



ROAD DAMAGE IDENTIFICATION AND DEGREE ASSESSMENT BASED ON UGV

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Abstract- Aiming at the problem of automatic identification and evaluation of road damage degree, the road damage identification and degree assessment algorithms based on unmanned vehicles experimental platform are studied. The road crack segmentation extraction method based on adaptive sliding window is studied. On this basis, the road damage crack classifies and identifies according to the crack geometry information and the principle of template matching. The road damage degree assessment algorithm based on fuzzy decision is proposed based on the quantitative analysis of the road crack and the corresponding parameters information. The experimental results demonstrate that the road damage identification and degree assessment algorithms proposed in this paper are effective and stable.

Index terms: unmanned vehicle, damage identification, quantitative analysis, fuzzy decision