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Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	Ms_BJAST_29653
Title of the Manuscript:	A Fuzzy System for Edge Detection
Type of the Article	Original Research Article

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	The results of the proposed method show that the method captures well the edges at the locations of high contrast in the image, but neglects the lesser contrast edges. The results of cameraman image preserves the edges quite well as the image has high contrast, while in the bridge image, many edges are discarded due to lesser contrast. A good balance is missing between high and low contrast edges. The results obtained by the proposed algorithm are visually compared with the other techniques. Even though humans are the best judge to compare image segmentation techniques, still there is a need to quantitatively compare the results of the proposed method with other methods to get a clear idea about the efficiency of the proposed method. As fuzzy logic has already been used for edge detection. It needs a quantitative comparison with the edges obtained by using other fuzzy logic algorithms based on the ground truth images. So that the quality of edges obtained by the proposed method can be represented in a better way. The paper is well explained, but it still has some preposition mistakes and few sentences are not very well structured. Pictures used have a little low quality.	Contrast is the difference in luminance or colour that makes an object distinguishable. In the case of low contrast images, it is not the fault of the edge detector if some edges are discarded. Low contrast images should be pre-processed in order to make it more suitable for edge detection. For example we can apply contrast stretching or histogram equalisation as a pre-processing step to enhance low contrast images. Here we perform histogram equalisation on the bridge image before applying our edge detection method. As illustrated in the figure more edges are detected when the contrast is enhanced. Many edge detection techniques have been proposed which solve the problem of low contrast images [11], but contrast enhancement is out of the scope of this research. For quantitative evaluation of our technique and comparison with other methods, we compute the Mean Square Error (MSE) and Peak Signal to Noise Ratio (PSNR). Please check section xxx page x. The paper has been revised and all modifications are highlighted in yellow colour.

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		 (a) (b) (c) (d) Figure 1: (a) original image, (b) image after histogram equalization, (c) Proposed edge detection for original image, (d) proposed edge detection results after equalization.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		