

Fig. 1. Top view of line mapping results of ALVIO [1], previous work [2], and UV-SLAM for MH\_01\_easy, MH\_02\_easy, MH\_03\_medium, MH\_04\_difficult, and MH\_05\_difficult in order from top to bottom. (a) ALVIO. (b) Previous work. (c) UV-SLAM.

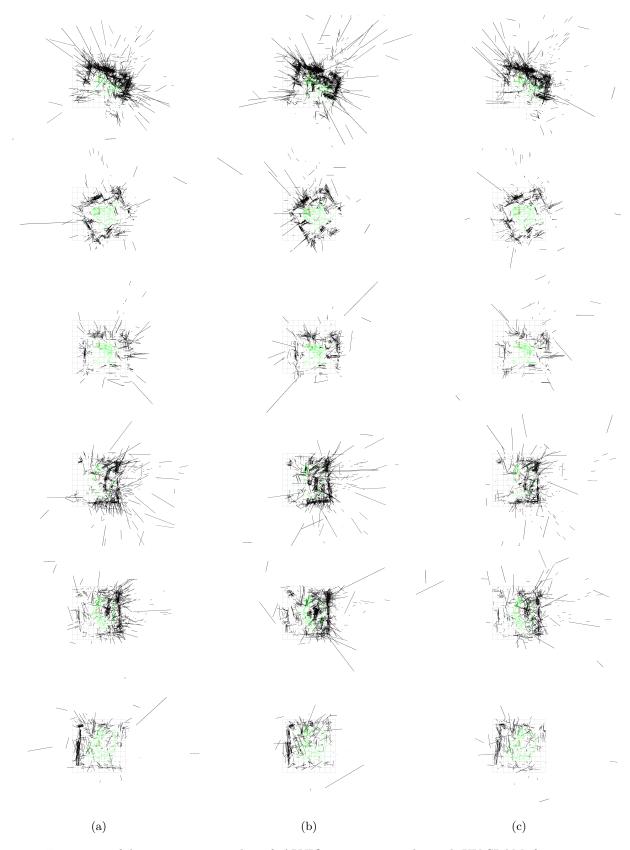


Fig. 2. Top view of line mapping results of ALVIO, previous work, and UV-SLAM for  $V1_01_easy$ ,  $V1_02_medium$ ,  $V1_03_difficult$ ,  $V2_01_easy$ ,  $V2_02_medium$ , and  $V2_03_difficult$  in order from top to bottom. (a) ALVIO. (b) Previous work. (c) UV-SLAM.

## References

- [1] K. Jung, Y. Kim, H. Lim, and H. Myung, "ALVIO: Adaptive line and point feature-based visual inertial odometry for robust localization in indoor environments," in *Proc. International Conference on Robot Intelligence Technology and Applications (RiTA)*, 2020, https://arxiv.org/abs/2012.15008.
- [2] H. Lim, Y. Kim, K. Jung, S. Hu, and H. Myung, "Avoiding degeneracy for monocular visual SLAM with point and line features," in *Proc. IEEE International Conference on Robotics and Automation (ICRA)*, 2021, pp. 11675–11681.