



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_14611
Title of the Manuscript:	A Neuronal Classification System for Plant Leaves using Genetic Image Segmentation
Type of the Article	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
I believe that the author missed my point. In other words GA + CNN cannot and will not be faster than Sobel, Prewit or Canny that is not possible because in all my experience I know that Genetic Algorithm with all the operators (crossover, mutation, selection...etc.) and running it for several cycles makes it slow. I agree that GA + CNN can provide better accuracy so I suggest removing the speed issue from the comparison. In the suggested literature a successful attempt is made to reduce the time requirement to run GA which can be useful for your case in the future if there is an intention to improve your research work.	(1) The issue is that the GA was only used in optimization of CNN templates and then the CNN templates is finally used during for segmentation. The GA module was never invoked during segmentation. Rather it was done off-line to optimize the CNN templates. So the actual computational time requirements for CNN-based edge detection was faster than the rests. (2) There have been some papers comparing Cellular Automata-based edge operators to other conventional edge operators and CA-based have been reported fastest. (3) CNN have been known to beat many edge operators in terms of computational time. Please refer to the original inventor of CNN viz: Chua L O and Yang L. Cellular neural networks: theory and applications. IEEE Trans on Circuits and System, 35(10):1257-1272, 1988 Or Chua, L. O., & Roska, T. (2002). Cellular neural networks and vision computing. Cambridge University Press.