



## Uncover the News

Sandy Weng





## **Objectives**



#### **Exploratory Data Analysis**

Explore the NY Times articles from 2019 to May 2021



#### **Topic Modeling**

Perform topic modeling on the World and US sections



#### Streamlit App

Deploy NMF model to Streamlit



#### Workflow 130,000 articles 02 04 01 03 Text Data **Topic Streamlit Preprocessing** Ingestion Modeling Deploy model API -> MongoDB NMF NLP & TF-IDF





#### **Data Overview**

#### How India Walton Pulled It Off in the **Buffalo Mayoral Primary**

Ms. Walton, 38, a democratic socialist who has never held political office, defeated Byron Brown, a four-term incumbent.



Title

**Abstract** 





A democratic socialist, India B. Walton has never held political office but upset the four-term mayor of Buffalo in the Democratic primary. Libby March for The New York Times



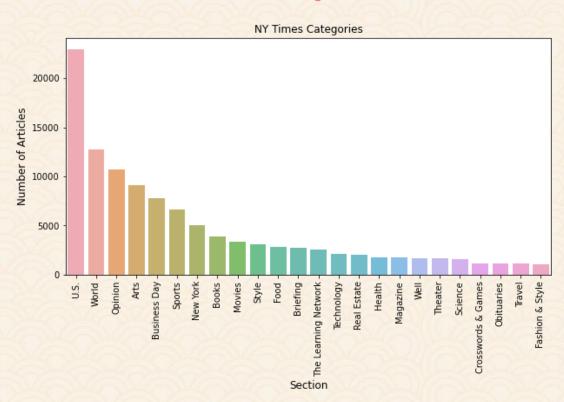


Date





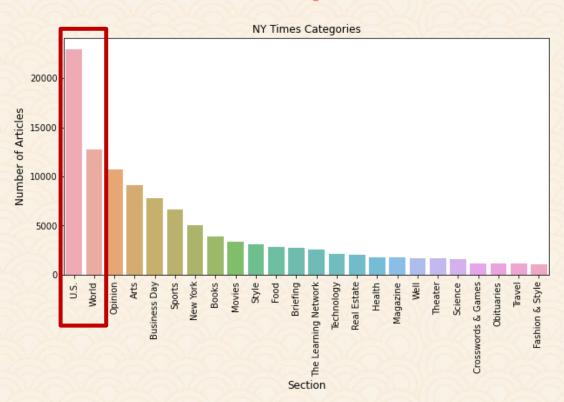
## **Data Exploration**







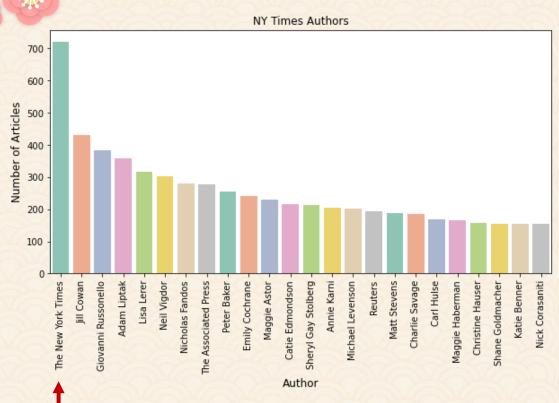
## **Data Exploration**







## **Findings**



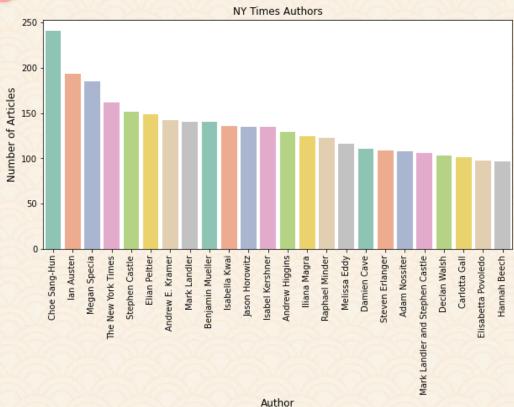
- Over 700 articles had the author 'The New York Times'
- Jill Cowan California correspondent







## **Findings**



- Choe Sang-Hun
  - Seoul bureau chief reporting on North and South Korea



## **Domestic News Topic Modeling**



#### **Donald Trump**

president, trump, impeachment, donald



#### George Floyd

police, death, chauvin, officer



#### Covid-19

officials, pandemic, health, country



#### 2020 Election

presidential, democratic, debate, candidates



#### Joe Biden

president elect, harris, joseph, victory



# Supreme Court Appointment

justice, judge, barrett, court



#### **Heads of State**

minister, johnson, trudeau, netanyahu



#### Korea

north, south, nuclear, kim

#### **World News**



#### Covid-19

coronavirus, restrictions, outbreak, spread



#### Hong Kong Protests

beijing, chinese, protest, communist



#### **Britain**

parliament, deal, brexit, european



#### Israel-Palestine

Netanyahu, election, gaza, israeli

#### Coronavirus

officials, pandemic, health, country



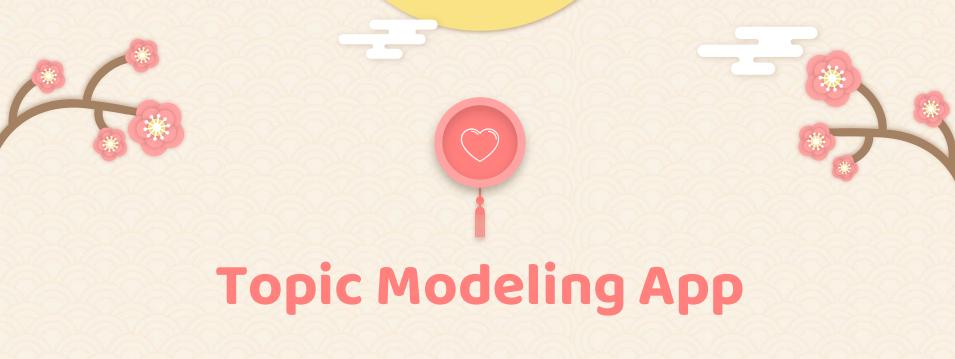
"President Biden signed two
executive orders Friday
directing more federal aid to
Americans struggling due to
the coronavirus pandemic and
laying the groundwork to
institute a minimum wage for
federal employees."



coronavirus, restrictions outbreak, spread

"France strengthened border controls and extended a curfew to the entire country on Thursday to keep the coronavirus in check but authorities warned that new restrictions were possible in the coming days if the epidemic worsened."





NMF modeling on the most shared NY Times articles on Facebook in the last 7 days



#### **Topic Modeling**



#### **Future Work**

- o Work on the app
  - Add more functions
  - o Incorporate more news outlets

o More unit testing









# Thank you!







## Appendix

The New York Times Distorts the Palestinian Struggle

THE New York Times DISTORTS THE PALESTINIAN STRUGGLE A CASE STUDY OF ANTI-PALESTINIAN BIAS IN AMERICAN NEWS COVERAGE OF THE FIRST AND SECOND PALESTINIAN INTIFADAS

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