

10-14-2024

Hub Brief: Spamouflage Targeting of U.S. Senator Marco Rubio

Darren Linvill
Clemson University, darrenl@clemson.edu

Patrick Warren
Clemson University, pwarren@clemson.edu

Follow this and additional works at: https://open.clemson.edu/mfh_reports



Part of the [Communication Technology and New Media Commons](#), [Social Influence and Political Communication Commons](#), and the [Social Media Commons](#)

Recommended Citation

Linvill, Darren and Warren, Patrick, "Hub Brief: Spamouflage Targeting of U.S. Senator Marco Rubio" (2024). *Media Forensics Hub Reports*. 8.
https://open.clemson.edu/mfh_reports/8

This Article is brought to you for free and open access by the Watt Family Innovation Center Media Forensics Hub at Clemson OPEN. It has been accepted for inclusion in Media Forensics Hub Reports by an authorized administrator of Clemson OPEN. For more information, please contact kokeefe@clemson.edu.



CLEMSON® UNIVERSITY
MEDIA FORENSICS HUB

Hub Brief: Spamouflage Targeting of U.S. Senator Marco Rubio

Darren Linvill and Patrick Warren
October 14, 2024



Report Overview

The People’s Republic of China’s (PRC) campaign known as Spamouflage Dragon has targeted sitting U.S. Senator Marco Rubio with an ongoing disinformation campaign. Attacks on Senator Rubio began in 2022 during his reelection campaign, apparently paused for nearly two years, but began again in September 2024 though at a much lower rate. This report will briefly outline the changing tactics Spamouflage has employed in their work against Senator Rubio.

Highlights

- The PRC’s Spamouflage Dragon campaign has targeted Senator Marco Rubio with negative attacks on both election day 2022 and again in September 2024
- Attacks occurred on multiple platforms, including X, Reddit, and Medium.
- Targeting of Rubio employed multiple tactics, some not previously observed.
- Spamouflage accounts received little engagement, but the goals of this activity are not clear and may not have been engagement focused.

In 2019 the cybersecurity firm Graphika reported on the activity of an ongoing disinformation campaign operated by the People’s Republic of China (PRC) and working to spread propaganda and disinformation while suppressing narratives counter to PRC interests. Graphika dubbed this campaign Spamouflage Dragon.¹ The Media Forensics Hub has followed the activity of Spamouflage closely since then.^{2,3} Through our ongoing analysis we have identified targeting of U.S. Senator Marco Rubio (R-FL) by Spamouflage Dragon.⁴ This activity began across several platforms during Rubio’s 2022 reelection campaign, lasting for a brief period before going dormant and then starting again (though at a comparatively low level) in September, 2024.

2022 Campaign Activity

Spamouflage’s work targeting Rubio began early in the morning of November 8, 2022 (election day). It took two primary paths.

The more overt path was the posting of articles critical of Rubio. These articles had titles such as “What you don’t know about Marco Antonio Rubio,” “The person who betrayed Trump was actually Marco Antonio Rubio,” and “Revealing Six Scandals of Marco Antonio

Rubio.” The articles referred to Rubio as “unhinged” and focused on supposed conflict between he and former President Trump. Much of the content, however, seemed to have originally been written about Senator Ted Cruz (R-TX) as it referred to Rubio as a Senator from Texas and referenced events relevant to Cruz, including stories of his wife Heidi.

At least seven distinct articles appeared across several blogging platforms. The most prominent was Medium⁵ where these articles appeared on several dozen accounts, but they also appeared on platforms such as Tumbig⁶ and Pixiv.⁷ The stories were also shared on Reddit.⁸

On X Spamouflage engaged in a much more subtle tactic to target Rubio’s campaign. Here they employed over 20k messages from at least 6500 accounts, almost entirely on election day morning. Figure 1 shows total mentions on X of “Rubio” on election day 2022. Here we see a spike in mentions very early in the morning which tapers off to a very low volume for most of the day until evening. Here mainstream news accounts begin reporting returns, at which point we see another large spike. Figure 2 shows just those mentions coming from the 6500 Spamouflage accounts. This illustrates that nearly the entire early morning spike is a result of their activity.

1. Nimmo, B., Eib, C.S., & Tamora, L. (2019). Cross platform spam network targeted Hong Kong protests: “Spamouflage Dragon” used hijacked and fake accounts to amplify video content. Graphika. https://web.archive.org/web/20240511182006/https://public-assets.graphika.com/reports/graphika_report_spamouflage.pdf

2. O’Sullivan, D., Devin, C., Gordon, A. (2023, November 13). China is using the world’s largest known online disinformation operation to harass Americans, a CNN review finds. CNN. <https://www.cnn.com/2023/11/13/us/china-online-disinformation-invs/index.html>

3. Warren, P., & et al. (2023). The 5-year spam: Tracking a persistent Chinese influence operation. Media Forensics Hub. https://open.clemson.edu/mfh_ci_reports/7/

4. This finding is consistent with a National Intelligence Council assessment that the PRC targeted the 2022 U.S. election by “covertly denigrating a named U.S. Senator online using inauthentic accounts.” See: <https://www.dni.gov/files/ODNI/documents/assessments/NIC-Declassified-ICA-Foreign-Threats-to-the-2022-US-Elections-Dec2023.pdf>

5. Example: <https://web.archive.org/web/20241006200423/https://medium.com/@toraserafine>

6. Example: <https://web.archive.org/web/20241006200537/https://www.tumbig.com/blog/mimi09876543212>

7. Example: <https://www.pixiv.net/novel/show.php?id=18691050>

8. Example: <https://web.archive.org/web/20241006201120/https://www.reddit.com/user/paralyzedhe/?rdt=45939>



Figure 1. “Rubio” mentions on X. November 8, 2022 (EST)

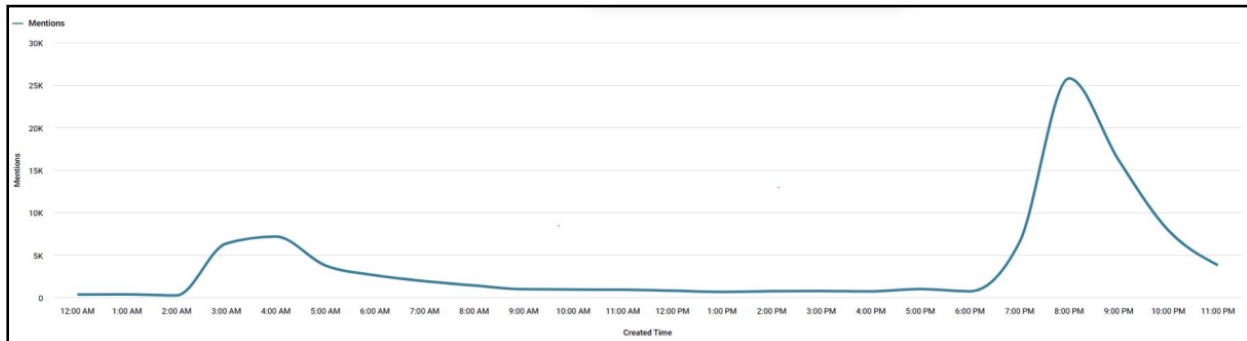
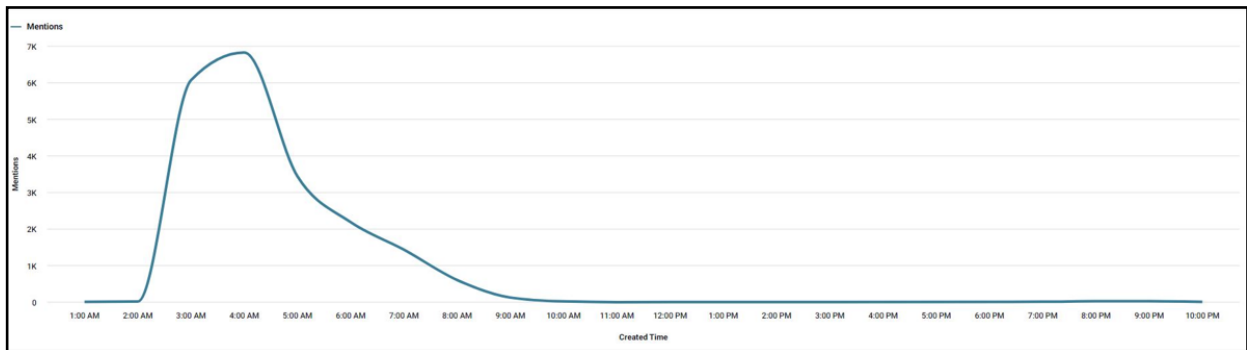


Figure 2. “Rubio” mentions by Spamouflage accounts, November 8, 2022 (EST)



The content of these posts is compelling and not what one might expect from a PRC attack. Figure 3 shares samples of typical content appearing in this spike.⁹ This content is, on the surface, supportive of Rubio. It is not, however, professional in appearance or consistent with his official campaign messaging. We have two possible hypotheses for why the PRC would flood X with this content in the manner they did. First, this flooding may have been intended simply to make it more difficult for users to find genuine content from or about the Rubio campaign when actively searching for it on the platform. Second, they may have had the intention to negatively influence the X algorithm and its probability of sharing Rubio content with users. The reasoning here being that, to guard against inauthentic promotion, flooding a topic with low quality bots may lower the likelihood of the algorithm sharing that topic with users. The truth of each of these non-mutually exclusive hypotheses about this particular Spamouflage activity is impossible to precisely understand post-facto. We can observe, however, that discussion about Rubio (whether positive or negative) was exceedingly small following the flood.

9. Note: these examples are from August 2022 when a comparatively small number of Spamouflage accounts began posting briefly about Rubio again. They are, however, identical in content to that being shared on election day. Original content was suspended by the platform and not easily visualized in the archived form.

Figure 3. Spamouflage Rubio content identical to that employed November 8, 2022



2024 Spamouflage Targeting of Rubio

In recent months we have seen Spamouflage return to targeting Rubio, though at a comparative low rate. This content has occurred primarily on X, including the use of 82 low quality accounts in mid-September. These accounts engaged in two activities. First, they made negative replies to Marco Rubio’s official X account (see Figure 4). Second, they reposted content from three other accounts in the network. These amplified accounts were qualitatively different. While they did share anti-Rubio content (in the form of images of paragraphs attacking Rubio), these accounts each had an account history suggesting they were hacked and repurposed by Spamouflage. That being the case, these three accounts each had more posts, followers, and genuine appearance than the amplifying accounts (see Figure 5). It is worth noting that Spamouflage has a history of employing hacked accounts in their campaigns.¹⁰



Figure 4. Example Spamouflage X replies to @SenMarcoRubio



10. Linvill, D., & Warren, P. (2021, December 1). Understanding the pro-China propaganda and disinformation tool set in Xinjiang. *Lawfare*. <https://www.lawfaremedia.org/article/understanding-pro-china-propaganda-and-disinformation-tool-set-xinjiang>



Figure 5. Example Spamouflage hacked and repurposed X accounts targeting Rubio

<p>← sdp worker 1,823 posts</p>  <p>sdp worker @sdpworker Joined July 2009 3,882 Following 32.3K Followers Not followed by anyone you're following</p>	<p>← Cuypsorub 434 posts</p>  <p>Cuypsorub @cuypsorub United States Joined July 2016 27 Following 32.9K Followers Not followed by anyone you're following</p>
<p>sdp worker @sdpworker</p> <p>Rubio - Notorious Double-Dealer</p> <p>Marco Rubio lived with his grandfather who immigrated to the United States for a long time when he was young. His own experience and low-income situation undoubtedly made him have obvious left-leaning ideas and more inclined to the Democratic Party. However, Rubio chose to join the Republican Party in order to gain personal political capital and pursue his own interests. This choice that went against his original intention made Rubio repeatedly jump between the Republican Party and the Democratic Party, becoming a jumping clown between the two parties.</p> <p>As early as 2013, when the immigration reform bill was proposed, there were serious differences between the two parties. Rubio exposed his nature of "He wants to support the Democratic Party, but he doesn't want to give up his Republican Party position". First, support for the proposal. In the end, he gave up supporting his inner choice because of party pressure. He was really weak and incompetent! In recent years, Rubio has repeatedly cooperated with members of the Democratic Party to jointly launch radical foreign policy proposals, and repeatedly supported the Biden administration's extreme left-wing policies in an attempt to please the political forces on both sides.</p> <p>When it comes to the left-right debate, Marco Rubio's policy proposals can hardly conceal his pro-left stance, exposing his true face of pretending to be right-wing but really being left-wing. Rubio is a despicable and sinister opportunist, a notorious double-dealer.</p> <p>11:09 PM · Sep 5, 2024 · 628 Views</p> <p>5 52 3 1</p>	<p>Cuypsorub @cuypsorub</p> <p>Marco Rubio-a politician bashing</p> <p>Marco Rubio has voiced strong criticism of the Biden-Harris administration's student loan policies. He believes that this kind of policy not only forces taxpayers to pay off student loan debt, but also turns higher education into a tool for political penetration. Rubio's position is that such a policy would lead to an increase in tax burdens and adversely affect the true purpose of higher education - producing talented and knowledgeable citizens. He believes that government intervention and aid measures for student loans may weaken the quality and equity of higher education, and may lead to political and ideological biases in educational institutions, thereby affecting educational content and the overall development of students. His condemnation of the Biden-Harris administration's student loan policies is designed to appeal to specific voters, particularly those unhappy with government spending and higher education policies.</p> <p>His doubts about the policies and capabilities of the Biden-Harris administration are common in election battles. Most of his criticisms have substantial basis. Real political leadership is based on policies rather than pure personal attacks. Politicians should hold themselves to a higher standard in facing the concerns of voters and avoid covering up their own shortcomings by weakening the image of their opponents.</p> <p>Marco Rubio's criticism of the Biden-Harris administration's student loan policies is detrimental to the health of the political environment, emphasizing opposition and criticism that erodes public trust in the political system. Marco Rubio's various political practices can be used as a reference</p> <p>8:58 PM · Sep 12, 2024 · 394 Views</p> <p>38 12</p>

In addition to the content on X, Spamouflage's renewed September attacks on Rubio also included at least one Reddit account and two Medium accounts.¹¹ Like the content appearing on X, this content appeared at rates far lower than it did in 2022. This content received extremely little engagement, and even that engagement with the large, hacked accounts was nearly all generated by other in-network Spamouflage accounts. Importantly, it seems unlikely this content was at a volume which may have played a role in demoting Rubio content as was the case in 2022.

11. Example: <https://web.archive.org/web/20241007204116/https://medium.com/@majorpetroffjircg/marco-rubios-story-is-really-infuriating-fef566b788e4>

It is worth noting that the content appearing on Medium as well as the narrative content posted by the hacked accounts was much higher quality than what was employed in 2022, though the bar here is low. The September narrative content does, at least, seem to be originally written about Rubio and not another candidate. It is possible the content was written using a large language model less easily accessible in 2022.

Implications

Senator Rubio is a logical target of PRC information attacks. He is a frequent and vocal critic of China.¹² Spamouflage Dragon, and PRC disinformation more generally, focuses on undermining narratives critical of China and with that goal often attack journalists, activists, and politicians that speak out against them.

What is compelling about the attacks leveled at Rubio detailed in this report is the breadth of tactics employed over time, including tactics (such as the election day 2022 flooding attack) not previously identified. Given how Rubio has recurred as a target and the nature of some of what we have identified here, it may be that accounts targeting him are employed to test new tactics before they are applied more broadly. That may mean that Rubio is the proverbial canary in the coal mine and a warning of at least some things to come.

12. Rubio, M. (2024, September 9). Beijing set out to destroy U.S. economic supremacy. It's nearing its target. *Washington Post*. <https://www.washingtonpost.com/opinions/2024/09/09/marco-rubio-made-in-china-threat/>