Point cloud segmentation : Plugin development

EDF would like to produce CAD models of pumps (to be able to work on them). To achieve this EDF scan its components; each scan produces a point cloud. So the problem is that in these clouds, there is a set of points which does not belong to the object scanned. It belongs to some near devices like "V shapes" and vices.

The whole issue is to identify these foreign elements in order to cut them off from the cloud. To cut these elements some possible solutions are plan detection, or pattern recognition, since many objects are held devices whose shape is known.

As this is problem of segmentation of a point cloud, we have to develop a plugin that will classify points from a cloud (without any logical structure among then) into two clusters.