

ABSTRACT

A crop identification system for aerial photography, including: a receiver module, receiving a visible light image generated by an aerial photography vehicle
5 for a target area; a data processing module, generating vegetation index information corresponding to the visible light image; and a deep learning module, receiving the vegetation index information, and processing the vegetation index information by a deep learning model with an RES U-NET architecture, to identify a crop type corresponding to the visible light image and to create a segmentation image labeled
10 by the crop type. The receiver module, the data processing module, and the deep learning module have a signal connection with each other.

FIG. 1