999	0.000

	Topic 0	Topic 1	Topic 2
Document 0	0.030	0.030	0.939
Document 1	0.939	0.030	0.030
Document 2	0.030	0.939	0.030
Document 3	0.333	0.333	0.333

Document 0



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Document 1



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Document 2






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Document 3




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LDA

	Topic 0	Topic 1	Topic 2
	0.000	0.000	0.999
	0.999	0.000	0.000
	0.000	0.999	0.000
	Topic 0	Topic 1	Topic 2


	Topic 0	Topic 1	Topic 2
Document 0	0.030	0.030	0.939
Document 1	0.939	0.030	0.030
Document 2	0.030	0.939	0.030
Document 3	0.333	0.333	0.333
	Topic 0	Topic 1	Topic 2

Document 0




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Document 1




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Document 2



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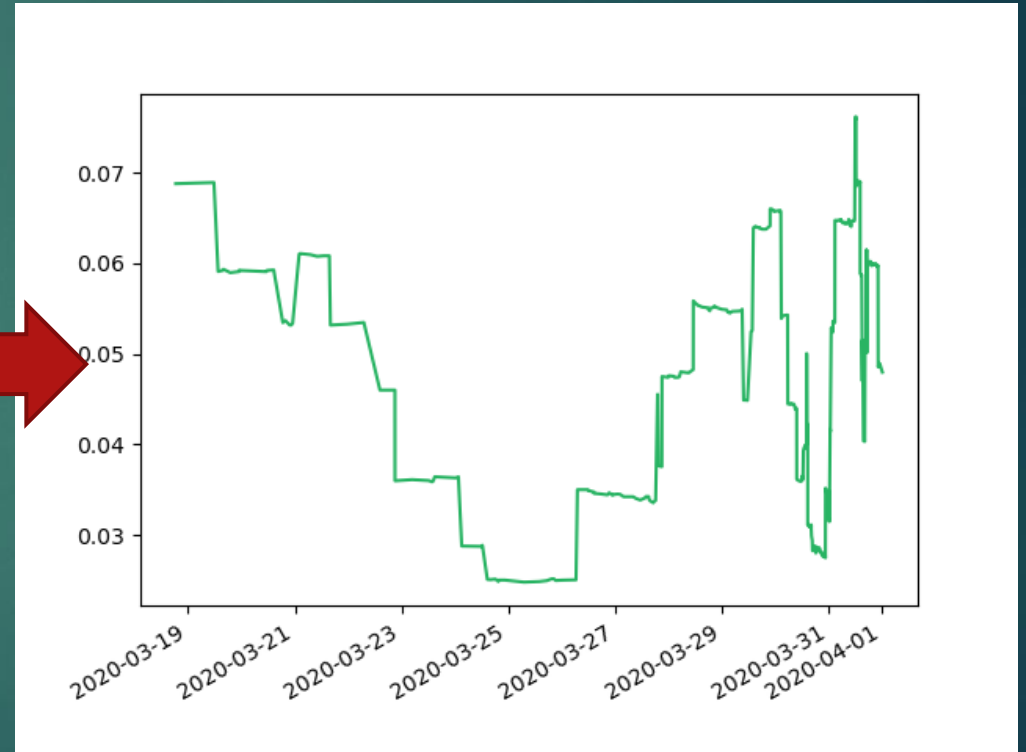
Document 3



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Streams Generation

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2020-03-03 20:53:10	0.016667	0.016667	0.016667	0.016667	0.016667	0.016667
2020-03-04 14:49:07	0.016667	0.016667	0.016667	0.016667	0.683333	0.016667
2020-03-04 20:36:05	0.016667	0.016667	0.016667	0.016667	0.016667	0.016667
2020-03-04 20:40:26	0.05	0.05	0.05	0.05	0.05	0.05
2020-03-05 01:39:39	0.008333	0.008333	0.008333	0.008333	0.008333	0.008333
2020-03-05 04:33:52	0.88125	0.00625	0.00625	0.00625	0.00625	0.00625
2020-03-05 14:14:36	0.01	0.01	0.01	0.01	0.01	0.01



Next steps



- Periodical updates



- Tool integration / web app (JS)



- Integrate advanced ML models (HDLA)



- [Beyond tokens](#)

Thank you