Interview Question:

For cluster

Where

are the spatial parameters of point a

is the reflectivity of point a

1. Given cluster C write an algorithm that detects if the cluster C is a traffic sign

(traffic sign is composed of retro-reflective sign and a pole, see .png attached)

1. For clusters that was classified as traffic sign, recognize the sign’s shape:  
   circle/square/triangle

Guidelines:

1. An example of traffic sign point cloud is attached as csv file.
2. You should provide clean and clear python code.
3. You can use different packages for algorithmic procedures.
4. You cannot use predefined high-level detectors.
5. The decision is single-frame, meaning, you cannot calibrate or learn based on data.