

Review Form 1.8

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_120196
Title of the Manuscript:	Evaluation of Machine Learning Model for Network Anomaly Detection: Support Vector Machine
Type of the Article	Original Research Article

Review Form 1.8

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Is the manuscript important for scientific community? <i>(Please write few sentences regarding this manuscript to justify your answer)</i>	Yes. Many cyber threats are possible in handling large volume of data in our day to day life. It is essential to identify the normal and attack traffic to reduce communication overhead in the network. This kind of research work is necessary for the real world to detect the network anomalies using machine learning algorithms	
Is the title of the article suitable? (If not please suggest an alternative title)	Title can be replaced by Network Anomaly Detection using various Support Vector Machine models	
Is the abstract of the article comprehensive?	Yes	
Are subsections and structure of the manuscript appropriate?	No. In the introduction part authors have explained about the machine learning and different types of SVM models and one related work in the last paragraph. Introduction section should be separate and related work or literature review should be separate. Authors are advised to introduce a new section for related work and discuss 10 to 15 recent research works related to SVM in network anomaly detection. Also update the references in the reference section.	
Do you think the manuscript is scientifically correct? <i>(Please write few sentences regarding this manuscript to justify your answer)</i>	Yes. Since resource sharing is crucial for today's trend. It is significant to sort out the issues and various challenges of different networks. Machine Learning is one of the trending tools to do the effective prediction on various applications.	
Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.	Majority of the references have taken from International Conferences, authors are advised to refer reputed International Journals for the same.	

Review Form 1.8

<p>Minor REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>	<p>Yes</p> <p>Proposed methodology should have a proposed block diagram to describe all the components of the entire methodology as a single unit. Insert a block diagram in this section.</p> <p>There is no detailed explanation for the figure no: 2 Correlation Heat Map.</p> <p>In paragraph 7 of introduction section, it is stated that CIC-DDOS2019 dataset is used for proposed work, but it is nowhere discussed in the entire research work. Only NSL-KDD dataset is used in the research. When compared to NSL-KDD dataset, CIC-DDOS2019 dataset has updated attack types. Authors are advised to use both the datasets and record the performance of different SVM models for better results and justification.</p> <p>Introduce a table to record the accuracy and f-score of different SVM models for clarity.</p> <p>Figure 3, 4, 5 and 6 are not mentioned in the respective paragraphs.</p> <p>Figure 7 and 8 are not explained in detail.</p> <p>A separate section has to be introduced to discuss the comparison between author's work and existing works (consider at least 5 related existing works)</p>	
<p>Optional/General comments</p>	<p>Authors can involve both the conventional and recent datasets for the effective evaluation of the SVM models</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

<p>Name:</p>	<p>C. M. Nalayini</p>
<p>Department, University & Country</p>	<p>Velammal Engineering College, India</p>