

工程与应用

Hough变换在车灯光轴交点检测中的应用

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摘要 汽车前照灯中, 近光灯通过明暗截止线来使行人和对面来车的驾驶员避免眩目或不舒服, 是汽车年检的重要项目。明暗截止线的拐点是车灯光形的关键点。提出了用Hough变换检测直线的原理提取拐点, 详细阐述了其实现方法, 并用实验验证了该方法较好的抗噪性和实时性。实现了车灯光轴检测由人工目测向计算机自动检测的转换。

关键词 [霍夫变换](#) [车灯光轴交点](#) [边缘检测](#)

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Detection of cross-point of optical axis of lamp based on Hough transform

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Abstract

Among automobile headlamps, the short-range lamp does not make pedestrian and drivers of the opposite dizzy by the dividing line of brightness and darkness. The short-range lamp is the important item of automobile's annual detection. The corner of the dividing line is the key point of lamp. A new method using Hough transform to detect straight line is raised, and explain it in detail. Experiments prove that it can resist noise and work on real time. It realizes the transform from manual detection to auto matic detection.

Key words [Hough transform](#) [cross-point of optical axis of lamp](#) [edge detecting](#)

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