

Review Form 3

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_121639
Title of the Manuscript:	Motor Insurance Claim Frequency Prediction Using XGBoost
Type of the Article	Original Research Article

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The manuscript discusses how big data has transformed the insurance industry, making traditional statistical methods and actuarial formulas insufficient for analyzing the vast and diverse data. To address this, the Extreme Gradient Boosting Algorithm (XGBoost), an ensemble learning method, was applied to process insurance claims data. XGBoost effectively handles missing values and improves prediction accuracy by iteratively reducing errors in decision trees. The study evaluated the XGBoost model using metrics like RMSE, MAE, and R-squared, and concluded that XGBoost was the optimal model for predicting insurance claim frequency, showing strong performance across all metrics	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Yes since it captures the relevant details	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Extreme Gradient Boosting Algorithm (XGBoost) effectively handles missing values and improves prediction accuracy in decision trees. XGBoost is widely used due to its combination of speed, performance, and flexibility. The author(s) carefully applied this method in handling insurance claims	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language is appropriate. However, I suggest the following: 1. The introduction section is too long compared with other sections of the document. Some of the information can be compressed 2. In the conclusion section, the author(s) is/are urged to change subsection (2) to section (2) in order to conform to uniformity.	
<u>Optional/General</u> comments		

PART 2:

	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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