

ABSTRACT

A railway track detection device according to an embodiment includes an image acquisition unit, a feature selection unit, a feature data extraction unit, and a railway track detection unit. The image acquisition unit acquires a captured image captured by imaging a region in a traveling direction of a railway vehicle. The feature selection unit selects, for each of a plurality of pixel groups in the captured image based on a predetermined criteria, one feature from among a plurality of features that are similarity measurements of railway track, the one feature being used for detection of the railway track. The feature data extraction unit extracts, from each of the plurality of pixel groups, feature data based on the one feature selected by the feature selection unit. The railway track detection unit detects the railway track from the captured image based on an extraction result by the feature data extraction unit.