

SYSTEM AND METHOD FOR DETECTING INFORMATION ABOUT ROAD RELATING TO DIGITAL GEOGRAPHICAL MAP DATA

ABSTRACT

According to various embodiments, a system for detecting information about a road relating to digital geographical map data is provided. The system comprises an input device configured to obtain remotely captured geographical image data; and a processor configured to generate ground truth image data from the digital geographical map data, and generate binary image data of the road segments from the remotely captured geographical image data using a semantic segmentation task. The processor is further configured to: skeletonize the binary image data to generate skeletonized binary image data including a center line of each road segment of the road segments, detect a road segment missing from the digital geographical map data using the skeletonized binary image data, detect a road width from the binary image data and the center line of each road segment of the road segments; and detect number of lanes from the detected road width.

FIG. 1