

ABSTRACT

Embodiments of the disclosure provide methods and systems for generating a color point cloud. The method may include receiving a point cloud and a plurality of images with respect to a scene captured by a plurality of sensors associated with a vehicle as the vehicle moves along a trajectory. The method may include segmenting the point cloud into a plurality of segments each associated with a start point and an end point on the trajectory of the vehicle. The method may also include associating each segment of the point cloud with one or more of the images based on the start point and the end point. The method may further include generating color point cloud by aggregating each segment of the point cloud and the one or more of the images based on calibration parameter in different distances between the segment of the point cloud and the vehicle.

(FIG. 7)