



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	Ms_BJMCS_27435
Title of the Manuscript:	On Designing Invertible Pseudo Covariance Matrix for Undersampled Cases in Classification
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.

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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 organization of paper (AS written in page 2). Related work has number 2 instead of 1.2, METHODOLOGY (and sub menus) has number 3 instead of 2, Results and discussion has number 4 instead of 3, concluded has number 5 instead of 4. 2- PCA (in page3) does not define before. 3- β, α at page 4 (2.1 inverse) does not define, what is this symbol refer to? 4- (Eq. 5-8) In Conclusion (page 9) this Equation does not exist in paper. 5- At section RESULTS AND DISCUSSION, tables 1, what is the number in this table refer to? If the numbers (Measure (%)) increase it is good to all indicators? And How the Indicators calculated (S_n, Sp,...) ? (write the Equations).	1. Done 2. Defined 3. Symbols defined 4. This is (Equations 5 to 8). Confusion removed. 5. In order to test the effectiveness of our classifier, standard performance metrics are used in this research. Given a test set with N samples, let N_p and N_n be the number of positive samples ("normal") and the number of negative samples ("diseased") within the dataset ($N = N_p + N_n$) respectively. After classification, let T_p and F_p be the number of positives detected as being positive and the number of positives detected/classified as being negatives ($N_p = T_p + F_p$) respectively. Similarly, let T_n and F_n be negatives detected as being negative and the number of negatives detected/classified as being positive ($N_n = T_n + F_n$). For this paper, we have considered the following metrics to analyze the performance.



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		1. Sensitivity: $S_n = T_P / (T_P + F_N)$ 2. Specificity: $S_p = T_N / (T_N + F_P)$ 3. Positive predicted value: $PPV = T_P / (T_P + F_P)$ 4. Negative predicted value: $NPV = T_N / (T_N + F_N)$ 5. Precision: $P = (T_P + T_N) / N$
Minor REVISION comments		
Optional/General comments	1- Write a paragraph about the topic of this paper in the introduction (like: importance of topics – Use-...) before the Technical background section. 2- Decrease the Equations, and write only the Equation that used in paper.	1. Headline 1.1 is removed to avoid this odd situation. 2. Number of equations is still the same.