# 第一次作业 (三位点云重建)

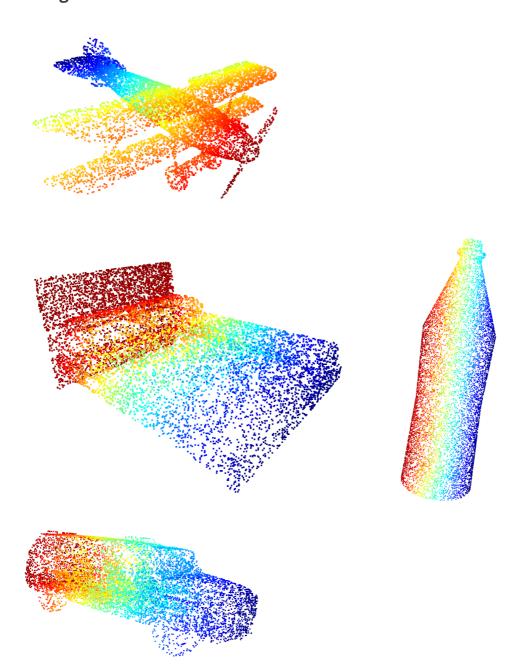
# PCA, surface normal estimation and Downsample

Date: 2020.07.04

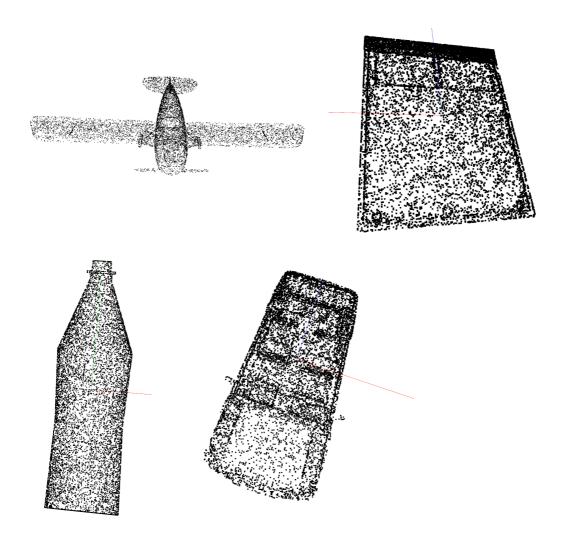
Author: MagicTZ

#### 1. PCA

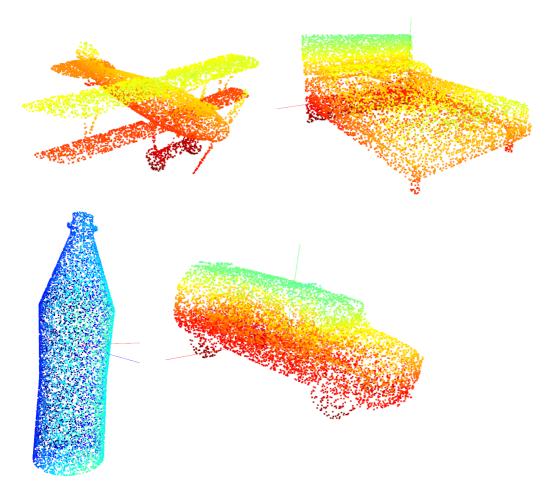
#### 1.1 Origin



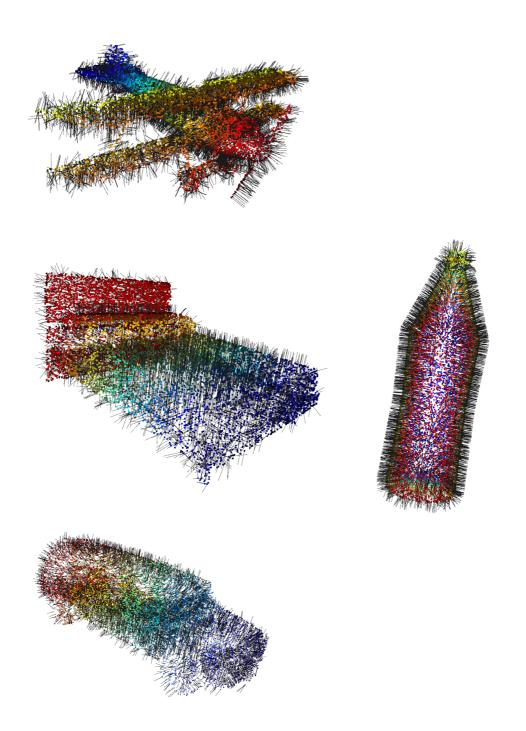
#### 1.2 The first and second principle (Only a plane)



1.3 The result of decoder

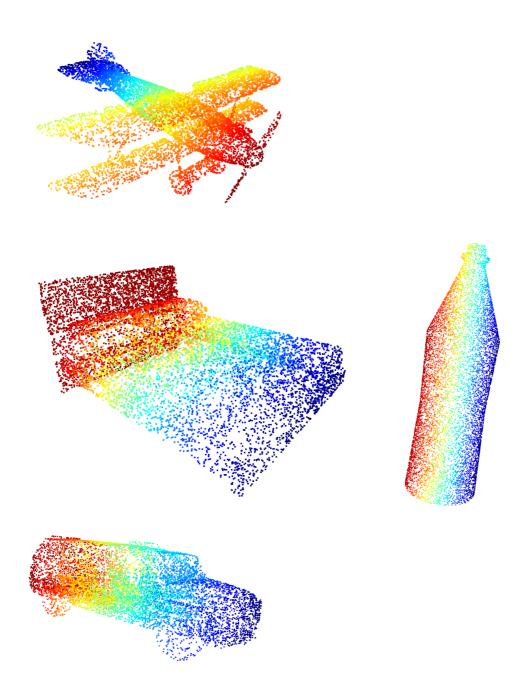


### 2. Surface Normal Estimation

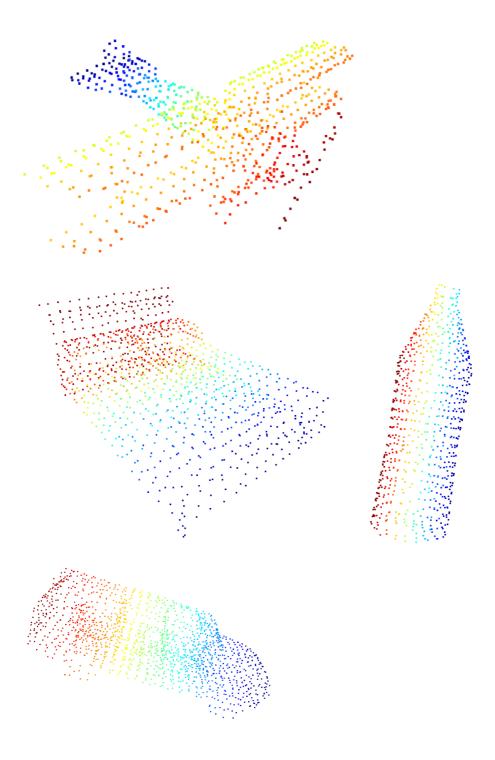


## 3. Downsample

3.1 Origin



3.2 Centroid



3.3 Random

