

View Reviews

Paper ID

88

Paper Title

Machine Learning for Human Activity Recognition in Endotracheal Suctioning Procedures

Track Name

Challenge

Reviewer #1

Questions**1. Contribution to ABC**

The authors proposed a method to improve activity recognition accuracy by data argumentation using GAN.

2. Decision

MAJOR revision then accept after re-checking

3. Review comments

Overall, it is well described, but there are a few parts that need to be corrected as they are not written in the general style of a paper. In addition, there are things written in the Introduction and Conclusion section but not in the Method section, that should be corrected.

4. Revision requirements

Major:

- The introduction should describe the whole paper's information, the aims and objectives, the methods used to achieve the problem, and the results of this paper, respectively. In general, the paragraph starting with "In this paper, we ~~" is written to describe those things.
- I think the contributions summary list is very good. However, you should reconsider some of the sentences. For example, the first sentence is written as "contribution = Idea", which is not good. It should be written that contribution is "showed/clarified

something", "proposed some method", etc. For example, "We show that using PCA, the accuracy can be improved".

- In IV.A, It is not clear how the data was expanded. What does "a function to horizontally flip the key data points" mean? For example, does it mean to turn a left-hand keypoint into a right-hand keypoint?

- In IV. A, it is challenging to understand the meaning of "a method of data cleansing." How was it recalculated?

- In IV.A, From this sentence of "we remove redundant data by smoothing the key points and ~", It was difficult to understand how you selected the redundant data/sample. This means you need to write more details about the smoothing.

- In IV.C, it is written, "Grid Search method to identify the utmost combination of features for the model creation."

In general, Grid Search was used to adjust the hyperparameters; was it used that way this time as well? Reading the sentences, it looks like it was used for feature selection.

- It does not write where Principal Component Analysis (PCA) was used.

- In VI. Discussion, you should first mention whether your methods were good or bad.

Miner:

- Abstract should not separate paragraphs. Write one paragraph.

- IV. C "we decided to select" => need to capitalize "We decided~"

- Table II => It's figure, so Figure 1.

- Evaluation results such as average accuracy and average F1 value should be shown in the Result section.

Reviewer #2

Questions**1. Contribution to ABC**

The paper aligns well with ABC's goals, focusing on activity recognition in nursing through video-based pose estimation. This research could benefit patient monitoring and nurse training.

2. Decision

MAJOR revision then accept after re-checking

3. Review comments

1. Has a lot of formatting issues.
2. Figure fonts are not clearly visible.
3. Their work procedure is unclear, and features are not mentioned.
4. Not enough related works

4. Revision requirements

1. I think conclusion should be the last section. Also, the discussion topic is not correct. Moreover, add a result section. Rewrite these sections.
2. Generative AI is one of the core requirements of the challenge, so it should be highlighted in the abstract and introduction.
3. Related works need more relevant papers.
4. I think plot is under the Figure category, not Table. Are you sure you mean Table 2 is a plot? Make corrections .
5. Figure fonts should be clearly visible. Increase the font size.
6. The use of Generative AI should be in the methodology, and the effect of using it should be explained in the result section.
7. Lack the explanation about the utilized features. It is not possible to evaluate your work without this information.
8. The work flow diagram does not contain a clear explanation.
9. Better add experimental set-up information, including language, device configuration, libraries, train test split, and execution time.
10. Discussion or conclusion should not contain references, ideally. Mention them in the related works or methodology if needed.
11. The whole paper should be carefully checked the sections should be written.

Follow the guidelines provided by the organizers.