

Review of: "Tweeting AI: A Machine Learning Approach for Bird Species Detection and Classification"

Thang Ta¹

¹ Instituto Politécnico Nacional

Potential competing interests: No potential competing interests to declare.

The paper topic is interesting when dealing with bird detection for the purpose of tracking avian species from their images. No doubt, CNNs are a safe choice for the classification of images. However, there are some (significant) problems in the papers.

I believe the authors made a mistake from the very beginning when they declared a novel approach, the term "Tweeting AI". This term was mentioned in a lot of papers published. Is this term novel? See here:

<https://arxiv.org/abs/1704.08389>

<https://ojs.aaai.org/index.php/ICWSM/article/view/15061>

The paper objectives:

1. *To develop a ~~machine learning-based~~ approach for detecting bird species based on their vocalizations captured via audio recordings coupled with image analysis capabilities provided by CNN models.*

I think this is a deep-learning approach more than machine learning-based.

I feel that the **literature review is not enough** with only a few citations?

The methodology section **needs, actually a figure, a sketch or a diagram more than verbose texts**

The experiment is not the right way to do also. It seems the authors are inexperienced, so they prefer to describe their work process. But this will never appear in a scientific paper. Instead, please consider:

- Write somethings (no need details) about the training, loss, accuracy, epochs,.. consider to create a figure.
- Make a few tables for comparisons about what the methods you use and compare by results, such as F1, precision, recall, and any metric related. Give some comments about the results.

In short, I reject the paper. But I encourage the authors continue to improve the quality according to my comments.

