

## **Edge Detector Error Estimation Incorporating CCD Camera Limitations**

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### **ABSTRACT**

The paper details a computationally efficient method for estimating edge detector errors, and represents a move away from theoretically derived tests that are often designed from a limited physical basis, to an easy to apply practically based test. A perfect edge: a step edge, is assumed in the object being viewed, but this is degraded by the charge coupled device TV camera and signal conditioning before the image is sampled by the processing system. Significant differences were found between the results produced from the traditional and new edge models, and computer processing was reduced from hours to only seconds for each study with the new scheme.