



SDI Review Form 1.6

Journal Name:	<u>British Journal of Mathematics & Computer Science</u>
Manuscript Number:	Ms_BJMCS_32860
Title of the Manuscript:	Experimental Study on Class Imbalance Problem using Oil Spill Training Data Set
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.

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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		
Minor REVISION comments	1. The evaluation metric of F-measure is used, but the definition should reclaim, and $0 \leq F\text{-measure} \leq 1$, in this paper, the F-measure may be lower than 1. 2. In this paper, the imbalance ratio is 2, but this ratio in many real-world applications may be bigger. 3. The proposed framework does not clear 4. The review of related work should be described in more careful arrangement. It is not a good idea to list them simply. 5. The innovation should be highlighted and make it easy to be found out. In addition, more description of the comparative results should be made to explain the performance improvement. The definition: $F\text{-measure} = \frac{2 \times \text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}}$	Thank you very much for the comments on our manuscript. According to these comments, our manuscript is improved. We list the response as follows. 1. Point taken. $\text{Precision} = \frac{TP}{TP+FP}$, $\text{Recall} = \frac{TP}{TP+FN}$ $F\text{-measure} = \frac{2 \times \text{Precision} \times \text{Recall}}{\text{Precision} + \text{Recall}} = \frac{2 \times \frac{TP}{TP+FP} \times \frac{TP}{TP+FN}}{\frac{TP}{TP+FP} + \frac{TP}{TP+FN}}$ In this paper, we did not use the descripts "Precision" and "Recall". We corrected the equation of F-measure. 2. In this paper, there are 412 samples, which include 30 oil spills and 382 look-alikes. In our opinion, the imbalance ratio is bigger than 12. 3. Sorry to confuse you. We rearranged the proposed framework. 4. Point taken. We rearranged related work. 5. This paper devised a novel classification method for imbalance oil spill dataset, see the third paragraph in Introduction. Then, we gave more detail of the comparative results.
Optional/General comments		