

Vision 5 - Point cloud processing

1. What is a point cloud?
2. What is the difference between ordered and un-ordered pointclouds?
3. What are typical problems in/with point clouds? (That we then address with the algorithms discussed in class?)
4. Local features typically depend on a surround region. What is an important parameter there? What are the trade-offs?
5. How does the outlier removal method we discussed in class work? (Statistically motivated.)
6. What is the approach (discussed in class) to estimate normals?
7. What is the approach (discussed in class) to estimate curvature?
8. How does a voxelgrid filter work? (steps)
9. It makes sense to remove the table plane from the point cloud if you are only interested in objects on the table. How can you remove the table plane? What assumption does your described method make?
10. Euclidian clustering:
 - 10.1. How does Euclidian clustering work? What are the steps?
 - 10.2. What is this useful for?
11. What are the steps in the pose estimation pre-processing pipeline we discussed in class?