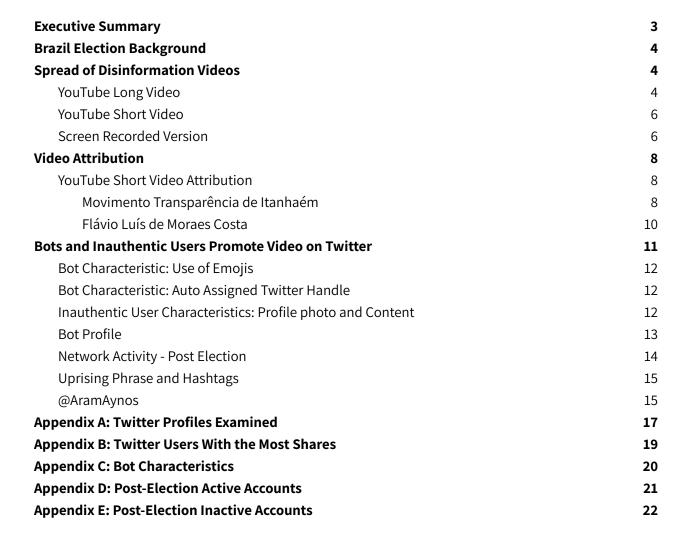


### **DISINFORMATION ANALYSIS**

How Bots Spread a Viral Disinformation Video Prior to the 2022 Brazilian Presidential Election



APRIL 2023



#### DISCLAIMER

The reporting contained herein from the Nisos research organization consists of analysis reflecting assessments of probability and levels of confidence and should not necessarily be construed as fact. All content is provided on an as-is basis, does not constitute professional advice, and its accuracy reflects the reliability, timeliness, authority, and relevancy of the sourcing underlying those analytic assessments.

### **Executive Summary**

Nisos investigators discovered a scheme to spread disinformation in support of former Brazilian President Jair Bolsonaro leading up to the October 2022 Brazil presidential election. This effort involved a viral YouTube Short video, a coordinated network of inauthentic users on Twitter, and bot social media accounts. Nisos identified a Brazilian political marketer who likely aided in the editing and proliferation of the disinformation video.

Due to the viral video's popularity and social reach to approximately 10 million users, Brazil's Superior Electoral Court fact-checked the video and ultimately refuted it. Although the TSE refuted the validity of the video, the initial inauthentic users and bot accounts continued to share it, which likely was deliberate to support former President Bolsonaro's claims of ballot fraud. The spread of disinformation through a short, non-contextual video is a common tactic to influence impressionable social media users, in this case potentially harming an election process. YouTube removed all identified versions of the observed content.

Additionally, a review of the image thumbnail from the YouTube Short video and the method in which they were shared revealed a coordinated inauthentic network of 38 Twitter accounts. These accounts displayed bot-like and inauthentic characteristics, including the use of emojis, auto assigned Twitter handles, and Generative Adversarial Network (GAN) profile photos.

Since the election, 17 of the 38 accounts have been suspended, deleted, or gone inactive, likely indicating they had been created specifically for election influence. Further, Nisos investigators identified that one of the 38 accounts posted calls-to-action leading up to the uprising against Brazilian government institutions in January 2023.

## **Brazil Election Background**

The 2022 Brazilian presidential election was held in two rounds on 02 October and 30 October, between then-incumbent President Bolsonaro and former President Luiz Inacio Lula da Silva. This election became Brazil's most polarized race in decades as the candidates differed widely on domestic and foreign policy. Prior to the 2022 election, former Brazilian President Jair Bolsonaro publicly began sowing doubt about the validity of the country's electronic voting system, which increased fears that he may refuse to accept defeat should Lula win.<sup>1</sup> Ultimately, Lula was elected the president of Brazil and the first person to be elected for a third presidential term in Brazil's history.

## **Spread of Disinformation Videos**

While investigating the potential spread of disinformation in the 2022 Brazilian presidential election, Nisos investigators discovered a video that originated on YouTube on 25 September 2022 in which a female confronted election workers about potential ballot and election fraud. A condensed, non-contextual YouTube Short derived from the long video—conveying cherry-picked content supporting Bolsonaro's claims of election fraud—was subsequently reposted and shared on multiple social media platforms at least 32,000 times, reaching approximately 10 million viewers. The video appeared on social media in three formats—the original long-form YouTube video, a YouTube Short, and a screen recording of that YouTube Short. Most shares of the video were the screen recording of the YouTube Short.

As a result of the videos' popularity, Brazil's Superior Electoral Court (TSE)—the government entity responsible for electoral integrity and investigating electoral fraud—fact-checked the claims and ultimately found them to be false.<sup>2</sup> Although the TSE refuted the content of the video, the initial inauthentic users and bot accounts continued to share it, which likely was done deliberately to support former President Bolsonaro's claims, further indicating that the network was involved in deliberate disinformation activities.<sup>34</sup>

#### YouTube Long Video

On 25 September 2022, *DIREITA SUL SP "CAPIAUS"* uploaded a 28-minute 46-second video to YouTube geotagged in Itapeva, Brazil.<sup>5</sup> The video shows an unidentified female entering the headquarters of the Union of Workers in the Construction, Furniture, Cement, Lime, Plaster industries, and Industrial Assembly (Sinticom) in the city of Itapeva where workers are preparing ballot boxes for the 02 October 2022 presidential election. The female questions the individuals about their working location and

<sup>4</sup>https://www.unicef[.]org/globalinsight/stories/digital-misinformation-disinformation-and-children

<sup>5</sup> https://www.youtube[.]com/channel/UClF15kq4JzvvlBSU6DbnndA

<sup>&</sup>lt;sup>1</sup> https://www.cnbc[.]com/2022/09/14/bolsonaro-vs-lula-all-you-need-to-know-ahead-of-brazils-election.html <sup>2</sup> https://www.justicaeleitoral.jus[.]br/fato-ou-boato/checagens/tre-sp-divulga-nota-de-esclarecimento-sobre-vid eo-gravado-durante-cerimonia-de-preparacao-das-urnas-em-itapeva/#

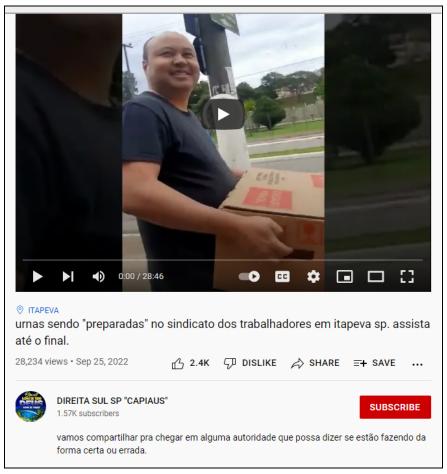
<sup>&</sup>lt;sup>3</sup> According to several prominent international organizations, digital misinformation is false or misleading content that is unwittingly shared, while digital disinformation is deliberately created and distributed with an intent to deceive or harm. Nisos is using this definition of disinformation for this report.



alleges that if the current President Jair Bolsonaro (PL) does not win this city it is because votes were altered.<sup>6</sup>

The video and description were provided in Portuguese and are translated in the table below.

Language	Title of Video	Description of video
Portuguese	urnas sendo "preparadas" no sindicato dos trabalhadores em itapeva sp. assista até o final.	vamos compartilhar pra chegar em alguma autoridade que possa dizer se estão fazendo da forma certa ou errada.
English	Ballot boxes being "prepared" at the workers' union in Itapeva, Sao Paolo. Watch through to the end.	Let's share so it gets to the authorities so they can tell us if they are doing it in the right or wrong way.



Graphic 1: Screenshot of full-length video removed by YouTube for violating community guidelines.

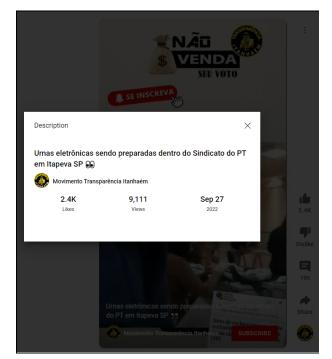
<sup>&</sup>lt;sup>6</sup> https://www.reuters[.]com/article/fact-check-urnas-itapeva-idUSL1N30Y1VN

#### YouTube Short Video

On 27 September 2022, the YouTube channel for Movimento Transparência Itanhaém posted a YouTube Short derived from the longer video. This video clip almost certainly was designed to be misleading as it was an edited version of the longer YouTube video with content selected to portray ballot fraud; this video as well as subsequent videos have an added caption that says, "Nao venda seu voto" in Portuguese, which translates to "Don't sell your vote."



*Graphic 2: Youtube video by Movimento Transparência Itanhaém captured 11:28 AM EST 27 September 2022.* 



*Graphic 3: Description of YouTube Short showing the date uploaded as 27 September 2022.* 

As of 10:03 PM EST 30 September 2022, three days after it was posted, YouTube removed the Short for violating community guidelines.

#### **Screen Recorded Version**

Nisos discovered a screen-recorded version of the Short that proliferated across multiple social media platforms. Bot coordinators often use screen-recorded versions of videos for broad dissemination across multiple social media platforms, likely in an effort to obfuscate their identity and prevent technical linkages to the original disinformation video.

Twitter user *BrancoPato2* very likely initiated the proliferation on that platform when he shared the video at 12:59 PM EST on 27 September 2022. User *BrancoPato2*'s tweet was shared 15.6k times as of 6:30 PM EST 3 October 2022.<sup>7</sup> Another proliferator of the video on Twitter, *roxmo*, had his tweet shared 7.5k times as of 6:40 PM EST 3 October 2022.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> https://twitter[.]com/BrancoPato2/status/1574745586162622465

<sup>&</sup>lt;sup>8</sup> https://twitter[.]com/roxmo/status/1574829862669393921

• The TSE's Twitter page replied to *BrancoPato2*'s tweet with a refutation of the video's content and the comment, "Bom dia! Confira a checagem e o esclarecimento," which translates to "Good Morning! Check out the check and clarification."<sup>9</sup>

The graphic below shows the Twitter posts' use of the screen-recorded video based on the red frame behind the time (upper left-hand corner) showing the same cellular signal, wifi strength, and battery percentage.

Additional commonalities of the videos included the following:

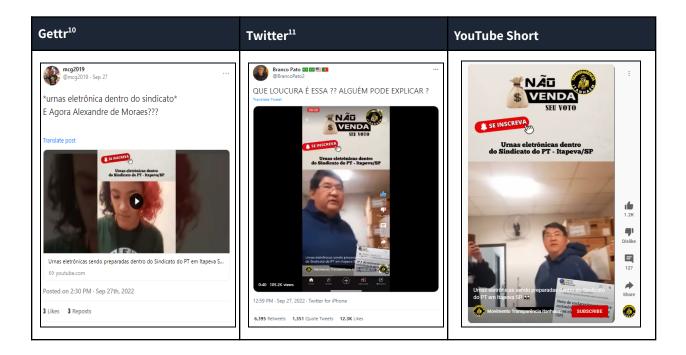
- "Urnas eletrônicas sendo preparadas dentro do Sindicato do PT em Itapeva SP"
- "URNAS ELETRÔNICAS DENTRO DO SINDICATO DO PT"
- "A gente vê que é um processo seguro, sem a menor possibilidade de contaminação"
- Black and yellow logo style sticker for Movimento Transparência Itanhaém



*Graphics 4: Example of the screen-recorded video as indicated by the red frame behind the time (upper left-hand corner) with the same cellular signal, wifi strength, and battery percentage.* 

<sup>&</sup>lt;sup>9</sup>https://www.justicaeleitoral.jus[.]br/fato-ou-boato/checagens/tre-sp-divulga-nota-de-esclarecimento-sobre-vid eo-gravado-durante-cerimonia-de-preparacao-das-urnas-em-itapeva/#





## **Video Attribution**

### YouTube Short Video Attribution

Nisos investigators assess that Flávio Luís de Moraes Costa, who is a member of Movimento Transparência de Itanhaém and has significant experience in online political marketing, likely was involved in the editing and viral success of the video. Flávio previously aided election campaigns for Bolsonaro allies using his social media skills, which he also advertises on his website and on the linktr[.]ee for Movimento Transparência de Itanhaém.

#### Movimento Transparência de Itanhaém

Various social media accounts for the group describe Movimento Transparência Itanhaém as a collection of private citizens who report facts and news about corruption, prison, extortion, and similar topics.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup> https://gettr[.]com/post/p1sbkrt45cc

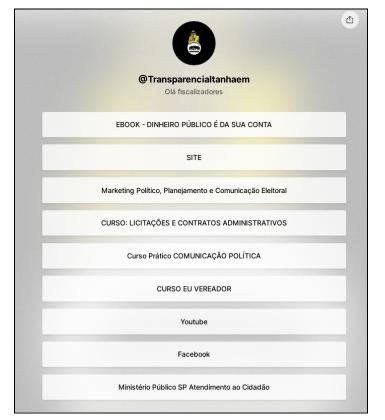
<sup>&</sup>lt;sup>11</sup> https://twitter[.]com/BrancoPato2/status/1574745586162622465

<sup>&</sup>lt;sup>12</sup> https://www.youtube[.]com/@MovimentoTransparencialtanhaem/about



Movimento Transparência Itanhaém @MovimentoTransparenciaItanhaem 120K subscribers								
HOME	VIDEOS	SHORTS	LIVE	PLAYLISTS	COMMUNITY	CHANNELS	ABOUT	Q
Description Movimento Transparência Itanhaém é um grupo de cidadãos que não estão em cargos públicos, e fiscalizam o Legislativo e Executivo, noticiando fatos e notícias sobre corrupção, prisão, extorsão, caixa 2, rachadinha e etc Tudo que sai na grande mídia! Informamos a população sobre fatos que envolve a nossa cidade e pelo Brasil. Acesse: https://linktr.ee/Transparencialtanhaem							Stats Joined Jul 17, 2 54,040,228 view	
Details								
For business inq	uiries: <u>movimentotr</u>	ansparenciaitanhaem(	<u>ଷୁମୁଲail.com</u>					
Location:	Brazil							

Graphic 5: YouTube pages for Movimento Transparência Itanhaém.<sup>13</sup>



Graphic 6: Linktree account for Movimento Transparência de Itanhaém.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> https://www.youtube[.]com/c/MovimentoTranspar%C3%AAncialtanha%C3%A9m

<sup>&</sup>lt;sup>14</sup> https://linktr[.]ee/Transparencialtanhaem

#### Flávio Luís de Moraes Costa

Flávio Luís de Moraes Costa started working for Movimento Transparência de Itanhaém in 2020 and likely remained a part of the group through 2022.

Flávio maintains a professional website, https://www.flaviojapa.com[.]br, which provides a list of his professional ventures, including Movimento Transparência Itanhaém,<sup>15</sup> event planning,<sup>16</sup> driving social media traffic to websites,<sup>17</sup> and political marketing.<sup>18</sup> According to his website, he helped Councilor Henrique Garzon's election in the city of Itanhaém in 2021. Henrique Garzon is a member of the Bolsonaro-aligned Podemos party.

Flávio also displayed a certificate on his website, which he obtained by completing four social media marketing courses offered by Presença Online.<sup>19</sup>

The courses are offered by Marcelo Vitorino, who has been active in digital and political marketing for over 20 years.<sup>20</sup> The Linktr[.]ee links mentioned above also contain other courses that Marcelo Vitorino offered.



Graphic 7: Flávio's course certificate from presencaonline[.]com.<sup>21</sup>

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<sup>&</sup>lt;sup>15</sup> https://www.youtube[.]com/c/MovimentoTranspar%C3%AAncialtanha%C3%A9m

<sup>&</sup>lt;sup>16</sup> https://www.flaviojapa.com[.]br/

<sup>&</sup>lt;sup>17</sup> https://www.flaviojapa.com[.]br/panfletagemdigital

<sup>&</sup>lt;sup>18</sup> https://www.flaviojapa.com[.]br/marketingpolitico

<sup>&</sup>lt;sup>19</sup> https://presencaonline[.]com/arquivo-editorial/assinatura-mensal-marketing-politico/

<sup>&</sup>lt;sup>20</sup> https://marcelovitorino[.]com.br/

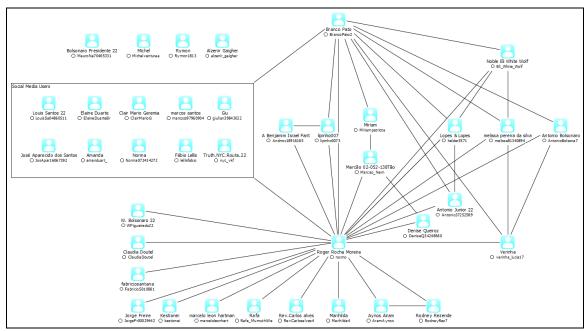
<sup>&</sup>lt;sup>21</sup> https://www.flaviojapa[.]com.br/marketingpolitico



## Bots and Inauthentic Users Promote Video on Twitter

Nisos identified several Twitter accounts that shared the video on the platform within a 30-hour time period, and investigators selected 38 of those accounts for further examination based on their large number of shares of the video and/or creation dates.

Appendix A provides the selector information for the 38 Twitter accounts examined, some of which may be real people that have fallen victim to disinformation, while a large number of the accounts examined are likely bots, as they display bot-like and inauthentic characteristics. The Twitter profile information for followers and following was gathered on 28 September 2022.



*Graphic 8: Network of Twitter users spreading the disinformation narrative about fraudulent activity with voting machines in Itapeva.* 

For the purpose of this investigation, we used the following definitions:

- Inauthentic User: Social media account created and used for the purpose of increasing reach on content or engaging in fabricated behavior for profit or gain.
- Bot: Automated social media account.

Investigators identified the following characteristics indicative of inauthentic users and/or bot-like behavior.

- Accounts contained emojis in the Twitter display name—most with the Brazilian flag
- A large number of Tweets, high number of followers, and/or high number of accounts followed
- Auto-assigned Twitter handles from account setup
- The creation date of the accounts are within the last six months

• GAN profile photos

### **Bot Characteristic: Use of Emojis**

Appendix C displays seven accounts that contain the Brazilian flag in the Twitter Display Name—some with additional emojis. Of those seven accounts, five were created within four months of the viral video and all within the last four years. Additionally, considering the creation date, each of these seven accounts exhibits at least one of the following behaviors: a large number of Tweets, high number of followers, and/or high number of accounts followed.

### **Bot Characteristic: Auto Assigned Twitter Handle**

Appendix C shows a common feature indicative of mass account creation, Twitter handles remaining unchanged from account setup. In addition, eight of the twelve accounts have been created since March 2022. Additionally, each of these eight accounts exhibits at least one of the following behaviors: a large number of Tweets, high number of followers, and/or high number of accounts followed.

#### Inauthentic User Characteristics: Profile photo and Content

Twitter user *RevCarlosalves4* shared the YouTube Short video more than 10 times in less than 30 hours. We also discovered similarities between the account's profile picture and display name and those of several other accounts. The profile picture was a screen capture of a YouTube Short video featuring Rev. Carlos Alves, a possible government official, and the profile picture of the similarly named accounts contained either the same photo or screen captures from the same YouTube Short video. Nisos investigators discovered conflicting reports on Alves' role in the Brazilian government but assess he was likely impersonated because of his probable role.<sup>22</sup>

	···· C Follow
Rev.Carlos @RevCarlosalves	
	e petista não perco tempo com esquerdista. Deus pátria e família. nte Bolsonaro, é ignorar o comunismo em nosso BRASIL.
⊘ Recife, Brazil	🖽 Joined August 2022
3,633 Following	1,792 Followers

Graphic 9: Profile for RevCarlosalves4.23

<sup>&</sup>lt;sup>22</sup> https://www.youtube[.]com/shorts/6L0eeo0AqLE

<sup>&</sup>lt;sup>23</sup> https://twitter[.]com/RevCarlosalves4





Accounts with similar user name and profile photo:

#### **Bot Profile**

*RodneyRez7* shared the YouTube Short video more than 10 times in less than 30 hours and has an overall high volume of tweets. *RodneyRez7* tweeted 4,185 times in a 66-day time period, from 05 August to 17 October 2022, equivalent to an individual posting approximately three times an hour every hour for 66 days. The account displays several other bot-like characteristics, including the use of emoji flags in the username, the use of a likely GAN profile photo (the photo shows an individual with no ears and distorted background), and posts at all hours of the day.



Graphics 14 & 15: (Left) Profile Photo for @RodneyRez7. 28 (Right) Profile photo for @RodeneyRez7.

<sup>27</sup> https://twitter[.]com/AlvesRam2

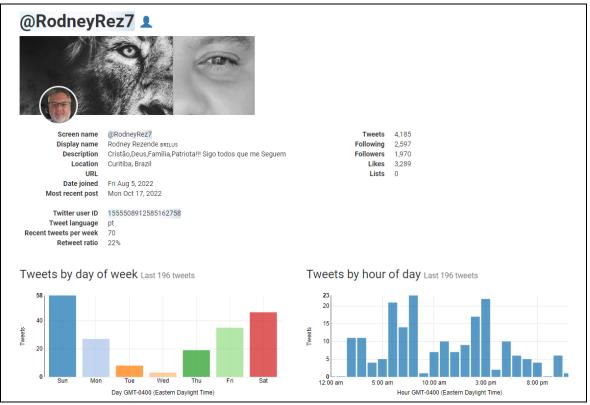
<sup>&</sup>lt;sup>24</sup> https://twitter[.]com/revcarlosalves3

<sup>&</sup>lt;sup>25</sup> https://twitter[.]com/Revcarlosalves

<sup>&</sup>lt;sup>26</sup> https://twitter[.]com/CarlosA81661555

<sup>&</sup>lt;sup>28</sup> https://twitter[.]com/rodneyrez7





Graphic 16: Detailed account information from Botometer about @RodneyRez7.29

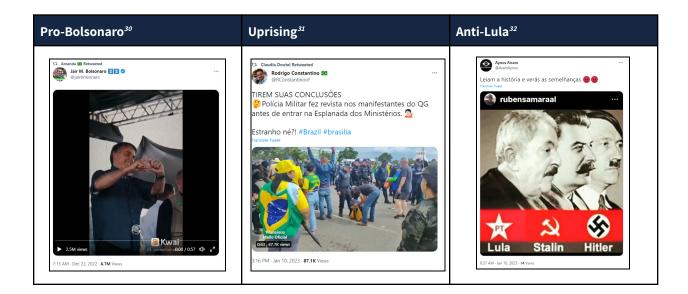
#### **Network Activity - Post Election**

Following the 08 January 2023 uprising in which thousands of Bolsonaro supporters invaded the Brazilian Supreme Court, presidential palace, and Congress, Nisos investigators reviewed the 38 Twitter accounts to identify any association with the event. As of 09 January 2023, 16 of the 38 accounts were either suspended, deleted, or have not been active since the election, indicating they were likely created to support and/or increase the audience for Bolsonaro's discord themes prior to the election. The other 19 active accounts have posted a mixture of content along three main themes: Pro-Bolsonaro, Uprising, and Anti-Lula content. The remaining three accounts appear to be active but two are now private. Examples of the content are provided below:

- **Pro-Bolsonaro**: Updates on Bolsonaro, articles about him or retweets from his Twitter account.
- Uprising: Photos and videos during or after the uprising.
- Anti-Lula: Articles and posts that were critical of Lula.

<sup>&</sup>lt;sup>29</sup> https://botometer[.]osome.iu.edu/





### **Uprising Phrase and Hashtags**

Nisos investigators observed the following phrase and hashtags from 12 October 2022 through 09 January 2023 related to the Brazilian uprising: "Festa da Selma," #brazilwasstolen, and #brazilianspring. The phrase "Festa da Selma" had a peak usage on the day of the uprising, while the hashtags #brazilwasstolen and #brazilianspring had the most widespread usage after the announcement of Bolsonaro's defeat in November 2022. The following accounts previously identified in the inauthentic network utilized uprising hashtags.

Hashtag	Twitter Handle	Mentions
#brazilwasstolen	AramAynos	1.91M
#brazilianspring	Rafa_MumuthiWe melissa81340894	1.59M

#### @AramAynos

Investigators identified that one of the accounts, *@AramAynos*, was actively engaged in posting potential uprising content before and during the events in Brazil on 08 January. *@AramAynos* referenced the hashtag *#brazilwasstolen* and posted a possible call-to-action during the days leading up to the uprising in Brazil, suggesting the user may have been involved in the events. Additionally, *@AramAynos* blamed Justice Alexandre de Moraes—who presided over the electoral authority during the election and was a frequent target of Bolsonaro—for the demonstrations in a post on 08 January.

<sup>&</sup>lt;sup>30</sup> https://twitter[.]com/jairbolsonaro/status/1605899714507014150

<sup>&</sup>lt;sup>31</sup> https://twitter[.]com/RConstantinoof/status/1612906147513507870

<sup>&</sup>lt;sup>32</sup> https://twitter[.]com/AramAynos/status/1612775539848224773/photo/1





Graphic 17: @AramAynos Twitter page with profile image of #brazilwasstolen and Pro-Bolsonaro content. 33



Graphic 20: Tweeted call-to-action.<sup>36</sup> @AramAynos.35

<sup>&</sup>lt;sup>33</sup> https://twitter[.]com/AramAynos

<sup>&</sup>lt;sup>34</sup> https://twitter[.]com/AramAynos/status/1612243649730863105

<sup>&</sup>lt;sup>35</sup> https://twitter[.]com/AramAynos/status/1610670868279050241

<sup>&</sup>lt;sup>36</sup> https://twitter[.]com/AramAynos/status/1610670797860884487



# **Appendix A: Twitter Profiles Examined**

Twitter Handle	Twitter Display Name	Creation Date	Following	Follower	Tweets
Michelventuraa	Michel	2022-09-28	8	1	2
Norma072414272	Norma	2022-09-25	51	23	109
JosApar16067392	José Aparecido dos Santos	2022-09-23	1462	529	1487
Rymon1813	Rymon	2022-09-14	42	0	32
lipinho0073	lipinho007	2022-09-11	478	216	1653
Andrroc18916165	A Benjamim Israel Farit 🔯 🕿 🗮 🙏	2022-09-15	3105	1736	606
LouisSa04860511	Louis Santos 🔨 😰 💽 🚽	2022-09-11	655	137	2906
MauroNa70465331	MBen.Fla	2022-08-31	28	2	1346
amanduart_	Amanda Duarte 🔕	2022-08-26	304	325	394
marcoss97960904	marcos santos	2022-08-19	215	65	11523
AramAynos	Aynos Airam	2022-08-15	523	431	1145
AntonioBolsona7	Antonio Bolsonaro	2022-08-14	325	202	7561
RevCarlosalves4	Rev.Carlos alves	2022-08-10	2621	1222	286
ClaudiaDoutel	Claudia Doutel	2022-08-05	63	5	209
RodneyRez7	Rodney Rezende 🔯 📰 📕	2022-08-05	2667	2005	4004
WFigueiredo22	Wellington Figueiredo	2022-08-02	83	2	120
Miriampatriota	Miriam 🔊 🔊 🔊	2022-06-02	1437	1207	1394
JorgeFr00029442	Jorge Freire	2022-04-26	632	165	501
Antonio37252589	Antonio Junior 😎👉 👉 22	2022-03-06	98	13	2296
nyc_vkf	Truth.NYC.Route.22	2021-08-23	219	164	9658
ElaineDuarteBr	Elaine Duarte	2021-08-02	215	96	5929
DeniseQ34248660	Denise Queiroz	2021-06-09	29	1	583
giulian39843022	Giu	2021-03-24	221	17	24858
Marihilda4	Marihilda	2020-05-29	99	3	4242
kestionei	Kestionei	2020-05-05	614	137	9758
BrancoPato2	Branco Pato 👀 🔊	2019-04-29	4441	4227	6670
melissa81340894	melissa pereira da silva	2019-04-21	1515	1352	74981
Marcao_Nem	SMarcão S02-052-138Tão S	2018-11-01	32606	30037	42109
Rafa_MumuthiWe	Rafa	2018-01-04	348	28	11237
ClairMarioG	Clair Mario Geremia	2017-08-29	94	184	35529
Eli_White_Wolf	Noble Eli White Wolf	2016-02-29	942	357	22166



FabricioS010881	fabriciosantana	2014-01-05	256	119	10887
marceloleonhart	marcelo leon hartman	2011-05-20	85	32	948
helder3571	Lopes & Lopes	2009-08-29	4889	2843	75563
lellisfabio	Fábio Lellis	2009-07-16	555	1528	16613
verinha_lucia17	Verinha	2009-06-23	531	305	4215
roxmo	Roger Rocha Moreira	2008-11-30	1037	1342421	230637
alzenir_gaigher <sup>37</sup>	Alzenir Gaigher	N/A	N/A	N/A	N/A

<sup>&</sup>lt;sup>37</sup> The Twitter account for @alzenir\_gaigher is private and information was not accessible.



# Appendix B: Twitter Users With the Most Shares

Twitter Handle	Twitter Display Name	Creation Date	Times Shared
LouisSa04860511	Louis Santos 🕺 😰 🔿 🚽	2022-09-11 14:47:37	67
alzenir_gaigher	Alzenir Gaigher	Private account	42
helder3571	Lopes & Lopes	2009-08-29 0:43:02	38
JorgeFr00029442	Jorge Freire	2022-04-26 17:25:30	33
FabricioS010881	fabriciosantana	2014-01-05 14:26:29	29
kestionei	Kestionei	2020-05-05 13:16:10	28
lipinho0073	lipinho007	2022-09-11 16:02:22	19
Miriampatriota	Miriam <b>SSS</b>	2022-06-02 23:32:58	19
Marihilda4	Marihilda	2020-05-29 17:14:44	19
melissa81340894	melissa pereira da silva	2019-04-21 21:38:01	19
giulian39843022	Giu	2021-03-24 18:01:03	18
nyc_vkf	Truth.NYC.Route.22	2021-08-23 22:23:25	17
ClairMarioG	Clair Mario Geremia	2017-08-29 21:24:51	17
ElaineDuarteBr	Elaine Duarte	2021-08-02 18:56:24	16
Eli_White_Wolf	Noble Eli White Wolf	2016-02-29 23:25:34	15
marceloleonhart	marcelo leon hartman	2011-05-20 13:33:34	12
Rafa_MumuthiWe	Rafa	2018-01-04 19:54:30	11
lellisfabio	Fábio Lellis	2009-07-16 3:41:05	11
Antonio37252589	Antonio Junior 😎 👉 👉 22	2022-03-06 17:36:57	10



# **Appendix C: Bot Characteristics**

### **Bot Characteristic: Use of Emojis**

Twitter Handle	Twitter Display Names with Brazil Emoji	Creation Date	Following	Followers	Tweets	Shares
Andrroc18916165	A Benjamim Israel Farit	2022-09-15	3105	1736	606	N/A
LouisSa04860511	Louis Santos 🔍 🎾 🔿 🔿	2022-09-11	655	137	2906	67
amanduart_	Amanda Duarte 😒	2022-08-26	304	325	394	N/A
RodneyRez7	Rodney Rezende 😒 🖘 📕	2022-08-05	2667	2005	4004	N/A
Miriampatriota	Miriam	2022-06-02	1437	1207	1394	19
BrancoPato2	Branco Pato 😒 🏹	2019-04-29	4441	4227	6670	N/A
Marcao_Nem	Marcão 202-052-138 Tão	2018-11-01	32606	30037	42109	N/A

### Bot Characteristic: Auto Assigned Twitter Handle

Auto Assigned Twitter Handle	Creation Date	Following	Followers	Tweets	Shares
Norma072414272	2022-09-25	51	23	109	N/A
JosApar16067392	2022-09-23	1462	529	1487	N/A
Andrroc18916165	2022-09-15	3105	1736	606	N/A
LouisSa04860511	2022-09-11	655	137	2906	67
MauroNa70465331	2022-08-31	28	2	1346	N/A
marcoss97960904	2022-08-19	215	65	11523	N/A
JorgeFr00029442	2022-04-26	632	165	501	33
Antonio37252589	2022-03-06	98	13	2296	10
DeniseQ34248660	2021-06-09	29	1	583	N/A
giulian39843022	2021-03-24	221	17	24858	18
melissa81340894	2019-04-21	1515	1352	74981	19
FabricioS010881	2014-01-05	256	119	10887	29



# Appendix D: Post-Election Active Accounts

Twitter Handle	Twitter Display Name	Creation Date	Pro-Bolsonaro	Uprising	Anti-Lula
amanduart_	Amanda Duarte 😒	2022-08-26	Х		
AramAynos	Aynos Airam	2022-08-15		Х	Х
ClaudiaDoutel	Claudia Doutel	2022-08-05	х	х	
RodneyRez7	Rodney Rezende 😒 📰 📕	2022-08-05	х		
Miriampatriota	Miriam <b>SSS</b>	2022-06-02	Х	х	Х
Antonio37252589	Antonio Junior 😎 👉 👉 22	2022-03-06	х	Х	
ElaineDuarteBr	Elaine Duarte	2021-08-02	х		
DeniseQ34248660	Denise Queiroz	2021-06-09	Х		
giulian39843022	Giu	2021-03-24	Х	х	
kestionei	Kestionei	2020-05-05	х	Х	
BrancoPato2	Branco Pato 💁 🖉 🗾	2019-04-29		х	х
melissa81340894	melissa pereira da silva	2019-04-21	х	х	Х
Marcao_Nem	Solution State	2018-11-01	х		Х
Rafa_MumuthiWe	Rafa	2018-01-04		х	Х
Eli_White_Wolf	Noble Eli White Wolf	2016-02-29	х		х
FabricioS010881	fabriciosantana	2014-01-05			Х
marceloleonhart	marcelo leon hartman	2011-05-20	х		
helder3571	Lopes & Lopes	2009-08-29		х	х
lellisfabio*	Fábio Lellis	2009-07-16			
verinha_lucia17 <sup>38*</sup>	Verinha	2009-06-23			
roxmo	Roger Rocha Moreira	2008-11-30		х	Х
alzenir_gaigher <sup>82*</sup>	Alzenir Gaigher	N/A			

<sup>&</sup>lt;sup>38</sup>The Twitter accounts for @verinha\_lucia17 and @alzenir\_gaigher are private and information was not accessible.

<sup>\*</sup>The following accounts have been active post Brazil election but did not post content regarding the three main themes.



# **Appendix E: Post-Election Inactive Accounts**

Twitter Handle	Twitter Display Name	Creation Date
Michelventuraa	Michel	2022-09-28
Norma072414272	Norma	2022-09-25
JosApar16067392	José Aparecido dos Santos	2022-09-23
Rymon1813	Rymon	2022-09-14
lipinho0073	lipinho007	2022-09-11
Andrroc18916165	A Benjamim Israel Farit 🛐 📰 🙏	2022-09-15
LouisSa04860511	Louis Santos 🕺 🈰 💽 🚽	2022-09-11
MauroNa70465331	MBen.Fla	2022-08-31
marcoss97960904	marcos santos	2022-08-19
AntonioBolsona7	Antonio Bolsonaro	2022-08-14
RevCarlosalves4	Rev.Carlos alves	2022-08-10
WFigueiredo22	Wellington Figueiredo	2022-08-02
JorgeFr00029442	Jorge Freire	2022-04-26
nyc_vkf	Truth.NYC.Route.22	2021-08-23
Marihilda4	Marihilda	2020-05-29
ClairMarioG	Clair Mario Geremia	2017-08-29