**Individual Report**

**Member name:** [Sangeeth Santhosh](mailto:ssantho9@asu.edu)

**Evaluated by:** [Justin Young](mailto:jtyoun15@asu.edu) [Gautham Vijayaraj](mailto:gvijaya6@asu.edu)

**Date:** 10/21/23

**Tasks Assigned:**

* Preparation and Evaluation of Individual Progress Reports
* Read not-so important papers

**Summary:**

* Read the research papers classified as not-so important, which are to be read by all the team members.
* Evaluation of individual progress reports of one team member was completed successfully.
* The research paper read this week was ‘A survey of data mining and social network analysis based anomaly detection techniques.
* The main focus area of this paper is to review different techniques for the prevention and detection of anomalies in online social networks, with special emphasis on data mining techniques.
* The techniques discussed in the paper do not compromise the integrity of honest users and only correct classification of spam and non-spam is achieved.
* In this paper, data mining approaches for anomaly detection are divided into three main categories: supervised, semi-supervised and unsupervised methods.
* The supervised method studies anomaly detection as a classification problem with pre-labeled data, which could be labeled either as anomalous or normal.
* The unsupervised method studies anomaly detection when there are no labeled objects available.
* Semi-supervised methods could be considered as a combination of supervised and unsupervised methods. It involves two sets of data – labeled and unlabeled.
* Overall, the paper covers different types of approaches for anomaly detection in data mining as well as social network analysis.

**Outcome:**

All the tasks assigned this week – preparation and evaluation of individual progress reports and reading of not-so important research papers was completed successfully.

**References** *(with citation)*   
  
[1] Ravneet Kaur, Sarbjeet Singh. "A survey of data mining and social network analysis-based anomaly detection techniques." Egyptian Informatics Journal, Volume 17, Issue 2, 2016, Pages 199-216. ISSN 1110-8665. doi: 10.1016/j.eij.2015.11.004.

**Evaluation of Report  
  
Evaluation by:** [Justin Young](mailto:jtyoun15@asu.edu)

**Date: 10/22/23**

**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, all major results are covered.

**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: 10/23/2023**