

ABSTRACT

A crop species identification system based on satellite telemetry data is disclosed, which includes: a receiver module, receiving plural telemetric vegetation indexes of a target area; a data cleaning module, cleaning anomalous data in the telemetric vegetation indices, to correspondingly generate cleaned index data; a feature extraction module, including at least two different convolution kernels for mapping the cleaned index data into at least two feature scale mapping data which respectively correspond to the convolution kernels, performing a pooling operation of the feature scale mapping data to generate a pooled data, and concatenating the at least two feature scale mapping data and the pooled data into concatenated data; and a classification module, including a fully-connected layer, for extracting features of the concatenated data, to generate a species classification result for the target area.

[FIG. 1]