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Group 5

1. Summary of the report

Pham Trung Kien and Do Van Quet are working on their self-proposed dataset about increasing the safety of construction workers. They have mentioned that there are limitations in the previous research on this study, which is still requiring human supervisors to manipulate the monitors and have the surveillance range of cameras limited, and they have proposed a method to overcome this problem. They have also mentioned a clear objective using their AI monitor, which consists of the multi-person detector and binary image classifier. As for their dataset, they have been collecting their data from open sources on the internet, but they didn't mention about their data preprocessing methods or procedures. They have utilized two different models for comparison, which are RAPiD (Rotation-Aware People Detection) and EfficientNetV2, and they have also listed out the reasons and the advantages of their chosen models. Then they showed their results and also specified the parameters they used for their model, some graphs and pictures to better showcase their result, and also the quantitative result compared to the original paper that they are referring to. Last but not least, they listed out all their references and the contributions each of them made.

2. Strengths of the report

- (1) They gave detailed descriptions about the detector, classifier, and models and their parameters.
- (2) There are lots of pictures, graphs, and tables for each section of the report, which gives a great visualization and it's clearer for readers to know where the highlights are.
- (3) Lastly, they provided thoughts and methods that they or other people may be able to improve in the future.

3. Weaknesses of the report

- (1) The RAPiD architecture graph was too small and I could barely see the words on the graph, as graphs should be used to demonstrate an idea better
- (2) They didn't specify what methods they have used for their data preprocessing, as I believe some data preprocessing has to be done while using the input number is large (20000).

4. Evaluation on quality of writing (4)

I think the report is complete and clearly written as it did express their thoughts and methods clearly, and there were figures for visualization and there were no typos. Also, they made a huge effort in collecting their dataset. I think the parts that this report can improve are as follows :

- (1) The accuracy result was not very obvious as it is only written in the comparison table, while I think they can make it more clear.

(2) They could add a conclusion at the very last to make the report more complete.

5. Evaluation on presentation (4)

The presentation was clear and well organized, and the language flow was fluent. The slides were also clear with lots of pictures, graphs, and tables for good visualization, and the slides were also well prepared as he used different colors for highlight points. However, there are some points that I think he can improve, which are as follows :

- (1) Sometimes they used small case for the first letter, but sometimes it's in capital case, which is not consistent in the whole presentation slides
- (2) They didn't mention how they chose the numbers for their parameters
- (3) The presentation slides for the model part is a little too full, they can try to put some information on another page so that they don't have to squeeze all the information in one slide

6. Evaluation on creativity (5)

I think the work did propose new ideas, as I believe these methods have not been proposed for the relevant dataset before. I think it does contain some state-of-the-art results, and I think they did improve the problem that monitoring the safety of construction workers still requires human supervisors to manipulate the monitors and have the surveillance range of cameras limited. I would like to read and cite, and utilize the models and parameters of their model, which I think is a quite new and creative idea.

7. Confidence on my assessment (3)

I have carefully read the paper and checked the results.