

Open cloud

Normal Calc

- Normal Est OMP
 - PCA
- k-d Tree

Segmentation

- K-d Tree
- Pass Through
- RegionGrowing
- Remove on Verticality
 - Ransac Plane
- Remove Cluster on size
 - Extract indices
- get Hor clusters
 - filter Hor clusters by max and min
- return extent clusters

Vector to cloud

- loop of filter by indices

Get boundaries of segment

- Bounding box
 - Moment Of Inertia Estimation
 - OBB

Extract Corner Points

- fit plane
 - Ransac
- Angle Between Planes
- Plane with Plane intersection
- Project
 - Distance to line
 - Project point onto line

Create OBJ file

Write Cloud file

Viewer