



The Balanced Perspective

Team 4: Sergio Valdez, Yuliana Jasso

Background

Extracting the “truth” from the news can be a challenging endeavor. There are numerous outlets and news information that we can read but finding the time to cross reference the information yourself can be difficult.

Our goal was to use classification and transformers to generate summaries of articles that will hopefully not be biased.

Several challenges we faced include: limited websites to obtain our data, finding ways to evaluate summaries, changing our classification model

Gathering Our Data

For our data, we webscraped articles from various news websites that span the political spectrum:

```
# Sample data with political party information
data = [
  {"political party": "Left", "url": 'https://www.alternet.org/louisianas-in-god-we-trust-law-tests-limits-of-religion-in-public-schools/'},
  {"political party": "Left", "url": 'https://www.alternet.org/trump/shiver-down-the-spine-reporter-explains-which-witness-keeps-trump-up-at-night-2666088526/'},
  {"political party": "Left", "url": 'https://www.alternet.org/comer-admits-he-doesnt-want-more-biden-hearings/'},
  {"political party": "Left", "url": 'https://www.alternet.org/trump-lawyers-grifters-shysters/'},
  {"political party": "Left", "url": 'https://www.alternet.org/wisconsin-supreme-court-2666086431/'},
  {"political party": "Left", "url": 'https://www.alternet.org/send/tapper-mtg/'},
  {"political party": "Left", "url": 'https://www.alternet.org/msn-uk/jenna-ellis-chesebro/'},
  {"political party": "Left", "url": 'https://www.alternet.org/taking-the-5th-won-t-save-trump-family-members-in-judge-engoron-s-courtroom-2666094129/'},
  {"political party": "Left", "url": 'https://www.alternet.org/the-right-wing/trump-christie/'},
  {"political party": "Left", "url": 'https://www.alternet.org/jenna-ellis-is-poised-to-become-trump-s-worst-nightmare-legal-experts-2666093680/'},

  {"political party": "Left", "url": 'https://www.alternet.org/mike-pence-2666093417/'},
  {"political party": "Left", "url": 'https://www.alternet.org/political-consequences-watergate-prosecutor-explains-why-trump-isn-t-in-jail-yet-2666093558/'},
  {"political party": "Left", "url": 'https://www.alternet.org/the-right-wing/mike-johnson-2666086402/'},
  {"political party": "Left", "url": 'https://www.theatlantic.com/politics/archive/2023/10/dean-phillips-joe-biden-2024-primary/675784/'},

  {"political party": "Center", "url": 'https://www.factcheck.org/2023/06/trumps-dubious-promise-to-end-birthright-citizenship/'},
  {"political party": "Center", "url": 'https://www.bbc.com/news/world-us-canada-67453674'},
  {"political party": "Center", "url": 'https://www.bbc.com/news/world-middle-east-67455962'},
  {"political party": "Center", "url": 'https://www.bbc.com/news/world-us-canada-67446313'},
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  {"political party": "Center", "url": 'https://www.bbc.com/news/av/world-us-canada-65381555'},
  {"political party": "Center", "url": 'https://www.bbc.com/news/world-us-canada-67433961'},

  {"political party": "Right", "url": 'https://www.oann.com/newsroom/brad-wenstrup-announces-he-will-not-seek-re-election-in-2024/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/republicans-work-to-ban-biden-admins-use-of-term-latinx-backed-by-several-hispanic-dems/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/jill-stein-announces-2024-presidential-bid-as-green-party-candidate/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/white-house-israel-will-hold-4-hour-daily-humanitarian-pauses-in-gaza-conflict/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/house-gop-proposes-to-slash-buttigieg-salary-to-1-via-spending-bill/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/sen-joe-manchin-not-running-for-re-election/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/manchin-says-he-would-absolutely-consider-presidential-run/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/michigan-judges-rejects-efforts-to-keep-trump-off-election-ballot/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/biden-and-xi-discuss-pressing-issues-at-apec-conference/'},
  {"political party": "Right", "url": 'https://www.oann.com/newsroom/trump-seeks-mistrial-in-n-y-business-fraud-case/'}
```


Gathering Our Data

We, then, created a CSV file to save the data, used requests and beautifulsoup to extract headline and content, and finally, wrote our data to a CSV file.

```
✓ 2m # Create a CSV file to save the data
csv_file = 'political_data.csv'

# Write data to the CSV file
with open(csv_file, mode='w', newline='', encoding='utf-8') as file:
    fieldnames = ["political party", "header", "content"]
    writer = csv.DictWriter(file, fieldnames=fieldnames)
    writer.writeheader()

    for item in data:
        url = item['url']
        response = requests.get(url)
        html = response.text
        soup = BeautifulSoup(html, 'html.parser')

        # Extract the headline and content
        headline = soup.find('h1').text.strip() if soup.find('h1') else ''
        article = soup.find('article')

        if article:
            # Extract the content of the article
            paragraphs = article.find_all('p')
            content = "\n".join(paragraph.text.strip() for paragraph in paragraphs)
        else:
            content = ''

        # Write the data to the CSV file
        writer.writerow({"political party": item["political party"], "header": headline, "content": content})

print(f'Data has been saved to {csv_file}')
```

Data has been saved to political_data.csv

Gathering Our Data

We gathered 300 articles in total. 100 for Left, 100 for Center, and 100 for Right biased political news.

webscraping-data.ipynb

File Edit View Insert Runtime Tools Help

Files

political_data.csv

sample_data

political_data.csv

political_data.csv

political_party

header

content

Left

Right

Center

1 to 10 of 300 entries

Filter

Shiver down the spine: Reporter explains which witness keeps Trump up at night

Left

Corner admits he doesn't want more Biden hearings

Left

When Louisiana passed a law in August 2023 requiring public schools to post "In God We Trust" in every classroom -- from elementary school to college -- the author of the bill claimed to be following a long-held tradition of displaying the national motto, most notably on U.S. currency. But even under recent Supreme Court precedents, the Louisiana law may violate the establishment clause of the First Amendment, which prohibits the government from promoting religion. I make this observation as one who has researched and written extensively on issues of religion in the public schools. The Louisiana law specifies that the motto "shall be displayed on a poster or framed document that is at least 11 inches by 14 inches. The motto shall be the central focus ... and shall be printed in a large, easily readable font." The law also states that teachers should instruct students about the phrase as a way of teaching "patriotic customs." Similar bills are being promoted by groups like the Congressional Prayer Caucus Foundation, a nonprofit that supports members of Congress who meet regularly to defend the role of prayer in government. To date, 26 states have considered bills requiring public schools to display the national motto. Seven states, including Louisiana, have passed laws in this regard. The Supreme Court has long treated public schools as an area where government-promoted religious messaging is unconstitutional under the First Amendment's establishment clause. For example, the Supreme Court held in 1962, 1963, 1992 and 2000 that prayer in public schools is unconstitutional either because it favored or endorsed religion or because it created coercive pressure to religiously conform. In 1980, the court also struck down a Kentucky law requiring the Ten Commandments to be posted in classrooms. At the same time, the court has protected private religious expression and individual public schools. The court has also been divided on issues of religious expression on the heels of a pivotal court case. In the 2022 case Kennedy v. Bremerton School District, the court overruled more than 60 years of precedent when it ruled that a public school football coach's on-field, postgame prayer did not violate the establishment clause. In doing so, the court rejected long-standing legal tests, holding instead that courts should look to history and tradition. The problem with using history and tradition as a broad test is that it can change from one context to the next. People -- including lawmakers -- are apt to ignore the negative and troubling lessons of U.S. religious history. Prior to the Kennedy decision, history and tradition were used by a majority of the court to decide establishment clause cases only in specific contexts, such as legislative prayer and war memorials. Now, states like Louisiana are trying to use history and tradition to bring religion into public school classrooms. Contrary to what people often assume, the phrase "In God We Trust" has not always been the national motto. It first appeared on coins in 1864, during the Civil War, and in the following decades it sparked controversy. In 1907, President Theodore Roosevelt urged Congress to drop the phrase from new coins, saying it "does positive harm, and is in effect irreverence, which comes dangerously close to sacrilege." In 1956, amid the Cold War, "In God we Trust" became the national motto. The phrase first appeared on paper money the next year. It was a time of significant fear about communism and the Soviet Union, and atheism was viewed as part of the "communist threat." Atheists were subject to persecution during the Red Scare and afterward. Since then, the motto has stuck. Over the years, legal challenges attempting to remove the phrase from money have failed. Courts have generally understood the term as a form of ceremonial deism or civic religion, meaning religious practices or expressions that are viewed as being merely customary cultural practices. Even after the Kennedy ruling, the Louisiana law may still be unconstitutional because students are a captive audience in the classroom. Therefore, the mandate to hang the national motto in classrooms could be interpreted as a form of religious coercion. But because the law requires a display rather than a religious exercise like school prayer, it may not violate what has come to be known as the indirect coercion test. This test prevents the government from conducting a formal religious exercise that places strong social or peer pressure on students to participate. The outcome of any constitutional challenge to the Louisiana law is far from clear. Prior cases involving the Pledge of Allegiance offer one example. Though the Supreme Court dismissed on standing grounds the only establishment clause challenge to the pledge it has considered, lower courts have held that reciting the pledge in schools is constitutional for a variety of reasons. These reasons include the idea that it is a form of ceremonial deism and the fact that since 1943 students have been exempt from having to say the pledge if it violates their faith to do so. The Louisiana law, however, requires instruction about the national motto. If the law is challenged in court and upheld, teachers could teach that the motto was adopted when the nation was emerging from the fear of communism and fear of communism was widespread. Moreover, they could teach that many people of faith throughout U.S. history would have viewed this sort of display as against U.S. ideals. More than two centuries before Roosevelt argued that it was sacrilegious to put "In God We Trust" on coins, the Puritan minister and Colonel Roger Williams famously proclaimed that "forced worship sinks in God's nostrils." Williams founded the colony of Rhode Island, at least in part, to promote religious freedom. Additionally, there is no prohibition on alternative designs for the national motto posters as long as the motto is "the central focus of the poster." In Texas, a parent donated rainbow-colored "In God We Trust" signs and others written in Arabic, which were subsequently rejected by a local school board. This situation, which gained significant media attention, brought the question of religious expression in public schools to the Supreme Court. It could be argued that accepting wall hangings that favor Christocentric viewpoints -- and rejecting those that reflect other religions or add symbols such as the rainbow -- is religious discrimination by government. If so, schools might be required to post alternative motto designs that meet the letter of the new law in order to uphold free speech rights and prevent religious discrimination. The Louisiana law would have been brazenly unconstitutional just two years ago. But after the Kennedy decision, the law may survive a potential legal challenge. Even if it does, one thing is for certain: It will be divisive. Frank S. Ravitch, Professor of Law & Walter H. Stowers Chair of Law and Religion, Michigan State University. This article is republished under the Creative Commons license. Read the original article.

He's the White House key master. CBS Correspondent Scott MacFarlane suggests that the immunity Mark Meadows' took in exchange for testifying in the federal presidential election subversion trial, spells big trouble for Trump and his inner sanctum. "Mark Meadows, according to my contacts on the Jan. 6 [House Select] Committee, has the keys to the castle," he said, appearing opposite co-host Mark McKinnon in a promo of an upcoming episode of Showtime's "The Circus". He continued: "One of their top investigators says there's nobody more important to talk to than Mark Meadows -- by leaps and bounds." According to MacFarlane's sources close to the committee, they tell him that, because of both Meadows' text messages and data they gleaned from him -- "he has potentially the most damning evidence in any investigation of Donald Trump." Meadows in the waits to potentially give up the goods on his former boss, MacFarlane suspects, is leading to many sleepless nights in Mar-a-Lago because he knows what alleged action and also inaction took place on behalf of the 45th president on Jan. 6, 2021. "Him talking to the special counsel has got to send a shiver down the spine of Trump's team and likely the former president himself," he said. Watch the video below or click here.

Newly-sworn-in Republican Speaker Mike Johnson wants the House of Representatives to continue the impeachment inquiry started by his predecessor, Kevin McCarthy, despite the lead impeachment proponent and investigator, Oversight Committee Chairman Jim Comer, having made clear he does not want any more hearings. Johnson, in his Thursday interview with Fox News' Sean Hannity admitted he would support -- or at least not block -- an impeachment attempt against President Biden to move forward, because the base wants it. "I know people are getting anxious and they're getting restless and they just want somebody to be impeached," Johnson said, as The Washington Post's Philip Bump reported Friday. "But that's not -- we don't do that like the other team," he claimed, referring to Democrats. "We have to base it upon the evidence, and the evidence is coming together. We'll see where it leads." READ MORE: Mike Johnson Once Agreed to Speak at 'Kill the Gays' Pastor's Conference -- Until an NCRCM Report Bump called Johnson's remarks "a pretty generous assessment of the process so far. Comer and his colleagues, including House Judiciary Committee Chairman Jim Jordan (R-Ohio) have repeatedly presented new allegations as proof of Biden's wrongdoing -- only to have them slowly be revealed as incomplete, misleading or unimportant. The loan repayment from Biden's brother that Comer hyped last week is just such an example, presented as money flowing to Biden in proof of Comer's long-standing allegations, before the money became obvious." Johnson Thursday night also told Hannity "If, in fact, all the evidence leads to where we believe it will, that's very likely impeachable offenses." But just hours earlier on Thursday, apparently having been unable to come up with any actual proof of any Biden

Methods

CNN for classification: We built a cnn model that helps us determine the political lean of the articles that we want to summarise and help us determine if the generated summaries are more balanced

Transformer Pegasus: Transformer-based model for abstractive summarization that we used to generate a summary that hopefully will generate a less biased summary.

CNN Model

```
class PoliticalAffiliationCNN(nn.Module):
    def __init__(self, vocab_size, embedding_dim, num_classes, filter_sizes, num_filters, dropout_prob):
        super(PoliticalAffiliationCNN, self).__init__()

        # Embedding layer
        self.embedding = nn.Embedding(vocab_size, embedding_dim)

        # Convolutional layers
        self.conv_layers = nn.ModuleList([
            nn.Conv2d(1, num_filters, (fs, embedding_dim)) for fs in filter_sizes
        ])

        # Fully connected layer
        self.fc = nn.Linear(num_filters * len(filter_sizes), num_classes)

        # Dropout layer
        self.dropout = nn.Dropout(dropout_prob)
```


CNN Model

```
24 def forward(self, x):
25     # Embedding layer
26     embedded = self.embedding(x)
27     embedded = embedded.unsqueeze(1) # Add channel dimension
28
29     # Convolutional layers with ReLU activation and max pooling
30     conved = [F.relu(conv(embedded)).squeeze(3) for conv in self.conv_layers]
31
32     # Max pooling over time
33     pooled = [F.max_pool1d(conv, conv.size(2)).squeeze(2) for conv in conved]
34
35     # Concatenate the pooled features
36     cat = torch.cat(pooled, dim=1)
37
38     # Dropout
39     cat = self.dropout(cat)
40
41     # Fully connected layer
42     logits = self.fc(cat)
43
44     return F.softmax(logits, dim=1)
45
```


Accuracy of our Trained CNN

```
1 label_to_index = {"Left": 0, "Right": 1, "Center": 2}
```


```
[5.8592e-01, 2.5696e-01, 1.5711e-01],  
[1.0783e-03, 9.9881e-01, 1.1467e-04],  
[1.6149e-02, 9.8319e-01, 6.6487e-04],  
[9.9999e-01, 9.3658e-06, 1.6234e-06]])  
Predicted Classes: tensor([0, 2, 2, 2, 0, 1, 2, 2, 0, 2, 0, 1, 1, 2, 1, 2, 0, 1, 2, 0, 1, 2, 2, 0,  
2, 1, 2, 1, 2, 0, 0, 0, 1, 0, 1, 1, 2, 1, 1, 1, 2, 2, 2, 0, 0, 0, 1, 2,  
2, 0, 1, 1, 0, 0, 2, 0, 0, 1, 1, 0])  
Actual Classes: tensor([0, 2, 0, 2, 0, 2, 1, 1, 0, 1, 0, 1, 0, 1, 1, 2, 0, 1, 2, 0, 0, 2, 0, 0,  
2, 2, 2, 1, 2, 0, 2, 0, 1, 0, 1, 1, 2, 1, 1, 0, 1, 2, 0, 0, 0, 0, 1, 1,  
2, 0, 1, 1, 2, 0, 2, 1, 1, 1, 1, 0])  
Test Accuracy: 0.7
```

Pegasus

In PEGASUS, important sentences are removed/masked from an input document and are generated together as one output sequence from the remaining sentences.

- Extractive summarization involves identifying important sections from text and generating them verbatim which produces a subset of sentences from the original text.
- Abstractive summarization uses natural language techniques to interpret and understand the important aspects of a text and generate a more “human” friendly summary.

Pegasus is abstractive.



```
# Define a function to summarize an article
def summarize_article(article, model_transformers):
    inputs = pegasus_tokenizer.encode(article, return_tensors='pt', truncation=True, max_length=max_length)
    summary_ids = model_transformers.generate(inputs, max_length=max_length, num_beams=5, early_stopping=True)
    summary = pegasus_tokenizer.decode(summary_ids[0], skip_special_tokens=True)
    return summary

# Load your external article
```

Articles fed to the pegasus transformer

articles.csv		1 to 3 of 3 entries	
political party	header	content	
Left	Judge Issues Gag Order Against Trump After Personal Attacks On Law Clerk	<p>A New York judge overseeing Donald Trump's civil fraud case has issued a limited gag order on the indicted ex-president, after the defendant publicly disparaged one of the judge's law clerks and posted her photo. "This morning one of the defendants posted on his social media account a disparaging, untrue and personally identifying post about a member of my staff," Judge Arthur Engoron said on Tuesday, the second day of Trump's trial. The judge's comments are referring to a post Trump made on Truth Social earlier that day disparaging Engoron's principal law clerk, Allison Greenfield. The post included a photo of Greenfield with Senate Majority Leader Chuck Schumer (D-N.Y.) at an event for the clerk's campaign for a judgeship in Manhattan civil court. "Schumer's girlfriend, Allison R. Greenfield, is running this case against me," Trump said in the post. "How disgraceful! This case should be dismissed immediately!" Engoron said that he had warned Trump a day earlier about making such comments, but that the defendant ignored him. Trump's post was later deleted after Engoron ordered it so on Tuesday, according to the judge. "Personal attacks on members of my court staff are unacceptable, inappropriate and I won't tolerate them in any circumstances," Engoron said. "Failure to abide by this order will result in serious sanctions." "Consider this statement a gag order forbidding all parties from posting, emailing or speaking publicly about any of my staff." Trump, his adult sons and his businesses are being sued for up to \$250 million over what prosecutors in New York argue is persistent business fraud. The indicted GOP front-runner for president has denied wrongdoing and repeatedly cast the case as a political attack by New York Attorney General Letitia James, who filed the lawsuit. Trump posted the attack while the trial was still in its morning session. Since the non-jury trial began on Monday, reporters note Greenfield has been sitting immediately to the right of Engoron and directly in front of Trump. The order by Engoron comes as a federal judge in Washington decides whether to grant prosecutors' request for a more severe gag order on the indicted ex-president in the Justice Department's case about efforts to overturn the 2020 election. Prosecutors in that case allege that Trump has repeatedly harassed and intimidated witnesses, and fueled threats against the court and prosecutors. At HuffPost, we believe that everyone needs high-quality journalism, but we understand that not everyone can afford to pay for expensive news subscriptions. That is why we are committed to providing deeply reported, carefully fact-checked news that is freely accessible to everyone. Our News, Politics and Culture teams invest time and care working on hard-hitting investigations and researched analyses, along with quick but robust daily takes. Our Life, Health and Shopping desks provide you with well-researched, expert-vetted information you need to live your best life, while HuffPost Personal, Voices and Opinion center real stories from real people. Help keep news free for everyone by giving us as little as \$1. Your contribution will go a long way. At HuffPost, we believe that everyone needs high-quality journalism, but we understand that not everyone can afford to pay for expensive news subscriptions. That is why we are committed to providing deeply reported, carefully fact-checked news that is freely accessible to everyone. Help keep news free for everyone by giving us as little as \$1. Your contribution will go a long way. As the 2024 presidential race heats up, the very foundations of our democracy are at stake. A vibrant democracy is impossible without well-informed citizens. This is why HuffPost's journalism is free for everyone, not just those who can afford expensive paywalls. We cannot do this without your help. Support our newsroom by contributing as little as \$1 a month. As the 2024 presidential race heats up, the very foundations of our democracy are at stake. At HuffPost, we believe that a vibrant democracy is impossible without well-informed citizens. This is why we keep our journalism free for everyone, even as most other newsrooms have retreated behind expensive paywalls. Our newsroom continues to bring you hard-hitting investigations, well-researched analysis and timely takes on one of the most consequential elections in recent history. Reporting on the current political climate is a responsibility we do not take lightly — and we need your help. Support our newsroom by contributing as little as \$1 a month. Reporter, HuffPost Do you have info to share with HuffPost reporters? Here's how. By entering your email and clicking Sign Up, you're agreeing to let us send you customized marketing messages about us and our advertising partners. You are also agreeing to our Terms of Service and Privacy Policy.</p>	
	Judge Imposes Gag Order On Trump In Fraud Case	<p>The judge overseeing a civil trial accusing former President Donald Trump and his company of fraud imposed a gag order Tuesday, after the former president posted a disparaging social media post about one of the judge's clerks. Former President Donald Trump speaks to the media as he arrives at New York State Supreme court for ... [+] the second day of the civil fraud trial against him on October 3 in New York City. The gag order prohibits parties in the case—including but not limited to Trump—from "posting, emailing or speaking publicly" about members of the New York City court's staff, Politico reports. Judge Arthur Engoron imposed the gag order Tuesday on the second day of Trump's trial, in which New York Attorney General Letitia James accuses the former president and his company of fraudulently inflating the value of their assets to obtain more favorable business deals and boost Trump's net worth. The gag order came after Trump posted on Truth Social about one of Engoron's clerks, calling her "Chuck Schumer's girlfriend" and sharing a picture of her with the Senate majority leader along with a link to the clerk's Instagram account. The post was later removed, which the Associated Press notes came after Trump, his attorneys and the AG's attorneys had a closed-door meeting during the trial's lunch break. Engoron said he ordered the post to be deleted, but it was viewed by "millions of people" first, Law360 reports. "Personal attacks on members of my court staff are unacceptable, inappropriate and I will not tolerate them in any circumstances," Engoron said Tuesday, as quoted by Politico. The trial is set to continue through December—with Trump expected to testify—and could result in Trump and his business associates facing such penalties as a \$250 million fine and prohibitions on commercial real estate acquisitions or running a New York business for the next five years. Engoron has also threatened "serious sanctions" should any parties in the case violate the gag order. The gag order in New York comes as Trump's attorneys and the Justice Department have separately been arguing over imposing a gag order on Trump in the federal case against him for trying to overturn the 2020 election. Special counsel Jack Smith, who's overseeing the investigation, has asked the court to put a gag order on Trump based on his "sustained campaign of prejudicial public statements" against witnesses and others involved with the case, citing a number of social media posts Trump has published attacking various potential witnesses in the case, including former Vice President Mike Pence and Attorney General William Barr. District Judge Tanya Chutkan has not yet ruled on the request, and a hearing is set for October 16. James sued Trump, his company and business associates—including his children—in November 2022, arguing the ex-president and his company had made more than 200 false statements that misstated the value of his assets to get more favorable business deals and inflate his own net worth. The lawsuit takes issue with valuations on a number of Trump's properties, including that the former president exaggerated the size of his penthouse in Trump Tower and overvalued his Mar-A-Lago estate in Florida. Trump has denied the allegations</p>	
Right	Judge issues gag order in Trump fraud trial after ex-president posts about court clerk	<p>Oct. 3 (UPI) — The judge in Donald Trump's multimillion dollar business fraud trial in New York City issued a partial gag order Tuesday after the former president blasted the judge's law clerk in a post on social media. New York State Supreme Court Justice Arthur Engoron issued the order on the second day of the civil trial after Trump posted a photo Tuesday morning of court clerk Allison Greenfield with Senate majority leader Chuck Schumer, D-N.Y., on his Truth Social site. Trump captioned the photo "Schumer's girlfriend," arguing that his case should be dismissed because she is "running this case against me." The post was removed several hours later. "Consider this a gag order on all parties with respect to posting or publicly speaking about any member on my staff," Engoron announced Tuesday afternoon. "This morning one of the defendants posted on a social media account a disparaging, untrue and personally identifying post about a member of my staff. Although I have since ordered the post deleted and apparently it was, it was also emailed out to millions of other recipients," the judge said. "Personal attacks on my members of my court staff are unacceptable, inappropriate and I will not tolerate them under any circumstances," Engoron added, while threatening nonspecific "serious sanctions." The limited gag order bans any emails, posts or public remarks about the judge's staff. Trump's presidential campaign has criticized Engoron as a "far-left Democrat," in emails and has accused Engoron of political bias. The former president claims Engoron is trying to hurt him politically since he is the only front-runner for the Republican 2024 presidential nomination. Trump told reporters Tuesday that the judge, who he called a "Trump-hater," is trying to "interfere with an election and it's a disgrace." Trump has also blasted New York Attorney General Letitia James, calling her a "fraud" and said "she should probably be dismissed also." "She used this to run for governor. She failed in her attempt to run for governor," Trump said of James before Monday's hearing. "She had virtually no following. She came back and she said, 'Well, now I will go back to get Trump again.' And this is what we have. It is a scam and a sham." In her case, James has accused Trump, his two adult sons Donald Trump Jr. and Eric Trump, and the Trump organization of "staggering fraud" for inflating the values of his real estate properties by more than \$2 billion to gain tax benefits and secure favorable loan and insurance terms. James is seeking \$250 million in damages, along with a ban that would keep the Trumps from doing business in New York. In a pretrial ruling last week, Engoron dissolved Trump's companies that are responsible for running his New York real estate after finding the former president liable for fraud.</p>	
Show 10 per page		2s completed at 4:20 AM	

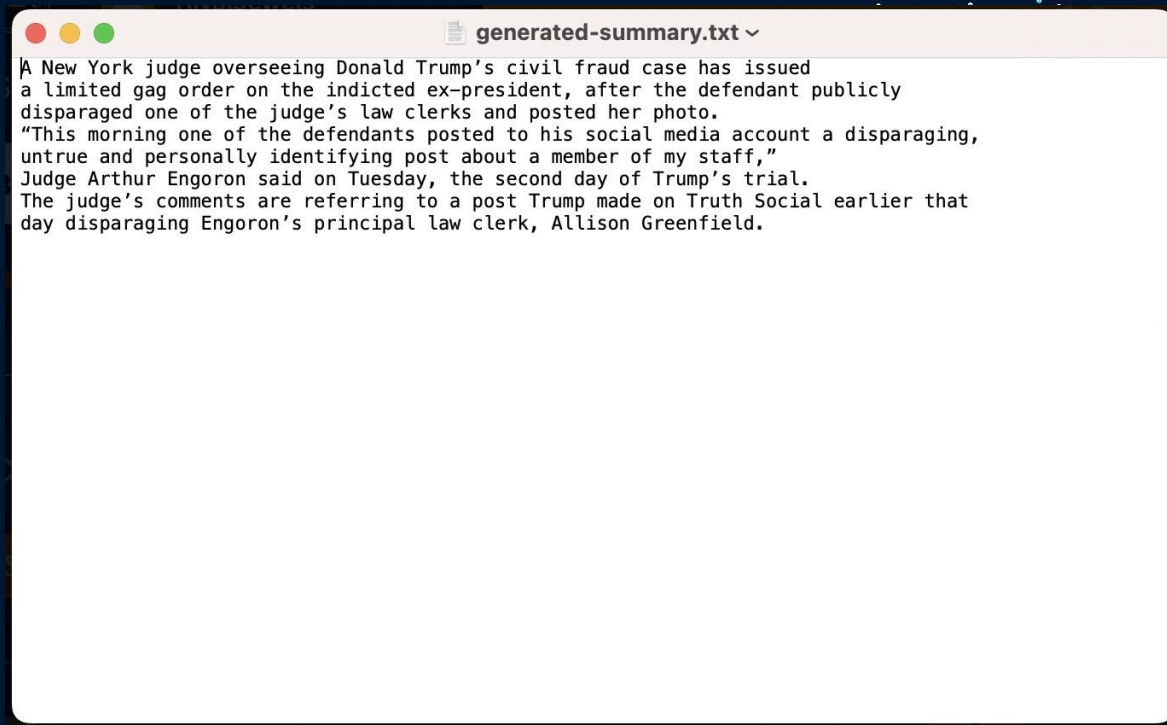
Evaluation of Articles

After getting the three articles that we want to summarize we feed them through our classification model.

```
1 label_to_index = {"Left": 0, "Right": 1, "Center": 2}
```

```
[(tensor([[1.0000e+00, 2.8829e-07, 5.6316e-07]]), 0), (tensor([[0.2200, 0.2685, 0.5115]]), 2), (tensor([[0.3777, 0.4262, 0.1961]]), 1)]
```

Generated summary



Evaluation of Summary

```
1 label_to_index = {"Left": 0, "Right": 1, "Center": 2}
```

```
[ ] 1 print(classify_article(summary))
```

```
(tensor([[0.5033, 0.1737, 0.3229]]), 0)
```

Further Evaluation

```
1 def calculate_coverage(generated_summary, input_articles):
2     # Tokenize input articles and summary
3     input_tokens = set(word_tokenize(" ".join(input_articles)))
4     summary_tokens = set(word_tokenize(generated_summary))
5
6     # Calculate coverage
7     entity_coverage = len(summary_tokens.intersection(input_tokens)) / len(input_tokens)
8     return entity_coverage
9
10 entity_coverage = calculate_coverage(summary, articles)
11 print("Entity and Keyword Coverage:", entity_coverage)
12
```

Entity and Keyword Coverage: 0.11143695014662756

Further Evaluation



```
1 from textblob import TextBlob
2
3 def analyze_sentiment(text):
4     blob = TextBlob(text)
5     sentiment_score = blob.sentiment.polarity
6     return sentiment_score
7
8 input_sentiment_scores = [analyze_sentiment(article) for article in articles]
9 summary_sentiment_score = analyze_sentiment(summary)
10
11 # Print sentiment scores
12 print("Sentiment Scores for Input Articles:", input_sentiment_scores)
13 print("Sentiment Score for Generated Summary:", summary_sentiment_score)
14
```

Sentiment Scores for Input Articles: [0.03284215784215785, 0.0780619477987899, -0.0011415172129457826]
Sentiment Score for Generated Summary: 0.016450216450216448

Further Evaluation

```
1 from bert_score import score
2 lst = [summary]
3 lang = "en"
4
5 _, _, bert_score_input = score(lst, [" ".join(articles)], lang=lang)
6
7 # Print BERTScore for comparison
8 print("BERTScore for Generated Summary vs. Input Articles:", bert_score_input.mean().item())
9
```



config.json: 100%	<div></div>	482/482 [00:00<00:00, 7.05kB/s]
vocab.json: 100%	<div></div>	899k/899k [00:00<00:00, 4.57MB/s]
merges.txt: 100%	<div></div>	456k/456k [00:00<00:00, 3.54MB/s]
tokenizer.json: 100%	<div></div>	1.36M/1.36M [00:00<00:00, 6.82MB/s]
model.safetensors: 100%	<div></div>	1.42G/1.42G [00:26<00:00, 65.5MB/s]

Some weights of RobertaModel were not initialized from the model checkpoint at roberta-large and are newly initialized: ['roberta.pooler.dense.bias', 'roberta.pooler.dense.weight']
You should probably TRAIN this model on a down-stream task to be able to use it for predictions and inference.

BERTScore for Generated Summary vs. Input Articles: 0.9130830764770508

Conclusion

We created a classifier that generalized well and generated a summary that was seemed to gather the most important details from the articles.

For further work we would want to improve our classification models to include more inbetween affiliation

References

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Any Questions?
