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(57) Abstract :

The present disclosure relates to a feedback system for street maintenance. The system (100) is configured a housing (102) with an image acquisition unit (104), a light source (106), a light scanning unit (108), and a processing unit (110) that are communicatively coupled to each other. The image acquisition unit (104) captures the image of the street surface. The light source (106) illuminates the street surface with light, while the light scanning unit (108) determines the three-dimensional coordinates on the street surface. Additionally, the processing unit (110) receives the data from the image acquisition unit (104) to identify lines, surface curvature, and their corresponding pixel location in the image to define their image space coordinates. Moreover, it extracts the object space coordinates from the three-dimensional coordinates and performs the vectorization of the image space coordinates, and the object space coordinates using one or more techniques.

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