ABSTRACT

Aspects concern a method including determining initial map positions of a road object on a map, the initial map positions respectively corresponding to images of the road object that are captured by a camera at different camera positions on the map, and constructing a pose graph in which one or more pairs of the initial map positions are respectively connected by first edges, one or more pairs of the different camera positions are respectively connected by second edges, and the initial map positions are respectively connected to the different camera positions by third edges. The method further includes optimizing the constructed pose graph by adjusting the initial map positions, the different camera positions, the second edges and the third edges so that lengths of the first edges are minimized, and determining a final map position of the road object, based on the optimized pose graph.

[Fig. 5]