Dear Editor-In-Chief and Associate Editor

As recommended, we are submitting the revised version of the paper entitled *"Machine Learning Explainability: Advances in Periocular Recognition”*, with the ID *electronics-1303683*.

We addressed all the comments and questions of the reviewers, presented below, stating our answers and changes in the document.

**DISCLAIMER:** We added the following code to the header of the “template.tex” file (so that the changes are easily distinguishable from the original version). These changes should appear in a bright blue colour and, if needed, can be set to the default black colour by commenting the next line:



**(ROUND 2) REVIEWER 1**

1. **COMMENT / QUESTION**

"Table 1 is completely copied from [15], this is not acceptable.”

* **ANSWER**

We acknowledge the fact that Table 1 is similar to one from a previous work. Therefore, we have replaced it with a textual description with additional reference to another baseline method for periocular recognition.

1. **COMMENT / QUESTION**

"This paper merely discusses some well-known prior knowledge in the field and some special cases in existing results from the authors' previously published work [15]. The explainability is not proved or justified, it is simply shown as a current process to explain their existing models.”

* **ANSWER**

As stated in the article and previous revision comments, the purpose of this work is to provide an “all-encompassing” overview of Interpretability applied to the periocular recognition problem. Compared to the previous work, we deliver much more in-depth descriptions of existing techniques, core principles in the field and much more thorough qualitative results and limitations. Moreover, the explainability aspect is not only supported by the method’s description but also by the results shown. These results are there to be seen and compared against other approaches, **proving** our method produces adequate explanations (if there were no qualitative results in this paper, then the “not proved” claim would be justified).