Machine Vision for Visual Quality Inspection of Car Arm Rests (BA/SA/MA)

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Project Description:

In the production of car arm rests, the quality of the final product is one of the most important aspects that must be examined from different perspectives before delivery. The current status of the quality inspection of the arm rest is manual inspection by trained employees. Despite the long duration needed for inspection, the accuracy of the inspection is highly dependent on the competency of the inspector. These problems in the manual inspection motivate an automatic visual inspection.

An automatic visual inspection can assist the employees to inspect the quality faster and more precisely. In order to provide an automatic visual quality inspection, machine vision methods and image processing algorithms can be utilized. The objective of this project is to detect several defects such as scratches on the edges, scratches on the surface, defect along the sewing lines, and curves along the edges on the arm rests using image data.

Requirements:

- Interested in data analysis, image processing and machine vision.
- Experience in Matlab or Python programming. Ideally with OpenCV knowledge.
- Good understanding in Machine learning methods and state of the art of image analysis.
- Perfect English Language Proficiency

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