Term Projects

1. "Improved Techniques for Grid Mapping with Rao-Blackwellized Particle Filters" available at http://www2.informatik.uni-freiburg.de/~grisetti/pdf/grisetti06tro.pdf
2. "iSAM2: Incremental smoothing and mapping using the Bayes tree" available at http://journals.sagepub.com/doi/pdf/10.1177/0278364911430419
3. "Selecting Good Measurements via L1 Relaxation: a Convex Approach for Robust Estimation over Graphs" available at https://ai2-s2-pdfs.s3.amazonaws.com/462b/a4c3812299813c12485648c71c79c802dde1.pdf
4. "Simultaneous calibration of odometry and sensor parameters for mobile robots" available at http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6482657
5. "Inference on networks of mixtures for robust robot mapping" available at http://www.roboticsproceedings.org/rss08/p40.pdf
6. "A linear approximation for graph based Simultaneous Localization and Mapping" available at http://www.roboticsproceedings.org/rss07/p06.pdf
7. "Supervised semantic labeling of places using information extracted from sensor data" available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.136.8094&rep=rep1&type=pdf
8. "Visual-lidar odometry and mapping: low-drift, robust, and fast" available at http://ieeexplore.ieee.org/abstract/document/7139486/
9. "LOAM: Lidar Odometry and Mapping in Real-time" available at https://www.ri.cmu.edu/pub_files/2014/7/Ji_LidarMapping_RSS2014_v8.pdf
10. "Stereo odometry based on careful feature selection and tracking" available at http://ieeexplore.ieee.org/abstract/document/7324219/
11. "Comparing ICP variants on real-world data sets" available at http://link.springer.com/article/10.1007/s10514-013-9327-2
12. "Fast and accurate scan registration through minimization of the distance between compact 3D NDT representations" available at http://journals.sagepub.com/doi/pdf/10.1177/0278364912460895
13. "Estimation of IMU and MARG orientation using a gradient descent algorithm" available at http://x-io.co.uk/open-source-imu-and-ahrs-algorithms/
14. "Fast Marching Trees: a Fast Marching Sampling-Based Method for Optimal Motion Planning in Many Dimensions" available at - https://web.stanford.edu/~pavone/papers/Janson.Pavone.ISRR13.pdf
15. "Multi-Heuristic A*" at http://www.cs.cmu.edu/~venkatrn/papers/rss14.pdf

16. “Incremental Sampling-based Algorithms for Optimal Motion Planning” at http://roboticsproceedings.org/rss06/p34.pdf
17. “PoseNet: A Convolutional Network for Real-Time 6-DOF Camera Relocalization” at http://www.cv-foundation.org/openaccess/content_iccv_2015/papers/Kendall_PoseNet_A_Convolutional_ICCV_2015_paper.pdf

KITTI Dataset

http://www.cvlibs.net/datasets/kitti/eval_odometry.php

Note: There are some good papers in this link that use KITTI dataset. You can pick papers from this link also but you will have to get it approved.