



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	Ms_BJAST_22267
Title of the Manuscript:	A Genetic Algorithm with Neighborhood Search to Solve Integer and Linear Programming Problems
Type of the Article	Short Research Article

General guideline for Peer Review process:

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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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	(1) In section 2, the paper should talk first about the chromosome structure used by introducing a new subsection with the title of genetic coding. (2) It is not clear how equation (1) is applied. Is it applied only once for all decision variables? Or is there any procedure with specific number of iterations by which the decision variables are amended? And in the latter case, is there a stopping criteria for such a procedure? (3) Excel solver is a very weak program and one cannot rely on it in any robust scientific comparison. Comparison with state-of-the-art commercial solvers such as CPLEX should be made.	1) The coding is binary, 0 and 1s. There are two new Figures (Fig. 1 and 2) that I hope will help with the coding structure. 2) There is a paragraph that to help clarifies this matter, from line 64 to 70. "On generation zero, one individual goes through chromosome repair if it is not feasible [10]. Equation (1) is used to compensate a not feasible individual and make it feasible. It is the same for minimization or maximization but on maximization it decreases the variables values, x_j, if a less than constraint is not met. On the other hand, on minimization, it increases the variables values only when a greater than constraint is not met. The sum of coefficients c_{ij} is computed at the start of a run. It has been observed that in this implementation the use of equation (1) helps to accelerate the convergence of the algorithm." There is a comparison included not with CPLEX but with LINGO. I hope in future research take your advice and have CPLEX ready for comparative with more complex examples and new releases of the algorithm. Many thanks for your helpful comments
Minor REVISION comments	N/A	
Optional/General comments	N/A	