

Bad Rear View Mirror Rejection System

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Abstract

This work was propose to create an industrial-based system that capable to test a rear view mirror and reject the rear view mirror if it was bad quality. Rear view mirror analized using computer to get it's reflection distortion level. As Indonesian National Standard (SNI) rules, if reflection distortion level more than 7,then rear view mirror will rejected. The system only working with 3 subsystem, a computer with reflection distortion level measurement algorithm, a robotic arm that can grip rear view mirror and move it between two positions, a reflection pattern with webcam that can capture mirror reflected pattern. After testing, this system can evaluate reflection distortion level of Honda's rear view mirrors. This rear view mirrors collectioan used as standard to test the system. The result is reflection distortion level for this rear view mirrors set is between 1,7 and 2,8 which still usable for automotive usage. The algorithm to get reflection distorsion level run on a computer with Linux 3.13 and Octave 3.8.1.



Figure1. Current system design

Keyword: reflection distortion, rear view mirror, rejection system

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