RL用于视觉导航、建图方面的重要文献
（Learning to Navigate in Cities Without a Map. 2018）

1.自我定位：

基于CNN
[1]Planet- photo geolocation with convolutional neural networks. ECCV, 2016.

基于CNN+LSTM
[2]Long-term recurrent convolutional networks for visual recognition and description. CVPR. 2015.

估计相机姿态和深度
[3]Image-based localization with spatial lstms. 2016.
[4]Posenet: A convolutional network for real-time 6-dof camera relocalization. ICCV, 2015
[5]Demon: Depth and motion network for learning monocular stereo. CVPR 2017

基于检索
[6]Netvlad: Cnn architecture for weakly supervised place recognition.CVPR. 2016.

2.导航：

[7]Deepnav: Learning to navigate large cities. *arXiv preprint arXiv:1701.09135*, 2017.
[8]Vizdoom: A doom-based ai research platform for visual reinforce- ment learning. *CIG,* IEEE, 2016.

基于Text description:
[9]Understanding grounded language learning agents. *arXiv preprint arXiv:1710.09867*, 2017.
[10]Gated-attention architectures for task-oriented language grounding. *arXiv 1706.07230*, 2017.
[11]Grounded language learning in a simulated 3d world. *arXiv preprint arXiv:1706.06551*, 2017.
[12]Active neural localization.ICLR, 2018.

3. 路径规划：

[13]Neural slam: Learning to explore with external memory. *arXiv preprint arXiv:1706.09520*, 2017.
[14]Neural map: Structured memory for deep reinforcement learning. *arXiv:1702.08360*, 2017.
[15]Teaching a machine to read maps with deep reinforcement learning. *arXiv:1711.07479*, 2017.
[16]Cognitive mapping and planning for visual navigation. *arXiv preprint arXiv:1702.03920*, 2017.
[17]Semi-parametric topological memory for navigation.ICLR. 2018

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[18]Carla: An open urban driving simulator. *arXiv preprint arXiv:1711.03938*, 2017.
[19]Ai2-thor: An interactive 3d environment for visual ai. *arXiv preprint arXiv:1712.05474*, 2017.
[20]Airsim: High-fidelity visual and physical simulation for autonomous vehicles. In *Field and Service Robotics*, pp. 621–635. Springer, 2018.
[21]Building generalizable agents with a realistic and rich 3d environment. *arXiv:1801.02209*, 2018.

其他：
[22]Ask your neurons: A deep learning approach to visual question answering. *IJCV.2017*