**ANALYZING A JOURNAL ARTICLE 1**

NAME: Sushmitha.S DATE: 11-04-2022

JOURNAL ARTICLE TITLE: Intrusion Detection and Prevention System Using Deep Learning.

**Step 1. What is the purpose/hypothesis/aim/objective of the study?**

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| a. Write down the exact statement in which the authors describe what they were testing. (Hint: This information may be provided in the article as a purpose statement or as a hypothesis). Include quotation marks around the exact wording, and indicate page number(s). | “In this paper both the separate Intrusion Detection System and the Intrusion Prevention system are combined as a single system to achieve the aim of intrusion detection and prevention tasks in a faster and efficient manner.”(Page number: 273) |
| b. Now describe the purpose of the study (as you understand it) in your own words. | The authors try to demonstrate about two systems one for detection and another for prevention of Intrusion using Deep Learning. |
| c. What was the “gap” in the research that the authors were trying to fill by doing their study? | The authors build the IDPS Research Tool, which will be able to detect and prevent intrusions from intruders. |

**Step 2. What is/are the major finding(s) of the study?**

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| a. Make some notes about the authors’ major conclusions or findings as written in the article. Include quotation marks whenever you use their exact wording, and indicate page number(s). | **“**In order to improve the system's versatility, it is necessary to implement the system as anomaly detection with a learning framework instead of signature-based detection. One of the newest training and classification techniques, which are executed in this engine, is emerged as deep learning.”  (Page number: 278) |
| b. Now write those conclusions (as you understand them) in your own words. | After implementing this IDS model using deep learning, the script for the prevention is generated. |

**Step 3. How did the authors test their hypothesis?**

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| a. Briefly summarize the main steps or measurements that the authors used in their methods. Try to explain in your own words as much as possible. | In the Training the received data after pre-processing is used to create the pre-trained model by feeding the present output to the selected Deep Neural Network consisting of 2 dense layers other than input and output layer with Relu and Softmax activation functions and train our data. |
| b. Do the authors suggest any problems or limitations with their methodology? Do you see any problems or limitations with their methodology? | Less powerful beyond classification problems |
| c. How did the authors analyse their data? What test/s did they use? | 1)The IDS phase first starts with the suitable data set collection.  2)KDDCup99 dataset.  3)Deep learning. |

**Step 4. How reliable are the results?**

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| a. Do the authors suggest any problems with the study that could lead to unreliable results? | The authors say that “It would be able to prevent all the unknown attacks and intrusions based on the deep learning model” |

**Step 5. Based on your analysis, are the claims made in this journal article accurate?**

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| --- | --- |
| a. Do the conclusions made (about the results) by the author make sense to you? Are the conclusions too broad or too narrow based on what was actually done in the study? | Yes the conclusions make sense and narrow. |
| b. Based on the accuracy of the methodology and the reliability of the results as described in Steps 3 and 4, do you think the conclusions can be believed? | The conclusions can be partaially believed. |

**Step 6. What is the importance of this scientific work?**

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| a. Write (in your own words) the significant contributions of the experimental work in this journal article as reported by the authors. | The authors tried to experiment Intrusion Detection and Prevention using Deep Learning. |
| b. Re-read your notes and explain why you think this is  o a strong or weak scientific article  o a strong or weak scientific study | It is a strong scientific study and partially strong article. |