

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

Indranath Chatterjee¹

¹ Tongmyong University

Potential competing interests: No potential competing interests to declare.

The paper's focus on bird species recognition and its suggested method for identifying and categorizing birds based on their vocalizations and visual data using convolutional neural networks (CNNs) are unquestionably relevant in the fields of avian ecology and conservation biology. However, several improvements are required to enhance the article and increase its effect.

The importance of understanding birds in our daily lives is acknowledged, however the study does not adequately address why it is important to safeguard birds. The goals and contributions listed appear encouraging, but without more explanation, they remain general and don't adequately express the potential significance of the suggested study.

One glaring flaw is the absence of a comprehensive literature review. The publication loses a chance to demonstrate the uniqueness of its method and how it advances prior research by excluding a discussion of earlier work on bird species recognition. Additionally, the study's credibility is damaged by the lack of information on the data collecting and pre-processing methods, which makes it difficult for readers to judge the accuracy and repeatability of the findings.

The performance evaluation criteria presented are crucial, however the paper's assertions of enhanced results using CNNs lack strong support without a thorough examination and comparison to alternative approaches. Additionally, the reader is left in the dark about ethical implications and appropriate deployment methods due to the ambiguity of the indicated ethical issues.

A stronger introduction should be written, highlighting the vital role that birds play in ecology and conservation. Clearly state the requirement for precise bird species identification and emphasize any possible practical uses. A thorough evaluation of the literature is also necessary to show the paper's contributions and field-specific relevance. To guarantee openness and repeatability, include thorough details on data collection and pre-processing.

Present a thorough performance review to demonstrate the superiority of the suggested model over the alternatives for a stronger argument. Explain ethical issues in detail so that readers are aware of the moral code that governs the study.