## *Disclaimer: The following document is intended to provide general guidance on the use of this template. Please refer to the template for the specific format and content requirements. You may also add additional information to the template as needed for your specific progress.*

**Individual Report**

**Member name:** [Rahul Nayak](mailto:rrnayak@asu.edu)

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

**Date: 09/30/2023**

**Tasks Assigned:**

* Work on individual in-depth report
* Preparing individual progress report
* Evaluating Avani’s individual progress report and in-depth report

**Summary:**

* During the previous week, I dedicated my efforts to delving into a research paper that pertains to identifying spam accounts within the Sina Weibo social network. This particular paper also contained an extensive amount of content and research related to the collection and analysis of datasets. As I shift my focus to this topic for the upcoming week, I continued to explore and study the aspects of dataset collection and analysis presented in the paper.
* Discussed the manual selection of 100 normal users and 50 spammers for data collection purposes.
* Pointed out the development of data crawlers for both normal and spammer users, enabling the extraction of data from more than 30,000 Weibo users.
* Emphasized the collection of information from 500 recent messages per user, encompassing user attributes and message characteristics.
* Highlighted the labeling of 11,488 spammers and 17,646 non-spammers, with an 80-20 split for training and testing datasets.
* Analyzed user-based features such as follower counts, account creation frequency, and posting habits, revealing behavioral distinctions.
* Noted the common practices of spammers, including automated message posting and the inclusion of URLs in their content.
* Described the implementation of a supervised machine learning model, specifically an SVM with an RBF kernel, for accurate spammer detection.
* Mentioned experiments with various ratios of spammers to non-spammers in the training dataset, with a 1:2 ratio yielding promising results.
* Highlighted the development of a prototype software for real-time spammer detection on Weibo and its successful testing on a trending topic.

**Outcome:** This week's progress builds upon the foundation laid during the previous week and provides a deeper understanding of the paper's content, particularly focusing on the data collection and analysis techniques employed for detecting suspicious activities on the Sina Weibo platform.

**References** *(with citation)*

[1] 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

**Evaluation of Report  
  
Evaluation by:** [Anuranjan Dubey](mailto:adubey37@asu.edu) **Date: 9/30/2023**

**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]**

* Yes, The written report effectively summarizes the major results of the paper on detecting spam accounts on Sina Weibo.

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

Yes, each section of the guidelines is sufficiently completed.

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

Yes, the quality of this version of the written report is satisfactory. The member has completed all their assigned tasks and summarized the research paper they studied. The evaluation report is complete with all the major results of the paper. **Approved by:** [Gautham Vijayaraj](mailto:gvijaya6@asu.edu) **Date: 9/30/2023**