**Peer Review - Flood Level Detection based on Computer Vision Techniques**

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In this project, Chong Di and Jiahao Xia propose a method to detect flood level accurately utilizing image processing techniques, such as semantic segmentation, image matching and camera pose estimation. Point cloud, panoramic images and flood images are used as dataset.

The authors first provide some introduction to flood level detection, in which they point out the importance and necessity of an accurate method of flood level detection. After that, the authors briefly introduce techniques used in the project including semantic segmentation, image matching and camera pose estimation. Then they discuss their methods and dataset. The introduction is detailed, but the section of experiment and result has not been completed. Apart from that, I would suggest that they add a section of abstract or summary before the introduction of background, which will make the report clearer.

In the introduction, the authors only talk about the knowledge of background. It would be better if they add some contents about how it is related to their project. As for the related work, the techniques used in this project are presented with great details. For example, in semantic segmentation, the authors five different networks in this field. However, they do not mention which one they are using and how they use it. It is the same with image matching and camera pose estimation. The introduction of the background seems not to be connected with the project.

In the method part, the authors only provide a picture showing the structure of their proposed detection method. It is difficult for the readers to fully understand their method with only one picture and a short paragraph of description. The introduction of dataset is very through and clear. For the experiment and result, which should be the vital parts of the project, the authors have not finished them yet, so I am looking forward to these sections.

Apart from all those that has been said, there are some little problems that can be fixed. For example, the font and font size of the report seem not suitable for reading. It would be better if they use smaller size. There are also some grammar issues. For example, in section 2.3, they mention “*…focus on two aspects…One aspect studies efficient optimizations…*”. It should be “*In one way, we study efficient…*”. These little errors won’t affect the report much, but it is a good way to improve the report and show the profession.

Generally, the project is interesting and useful. I expect to see their experiment done and their results of evaluation. Meanwhile, I think there are many things they can do to write a better report.