A Localizability Estimation Method for Mobile Robots Based on 3D Point Cloud Feature

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- Firstly, we propose a real-time point cloud clustering algorithm with multiple constraints based on depth map.
- Localizability is set to be equal to the strength of the constraints associated with 3D point cloud.
- Based on the method of using information matrix theory, this paper integrates the Fisher's information matrix and point cloud features to estimate localizability.