**Title:** Pavement Performance Prediction using Machine Learning: Supervised Learning with Tree-Based Algorithms

**Manuscript ID:** 5165

**Round: 1**

Dear Editor,

Please find enclosed the revised version of our article entitled "Pavement Performance Prediction using Machine Learning: Supervised Learning with Tree-Based Algorithms." We appreciate the reviewers' valuable feedback and have made focused efforts to improve the manuscript based on their suggestions. We are confident that this revised version is an improvement over the original submission.

In order to address the suggestions made by the reviewers, we have made some changes to the manuscript: (i) We have revised the introduction to better articulate the motivation and objectives of the paper, (ii) we have expanded the discussion of the results, providing more detailed information on the performance of each model and potential improvements for future work, and (iii) we have clarified our approach to handling outliers in the dataset, as well as emphasized the importance of employing techniques to rebalance the datasets in future work.

Attached is our detailed responses to reviewers' comments and suggestions, along with the revised manuscript, where text added and modifications are tracked with Word's revision control. Thank you very much for your effort and for collaborating to improve our article.

With our best regards,

Adelino Ferreira

Tiago Tamagusko