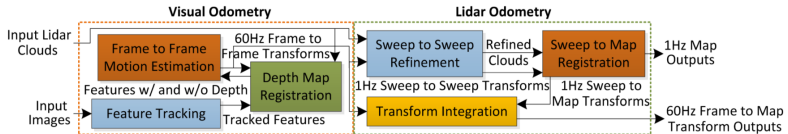
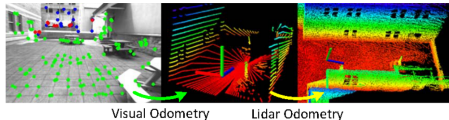


Visual-lidar Odometry and Mapping: Low-drift, Robust, and Fast

J. Zhang and S. Singh (ICRA2015)



- ▶ Combining visual and lidar odometry in a fundamental and first principle method
- ▶ Visual odometry to estimate the ego-motion and to register point clouds from a scanning lidar at a high frequency but low fidelity
- ▶ Scan matching based lidar odometry to refine the motion estimation and point cloud registration simultaneously
- ▶ Ranking first on the KITTI odometry benchmark
- ▶ Further experiments with a wide-angle camera and a fisheye camera
- ▶ Robust to aggressive motion and temporary lack of visual features