**Twitter Dataset for 2022 Russo-Ukrainian Crisis**

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**Abstract**—Online Social Networks (OSNs) play a significant role in information sharing during a crisis. The data collected during such a crisis can reflect the large scale public opinions and sentiment. In addition, OSN data can also be used to study different campaigns that are employed by various entities to engineer public opinions. Such information sharing campaigns can range from spreading factual information to propaganda and misinformation. We provide a Twitter dataset of the 2022 Russo-Ukrainian conflict. In the first release, we share over 1.6 million tweets shared during the 1st week of the crisis.

**Index Terms**—Russo-Ukrainian Crisis, Twitter, Russia, Ukraine, Conflict

I. INTRODUCTION

The Russo-Ukrainian conflict escalated in February 2022 after Russia recognised two Ukrainian breakaway regions — the Donetsk People’s Republic and the Luhansk People’s Republic [1]. Following this, the Russian Federation’s senate granted the use of military force in those regions on 22nd February 2022. On 24th February, the Russian government began an invasion of Ukraine, what it referred to as a special military operation [2].

At the time of writing, the conflict is still ongoing. People worldwide have been using social media to share their opinions regarding this conflict. Online Social Networks (OSNs) have been a prominent source of data in studying prior large-scale information discourse during crises and social movements [3], [4], particularly in terms of ‘information warfare’ where such platforms can become the source of propaganda and misinformation [5]. To facilitate timely analysis, we are therefore publishing an open dataset relevant to this ongoing crisis. This data can help in studying the political discourse, opinion mining, and (mis)information propagation on Twitter [6]. We will continue to gather data and publish updates every 24 hours.

II. DATASET COLLECTION

We use the Twitter Streaming API1 to collect data in real-time. Note, the Streaming API is the standard method used to collect Twitter data [7]. We use a list of keywords associated with the crisis, as shown in Table I. At the time of writing, the crisis is still ongoing. As such, the list of keywords is likely to change over the time with inclusion of the newer words according to the situation. We will incorporate any changes and update the list in future versions. The Twitter streaming API tracks the requested words and provides any tweet that contains any of the words. We will continue the data collection and update the data repository accordingly.

III. DATASET SUMMARY & USAGE

By the 6th March, we have collected over 1.6 million tweets using the keywords as mentioned in Table I. We do not apply any language or geo-filters to the data collection. Hence, the dataset contains tweets from different regions in several languages worldwide. The daily volume of tweets is shown in Figure 1 with an average of about 200K tweets every day. We show the tweet distribution based on the keywords in Table I. Most of the tweets contain the Russia and Ukraine reference, followed by Putin. Zelensky is mentioned less as compared to Putin. In addition, we also show the top-10 used hashtags and mentions, across the so far collected data, in Table III. In terms of mentions, Zelensky has higher mentions. In addition, most of the mentions are related to western leaders. A word cloud of tweet text is shown in Figure 2. The prominence of

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1https://developer.twitter.com/en/docs/twitter-api

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2until 6:00 AM, 6th March 2022, UTC Time
words like ‘breaking’, ‘news’, and ‘suspicions’ suggests that most of tweets discuss the latest situational updates.

There are over 900,000 users in current snapshot of the data. Out of all tweets, over 1.2 million are retweets. From these tweets, 413,254 unique tweets have been retweeted with an average of three retweets per tweets, while the standard deviation is 12.04.

Data is shared according to Twitter guidelines, governing data usage and sharing [8]. As such, we only share the tweet IDs. We group the tweet IDs by date. This date is according to UTC, as returned by the Twitter API. We plan to update our public repository of data every 24 hours. We share these tweet IDs on a GitHub repository here:

https://github.com/ehsanulhaq1/russo_ukraine_dataset.git

The tweet IDs are distributed across multiple files according to the date. Each file contains up to 50,000 tweet IDs. We recommend open source tools such as Twarc [9], Tweepy [10], or Hydrator [11] to download the complete tweets using these tweet IDs. We will update this repository daily with the latest tweet IDs and relevant statistics. In addition, we will also update the tweets according to the potential warning label as flagged by Twitter.

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**TABLE II**

**NUMBER OF TWEETS CONTAINING THE KEYWORDS**

| Keyword   | Tweets |
|-----------|--------|
| putin     | 328186 |
| zelensky  | 86122  |
| russian   | 536464 |
| ukraine   | 687321 |
| keiv       | 91142  |
| kharkiv   | 27089  |
| zaporizhzhia | 8644  |

**TABLE III**

**TOP 10 HASHTAGS AND MENTIONS**

| hashtags          | mentions                  |
|-------------------|---------------------------|
| Ukraine           | ZelenskyyUa               |
| Russia            | NATO                      |
| Putin             | POTUS                     |
| UkraineRussiaWar  | Ukraine                   |
| Russian           | UN                        |
| Kyiv              | vonderleyen               |
| Ukrainian         | elonmusk                  |
| Kharkiv           | KyivIndependent           |
| ukraine           | EmmanuelMacron            |

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Fig. 2. A word cloud of tweets - excluding hashtags and mention