**Individual Report**

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**Evaluated by** [Anuranjan Dubey](mailto:adubey37@asu.edu) **Approved by:** [Gautham Vijayaraj](mailto:gvijaya6@asu.edu)

**Date: September 2, 2023**

**Tasks Assigned:**

* Finding 4 research papers on topics related to Detection of Suspicious Activities on Social Media Using Data Mining and Machine Learning.
* Work on individual in-depth report
* Preparing individual progress report
* Evaluating Avani’s individual progress report and in-depth report
* Preparing project plan
* Studying the research paper "Suspicious Behavior Detection Current Trends and Future Directions” to answer the question What are the different kinds of suspicious behaviors that are present on social media?

**Summary:**

* The rationale for this review of the question What are the different kinds of suspicious behaviors that are present on social media? is to identify and categorize various types of suspicious behaviors that occur on social media platforms.
* Alongside the increased reliance on social media, there has been a parallel rise in malicious activities conducted by individuals or groups seeking to exploit these platforms for personal gain or to deceive users
* Such activities pose a threat to the integrity of interactions and the credibility of information disseminated through social media. Therefore, understanding and categorizing these suspicious behaviors are essential steps towards developing effective measures to ensure a secure and authentic social media environment.
* Understanding these behaviors is crucial for developing effective strategies to detect and prevent them, thereby enhancing the security and authenticity of social media interactions.
* The major studies reviewed in the paper depict a variety of suspicious behaviors on social media, including traditional spam, fake reviews, social spam, link farming, social sybils, and astroturfing.
* These studies provide insights into the characteristics, patterns, and methods used to detect these behaviors. They also discuss the challenges and complexities involved in addressing these issues in the context of data mining and machine learning.

**Outcome:**

In summary, the review provides insights on the diverse forms of suspicious behaviors prevalent on social media and highlights the importance of research in this field to ensure the security and authenticity of online interactions in an ever-changing digital landscape.

**References** *(4 Research papers found)*

[1] M. Jiang, P. Cui and C. Faloutsos, "Suspicious Behavior Detection: Current Trends and Future Directions," in *IEEE Intelligent Systems*, vol. 31, no. 1, pp. 31-39

[2]S. Shinde and S. B. Mane, "Malicious Profile Detection on Social Media: A Survey Paper," 2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2021, pp. 1-5.

[3] S. Gheewala and R. Patel, "Machine Learning Based Twitter Spam Account Detection: A Review," 2018 Second International Conference on Computing Methodologies and Communication (ICCMC), Erode, India, 2018, pp. 79-84, doi: 10.1109/ICCMC.2018.8487992.

[4] Xianghan Zheng, Zhipeng Zeng, Zheyi Chen, Yuanlong Yu, Chunming Rong,Detecting spammers on social networks,Neurocomputing,Volume 159,2015, Pages 27-34,ISSN 0925-2312, https://doi.org/10.1016/j.neucom.2015.02.047.

**Evaluation of Report  
  
Evaluation by:** [Anuranjan Dubey](mailto:adubey37@asu.edu) **Date: 2 September 2023**

**Is the weekly member report complete with all the major result(s) of the paper(s)? If not, provide as many examples of the major result(s) missing in the written report as possible. (in bullet form). [within 100 words]**

* The weekly member report is complete in summarizing the major results of the paper.
* It identifies various types of suspicious behaviors on social media, such as traditional spam, fake reviews, social spam, link farming, social sybils, and astroturfing.
* The report also emphasizes the importance of understanding these behaviors for enhancing security and authenticity on social media.
* It highlights the insights provided by the reviewed studies on the characteristics, patterns, and detection methods of these behaviors.
* No major results appear to be missing from the report.

**Is each section of the guidelines sufficiently completed? If not, point out what is missing. [Normally within 40 words].**

Yes

**Is the quality of this version of the written report satisfactory? If not, then why not? [Normally within 40 words]**

Yes

**Approved by:** [Gautham Vijayaraj](mailto:gvijaya6@asu.edu) **Date: 9/4/2023**