

Review Form 1.6

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_84916
Title of the Manuscript:	Forecasting of road traffic flow based on harris hawk optimization and XGBoost
Type of the Article	Original Research Article

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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)
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	<p>The abstract may be written with another format by removing the sub titles and connecting the paragraphs.</p> <p><u>FOR EXAMPLE</u></p> <p>This paper explores the Forecasting of road traffic flow based on harris hawk optimization and XGBoost. By predicting short-term traffic flow to assist intelligent transportation system decision-making, which can be more effective in solving the problem of congestion and improve road capacity. In this paper, a multi-step prediction HHO-XGBoost model is proposed by combining XGBoost and Harris Hawk optimization, which is applied to traffic flow prediction.</p> <p>The Methodology focuses on the hyperparameters of the XGBoost model which is optimized using Harris Hawk Optimization. The XGBoost parameter optimization is treated as an optimization problem and solved using an intelligent optimization algorithm to obtain the optimal parameters of the model, and the proposed model is applied to traffic flow prediction together with seven other representative models.</p> <p>In the result of the prediction case, the proposed model has the lowest MAPE, and the proposed model has the best prediction performance and the most stable generalization compared to the comparison models. In addition, Harris Hawk Optimization has more powerful global search ability than Salp swarm algorithm</p> <p>Therefore the HHO-XGBoost model has a strong strong potential in traffic flow prediction field. The parameter adjustment of the machine learning model based on the intelligent optimization algorithm is a way to improve machine learning. The HHO has stronger global search ability than SSA, and can find the global optimal solution with fewer iterations.</p>	
<u>Optional/General</u> comments	<p>This is a good work and the novel hybrid model is great. The illustrations/Diagram is detailed.</p>	

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?	<p><u><i>(If yes, Kindly please write down the ethical issues here in details)</i></u></p>	

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