

Article Abstract

Title:	Improvement in quality testing of Braille printer output with Euclidean distance measurement using camera calibration
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Abstract:	This paper focuses on quality testing of Braille printed paper using calibrated camera by detecting dots and measuring the Euclidean distances between them with equal gap, vertically and horizontally. For higher accuracy, camera calibration is essential to observe a planar checker board pattern from different distances and orientations. In this process, the position of the camera is fixed and the pattern can be freely moved. Radial lens distortion is modeled. Machine simulation and experimental results have also been discussed. Quality improvement can be achieved by giving a feedback after finding the distorted edges from image processing of the paper. This approach thus definitely helps the blind reader to avoid disturbances in reading the printed documents by both, single sided and inter-point printer.
Keywords:	Image processing, camera calibration, quality testing of Braille printer