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 in a traveling direction of a railway vehicle. The feature selection unit selects, for each of a plurality of pixel groups being a part of the captured image based on a predetermined criteria, one of a plurality of features that are used for detecting railway track. The feature data extraction unit extracts, from each of the plurality of pixel groups, feature data based on the one of the features selected by the feature selection unit. The railway track detection unit detects a railway track in the pixel group based on an extraction result by the feature data extraction unit.