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Peer Review

Review of: "TrafficLoc: Localizing Traffic Surveillance Cameras in 3D Scenes"

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This paper proposes a novel method to localize traffic surveillance cameras in 3D scenes by image-to-point cloud registration. This paper is well-written, and the experiment proves that the proposed method can achieve better performance than existing methods. However, there are some problems to be solved:

1. The proposed method requires a LiDAR point cloud to localize the camera. However, establishing the high-resolution point cloud map can be expensive. Nowadays, even vectorized HD maps are hard to collect at a large scale, due to expensiveness and the restriction of mapping regulations. Will requiring a 3D point cloud map be a problem in the application of the proposed method? Please provide some explanation.
2. According to the experimental results, the relative translation error of the proposed method is the smallest among similar methods. However, the RTE of 0.51m is still bigger than the error of GNSS RTK, which is about 0.1m. Can using a GNSS device solve the problem of localizing the surveillance camera?
3. The proposed dataset has only about 1000 images. It could be better to enlarge the dataset in further research by setting more scenarios in Carla.
4. The main contributions of the paper can be further summarized to highlight the novelty of the proposed method.

Declarations

Potential competing interests: No potential competing interests to declare.

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