

**Basic Study on Pedestrian Detection Device for Railway Crossings
in means of Infrared Camera and Image Processing**

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Of all the railway operation accidents that occurred in 2017 throughout Japan, 40% of the cases and casualties happened at the railway crossing. In order to reduce the accidents and achieve safer train operation for both train operators and to the public, we are developing a pedestrian detection device for railway crossings using a far-infrared camera and image processing. This paper shows a basic study on the hardware and the outline of basic detection algorithm, and reports the verification results.