Academic Writing AND APA 7

Academic Writing: Rule 1

- Academic writing will not accept the followings
  - Opinions
  - Based on my experience, …..
  - According to my readings, …..
  - **In general: uncited statements or statements that are not based on evidence or results of a study**

- Academic writing will accept the followings
  - Uncited statements are accepted as long as they are followed by:
    - Evidence or results of a study
    - Cited statements

Academic Writing: Rule 2

- Statements
    - A statement, generally, should not exceed four lines.

- Paragraphs
    - A paragraph cannot be less than four sentences and it cannot be less than four lines.

    - A paragraph should not go beyond one page.

    - A paragraph should have at least two cited statements. Citations should be at least from two different sources.

Academic Writing: Rule 3

- Assume highlighted greens are your statements presented in the next two slides.

- We will discuss proper citing in these two slides.

Academic Writing: Rule 3

- Unaccepted Citation in Example:
  - I used the quantitative methodology to examine hypotheses in this study because this methodology encompasses collecting numeric data (Ahmad et al., 2019).

- Accepted Citation in Example:
  - I used the quantitative methodology to examine hypotheses in this study. This methodology encompasses collecting numeric data (Ahmad et al., 2019).

Academic Writing: Rule 3

- Unaccepted Citation in Example:

  - A problem of unsupervised DDoS attack detection methods is the curse of dimensionality because the curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018).

- Accepted Citation in Example:

  - A problem of unsupervised DDoS attack detection methods is the curse of dimensionality. The curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018).

Academic Writing: Rule 3

- Now, assume highlighted green is from a different author presented in the next slide.

Academic Writing: Rule 3

- Unaccepted Citation in Example:

  - A problem of unsupervised methods is the curse of dimensionality (author's last name, 2016) as the curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018).

- Accepted Citation in Example:

  - A problem of unsupervised methods is the curse of dimensionality (author's last name, 2016). The curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018).

Academic Writing: Rule 3

- Now look at the following slide for acceptable citation.

Academic Writing: Rule 3

- Acceptable Citation in Example:
  - Feature reduction is able to excavate useful information from a dataset (Yanfang et al., 2020)**, and** is with the capability to enhance the "generalization performance" (Xiaojuan et al., 2018, p. 595).

Academic Writing: Rule 4

- University Library Database is Extremely Recommended
- No Wikipedia and Unreliable Websites
  - Look for Websites that have name of author(s) and have dates for the presented contents. (not encouraged)

- Academic Integrity
  - Do not copy writings or statements

- Why?
  - Unethical

  - Risk of Encountering Academic Corrective Actions

  - You need citations and references anyway
    - Uncited statements or statements that are not based on evidence or results of a study are not accepted.

Academic Writing: Suggestion

- Difference among Active Voice and Passive Voice in Examples:
  - Active Voice:
    - Company X used this security information.
  - Passive Voice:
    - This security information was used by company X.

- Try to Use Active Voice in Writings than Passive Voice
  - More Assertive
  - More acceptable in studies

Academic Writing: Suggestion

- Try to Apply MEAL Plan in Paragraphs
  - **M**
    - Statement that presents (describes) the main point.
    - It can be considered the purpose for the respective paragraph.
  - **E**
    - Statement that presents the evidence to the main point. This statement is cited.
  - **A**
    - Your Analysis (Relationship of the M and E statements to your writing)
  - **L**
    - One Statement
    - Statement representing lead-out (Conclusion) and lead-in (Opening Argument to the next paragraph).

Academic Writing: MEAL Example

A problem of DDoS attack detection methods that apply the clustering method is the curse of dimensionality. The curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018). In a high dimensional network traffic data set that has a lot of features (attributes), distance between data points leads to being inconsequential, which causes calculation of the learning process of an unsupervised DDoS attack detection method to produce equal feature weights known as the curse of dimensionality (Idhammad et al., 2018). Therefore, the purpose of this study is to examine the addition of a hybrid feature selection method prior to the clustering method in detecting DDoS attacks.

Academic Writing: Issue and Suggestions

- MEAL Plan is not Accepted for Writing an entire paragraph
  - Since it talks about presenting one citation or evidence

- Why?
  - Contents require Synthesis
  - One citation is not enough for providing synthesis

- Fixing the Issue of the MEAL Plan
  - M (if you can, cite the statement presenting the main point)
  - MEEAL
  - Bring a cited statement to support your analysis
    - MEAEL

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- Proper Citation:
  - Feature reduction is able to excavate useful information from a dataset (Yanfang et al., 2020), and is with the capability to enhance the "generalization performance" (Xiaojuan et al., 2018, p. 595).

  - According to Quang-Van et al. (2021), the winning neuron has the closest distance to a randomly selected input vector by the SOM algorithm known as best matching unit (BMU).

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- Authors more than 2
  - (Yanfang et al., 2020).
    - If placed at the end of a sentence
  - Yanfang et al. (2020)
    - If placed in the beginning or the middle of sentence
- One Author
  - (Yanfang, 2020).
  - Yanfang (2020)
- Two Authors
  - (Yanfang & Williams, 2020).
 - Yanfang and Williams (2020)

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- Spacing between two sentences
    - Single Space
    - Not Double Space

    - Example:
        - A problem of DDoS attack detection methods that apply the clustering method is the curse of dimensionality. The curse of dimensionality lowers the effectiveness of unsupervised DDoS attack detection methods in terms of identifying attacks correctly (Idhammad et al., 2018).

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- Example of appropriate figure

Figure C1

DDoS Attacks Detection Methods with Data Cleaning
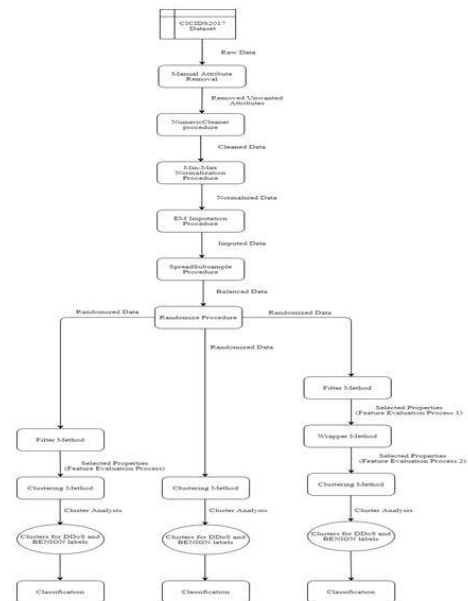
Note. This figure illustrates the data cleaning process including DDoS attacks detection modeling.

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- Example of appropriate table

Table 1

Independent Variable Table

Independent Variables	Algorithms
Clustering Method	SelfOrganizingMap
	SimpleKMeans
Filter Method	ChiSquaredAttributeEval
	InfoGainAttributeEval
Wrapper Method	WrapperSubsetEval(J48)
	WrapperSubsetEval(NaïveBayes)

Note. The ChiSquaredAttributeEval and the InfoGainAttributeEval are the chi-squared and information gain algorithms, which the study has referenced. The wrapper method will use the J48 and NaïveBayes classifiers to determine the appropriate feature.

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- Examples of table/figure naming convention under appendices

- Table A1 indicates that the table is under Appendix A
- Table B1 indicates that the table is under Appendix B
- Tables D1-6 indicates that the tables are under Appendix D

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- Examples of table/figure naming convention under appendices

- Figure 1 indicates that the figure is within the contents
- Figure C1 indicates that the figure is under Appendix C
- Figures H1-6 indicates that the figures are under Appendix H

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- Appendices are placed after references

- If tables are placed within the contents, they should not break into a second page, third page, and …

- Tables that break into the second page should be placed under appendices

- **References** are **ordered alphabetically** based on authors' last names.

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- An example of a reference for a journal. 8 is Vol and 7 is Issue
- Journals have volume and issue numbers.

Sangve, S. M. & Kulkarni, U. V. (2017). Anomaly based improved network intrusion detection system using clustering techniques. *International Journal of Advanced Research in Computer Science*, *8*(7), 808-815. https://doi.org/10.26483/ijarcs.v8i7.4453

- An example of a reference for an article
- Regular articles do not have volume and issue numbers

Sharafaldin, I., Lashkari, A. H., & Ghorbani, A. A. (2018). Toward generating a new intrusion detection dataset and intrusion traffic characterization. SciTePress – Science and Technology Publications, Lda., 108-116. https://doi.org/10.5220/0006639801080116

- An example of a reference for a hard-copy book

Kamath, U. & Choppella, K. (2017). *Mastering java machine learning*. Birmingham, UK: Packt Publishing.

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- An example of a reference for a book as PDF from a site

Merkow, M. S. & Breithaupt, J. (2014). *Information security principles and practices*

(2nd e.d.). Indianapolis, IN: Pearson.
https://ptgmedia.pearsoncmg.com/images/9780789753250/samplepages/078
9753251.pdf

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- An example of a reference for a webpage on a site

Last name, first initial. (2016). *Title given for the contents*. Title of the site. URL

- An example of a reference for a webpage on a site with no date

Last name, first initial. (n.d.). *Title given for the contents*. Title of the site. URL

APA 7

- I have provided a template for adhering to the rest of APA 7 edition formatting