

























2010, 28(2): 1–17.

- [36] Payeur P, Hebert P, Laurendeau D, et al. Probabilistic octree modeling of a 3-d dynamic environment[C]//Proceedings of IEEE international conference on Robotics & Automation. New Mexico, USA: IEEE, 1997: 1289-1296.
- [37] Wurm K M, Hornung A, Bennewitz M, et al. OctoMap: A probabilistic, flexible, and compact 3D map representation for robotic systems[C]// Proceedings of IEEE international conference on Robotics & Automation. Alaska, USA: IEEE, 2010.
- [38] Hornung A, Wurm K M, Bennewitz M, et al. OctoMap: An efficient probabilistic 3D mapping framework based on octrees[J]. *Autonomous Robots*, 2013, 34 (3):189-206.
- [39] Daudelin J., Campbell M. An Adaptable, Probabilistic, Next-Best View Algorithm for Reconstruction of Unknown 3-D Objects[J]. *IEEE Robotics and Automation Letters*, 2017, 2(3): 1540-1547.
- [40] Potthast C, Sukhatme G S. A probabilistic framework for next best view estimation in a cluttered environment[J]. *Journal of Visual Communication and Image Representation*, 2014, 25 (1): 148-164.
- [41] Amanatides J. A Fast Voxel Traversal Algorithm for Ray Tracing[J]. *Proc Eurographics Amsterdam the Netherlands*, 1987:3-10.
- [42] Vasquez-Gomez J I, Sucar L E, Murrieta-Cid R, et al. Tree-based search of the next best view/state for three-dimensional object reconstruction [J]. *International Journal of Advanced Robotic Systems*, 2018:1-11.
- [43] Delmerico J, Isler S, Sabzevari R, et al. A comparison of volumetric information gain metrics for active 3D object reconstruction[J]. *Autonomous Robots*, 2018, 42(2): 197-208.
- [44] Vasquez-Gomez J I, Sucar L E, Murrieta-Cid R, et al. Volumetric next best view planning for 3d object reconstruction with positioning error[J]. *International Journal of Advanced Robotic Systems*, 2014, 11(10): 159-171.
- [45] Vasquez-Gomez J I, Sucar L E, Murrieta-Cid R.

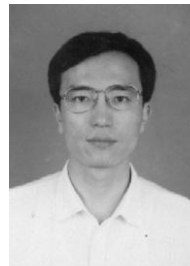
View planning for 3d object reconstruction with a mobile manipulator robot[C]//Proceedings of IEEE/RSJ international conference on intelligent robots and systems. IL, USA: IEEE/RSJ, 2014: 4227-4233.

- [46] Yamauchi B. A frontier-based approach for autonomous exploration[C]// Proceedings of IEEE international conference on robotics and automation. New Mexico, USA: IEEE, 1997: 146–151.
- [47] Isler S, Sabzevari R, Delmerico J, et al. An information gain formulation for active volumetric 3D reconstruction[C]// Proceedings of IEEE international conference on Robotics & Automation. Stockholm, Sweden: IEEE, 2016: 3477–3484.



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