

ABSTRACT

METHOD, APPARATUS, DEVICE, AND STORAGE MEDIUM FOR DETECTING ROAD DISTRESS

This invention provides a method, apparatus, device, and storage medium for detecting road distress. The method comprises: performing distress detection on a road radar image based on a fully trained large-target detection model and a fully trained small-target detection model, obtaining a large-target detection result and a small-target detection result; fusing large-target detection result and small-target detection result to determine a distress detection result of the road radar image; wherein the large-target detection model includes a deformable convolutional layer, a dual-path detection head, a smooth non-maximum suppression operation layer; and the small-target detection model includes a multi-scale convolutional layer, a deformable ROI pooling layer, the dual-path detection head, a balanced line loss function, and the smooth non-maximum suppression operation layer. By specifically controlling the structure and corresponding functions of the dual-path target detection model and fusing their results, the reliability of the final distress detection results is guaranteed.

FIG. 1