

# Political orientation analysis using Twitter

US politics has always been very polarized. The animosity that people feel toward opposing party has been growing consistently over the last few decades. Whether this affective polarization is a result of social media adoption, two party system, increased political salience of globalization, or immigration is up for debate. For this project, I will attempt to collect twitter data of users based on their political affiliations.

## Team

**Beni Singh:** I'm a software engineer with background in computer science working for a major networking company in Seattle, WA. I will be the only contributor for this project.

## Data

**How:** The data is collected by scraping tweets from public political figures of both parties. This acts as a starting point for my data set, which will be utilized to categorize more user profiles into the two categories (Democrat and Republican). Initial set of democrat and republican user profiles is created manually using publicly available data of U.S. politicians and their twitter profiles. Various data points such as followers, liked by, retweeted by, etc. from twitter API is then used on the starting set to find more users for each political profile. All the tweets from a user are collected and stored along with their political affiliation.

**Why:** This dataset can be utilized by anybody who wishes to study the U.S. political environment from the lens of Twitter Democrats and Republicans. I hope to use this data and create a political orientation analysis application of a Twitter user based on their tweets.

**Limitations:** The biggest challenge in collecting any data from Twitter is differentiating real profiles from bot accounts. This limitation has been naturally diminishing over the last few weeks as Twitter is finally getting around removing millions of bot accounts. However, that is something I can also try to improve in the code by adding more verification before collecting user data.

**Access Rights:** No restrictions exist on public tweets, so this data will be available freely under MIT license.

## SAMPLE TWEETS FROM REPUBLICAN SENATOR @TEDCRUZ

```
Ta.Singh@WT0X4XR9QD project-1 % python3 twitter.py
200
{
  "data": [
    {
      "author_id": "23022687",
      "created_at": "2022-05-11T02:43:16.000Z",
      "id": "1524218555205660674",
      "text": "RT @Newsweek: Senator Ted Cruz sponsored the AMERICANS Act which will require the secretary of defense to make an effort to retain unvaccin\u2026"
    },
    {
      "author_id": "23022687",
      "created_at": "2022-05-11T02:43:04.000Z",
      "id": "1524218505524092930",
      "text": "RT @Newsweek: Senator Ted Cruz and 13 GOP colleagues introduced a bill that would grant service members who refuse to get the COVID-19 vacc\u2026"
    },
    {
      "author_id": "23022687",
      "created_at": "2022-05-10T22:14:45.000Z",
      "id": "1524150979435843591",
      "text": ".@Raullabrador4ID is a proven fighter, a protector of the unborn, a stalwart advocate for our constitutional liberties, & a fierce defender of our nation\u2019s border. He will protect our constitution & our way of life.\n\nJoin me in supporting Ra\u2019s mission today!\nhttps://t.co/eHygDVYyVW"
    },
    {
      "author_id": "23022687",
      "created_at": "2022-05-10T19:34:43.000Z",
      "id": "1524110704894164994",
      "text": ".@JeremyMunson is a proven fighter who will fight to save America from the radical left. \n\nI\u2019m proud to endorse Munson for Congress because I need his help to restore our freedoms, stand up against the establishment, and drain the swamp.\nhttps://t.co/kd5FVmfQ3M"
    },
    {
      "author_id": "23022687",
      "created_at": "2022-05-10T19:34:26.000Z",
      "id": "1524110634891329544",
      "text": "RT @jeremymunson: BREAKING: Another America First Patriot is joining Team Munson! Today, @tedcruz announced his endorsement of our campaign\u2026"
    },
    {
      "author_id": "23022687",
      "created_at": "2022-05-10T19:30:18.000Z",
      "id": "1524109594502615042",
      "text": "RT @MilitaryTimes: The proposal \u2014 led by Sen. Ted Cruz and backed by 13 other GOP colleagues \u2014 would also require the military to \u2014 make eve\u2026"
    }
  ]
}
```

## SAMPLE TWEETS FROM DEMOCRATIC SENATOR @BERNIESANDERS

```
"data": [
  {
    "author_id": "216776631",
    "created_at": "2022-05-10T14:24:29.000Z",
    "id": "1524032632740360192",
    "text": "RT @SummerForPA: They have their corporate PACs, but we have the people.\n\nOur movement is proof that the power of the people is greater than\u2026"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-10T14:22:09.000Z",
    "id": "1524032044380131328",
    "text": "The billionaires fear @SummerForPA because she\u2019s running for Congress to deliver for the working class. Join us Thursday in Pittsburgh as we stand together in the fight for justice. https://t.co/JUgm18I1HW"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-09T16:22:39.000Z",
    "id": "1523699984364818432",
    "text": "Congratulations to @SBWorkersUnited. Even without negotiating a first contract, you have already forced CEO Howard Schultz to announce a 25% increase in wages for Starbucks workers. \n\nImagine what workers will be able to do together with a union!"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-09T01:48:04.000Z",
    "id": "1523479888627445765",
    "text": "Cancel student debt. All of it. https://t.co/j0K6YWFuy2"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-07T00:31:20.000Z",
    "id": "1522735801435578369",
    "text": "RT @SummerForPA: Guess who's coming to town...\n\nhttps://t.co/av10MveDdH https://t.co/7RIKE2skrt"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-06T23:29:02.000Z",
    "id": "1522720123563487232",
    "text": "If you spend time with the courageous workers, it is absolutely clear why the movement to unionize Starbucks stores is spreading like wildfire. They are saying loudly that we are going to have an economy that works for all, not just Howard Schultz and other billionaires. https://t.co/ckwSFCs6dS"
  },
  {
    "author_id": "216776631",
    "created_at": "2022-05-06T22:29:28.000Z",
    "id": "1522705132139413504",
    "text": "If Howard Schultz wants a photo-op with the President so badly, maybe, just maybe, he ought to obey the law, end the union busting at Starbucks, stop firing workers for being pro-union and negotiate a first contract with union workers that is fair and that is just."
  }
]
```