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Journal Name:	**British Journal of Applied Science & Technology**
Manuscript Number:	**2014_BJAST_10707**
Title of the Manuscript:	**Efficient Frequent Pattern Mining using Auto-Associative Memory Neural Network**
Type of the Article	**Original 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:

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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. The manuscript is concerned with efficient frequent pattern mining using auto-associative memory neural network, which is interesting. It is relevant and within the scope of the journal. 2. However the manuscript, in its present form, contains several weaknesses. Adequate revisions to the following points should be undertaken in order to justify recommendation for publication. 3. For readers to quickly catch the contribution in this work, it would be better to highlight major difficulties and challenges, and your original achievements to overcome them, in a clearer way in abstract and introduction. 4. Full names should be shown for all abbreviations in their first occurrence in texts. For example, FP in p.1, FIMI'04 in p.9, etc. 5. It is mentioned in p.1 that auto associative memory is adopted for mining frequent patterns. What are the other feasible alternatives? What are the advantages of adopting this particular method over others in this case? How will this affect the results? More details should be furnished. 6. It is mentioned in p.1 that the correlation matrix memory is adopted in the auto associative memory in this study. What are the other feasible alternatives? What are the advantages of adopting this particular method over others in this case? How will this affect the results? More details should be furnished.	

	7. It is mentioned in p.4 that a hebbian learning rule is adopted to train the CMM. What are the other feasible alternatives? What are the advantages of adopting this particular method over others in this case? How will this affect the results? More details should be furnished. 8. The discussion section in the present form is relatively weak and should be strengthened with more details and justifications. 9. Some key parameters are not mentioned. The rationale on the choice of the particular set of parameters should be explained. Have the authors experimented with other sets of values? What are the sensitivities of these parameters on the results? More details should be provided. 10. Some assumptions are stated in various sections. More justifications should be provided on these assumptions. Evaluation on how they will affect the results should be made. 11. Moreover, the manuscript could be substantially improved by relying and citing more on recent literatures about real-life applications of various contemporary soft computing techniques in different fields such as the followings:. ● Huang, Z.K., et al., "A New Image Thresholding Method Based on Gaussian Mixture Model," *Applied Mathematics and Computation* 205 (2): 899-907 2008. ● Taormina, R., et al., "Artificial Neural Network simulation of hourly groundwater levels in a coastal aquifer system of the Venice lagoon", *Engineering Applications of Artificial Intelligence* 25 (8): 1670-1676 2012. ● Wu, C.L., et al., "Predicting monthly streamflow using data-driven models coupled with data-	

	preprocessing techniques," *Water Resources Research* 45, W08432, doi:10.1029/2007WR006737, 2009. ● Zhang, J., et al., "Multilayer Ensemble Pruning via Novel Multi-sub-swarm Particle Swarm Optimization," *Journal of Universal Computer Science* 15 (4): 840-858 2009. ● Cheng, C.T., et al., "Long-term prediction of discharges in Manwan Reservoir using artificial neural network models," *Lecture Notes in Computer Science* 3498: 1040-1045 2005. ● Chau, K.W., "Application of a PSO-based neural network in analysis of outcomes of construction claims," *Automation in Construction* 16 (5): 642-646 2007. 12. Some inconsistencies and minor errors that needed attention are: ● In line 47 of p.2 "…as a specialize area of..." should read "…as a specialized area of..."; ● In line 228 of p.7 "…frequent 1-temsets and frequent..." should read "…frequent 1-itemsets and frequent..."; 13. In the conclusion section, the limitations of this study, suggested improvements of this work and future directions should be highlighted.	
Minor REVISION comments		
Optional/General comments		

Note: Anonymous Reviewer