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Dear Editor:

I am writing to submit our manuscript entitled "Crowd-Certain: A Novel Approach to Label Aggregation in Crowdsourced and Ensemble Learning Classification Tasks" for consideration for publication in the Journal of Knowledge and Information Systems.

Our study proposes a novel method for label aggregation in crowdsourced and ensemble learning classification tasks. Crowdsourcing has been a common method to gather large amounts of data, however, the dynamic and uncertain nature of crowdsourced labeling presents significant challenges. Existing methods often involve computationally expensive and time-consuming repeated simulations for every new dataset. To address this, our paper presents Crowd-Certain, a method that leverages the consistency of the annotators and predicted probabilities to efficiently determine a reliability score for each annotator and the subsequent label aggregation.

This paper is an important contribution to the field, as we demonstrate that Crowd-Certain outperforms ten existing methods across ten different datasets, irrespective of the number of annotators involved. Our method offers higher average accuracy, F1 score and AUC rates, providing superior performance, robustness, and computational efficiency.

The proposed Crowd-Certain method has significant implications for many practical applications such as medical diagnosis, fraud detection, or sentiment analysis. By allowing for the reuse of trained classifiers on future sample data, our method eliminates the need for recurrent simulation processes inherent in existing methods, thereby substantially reducing time and resources required for labeling.

We believe our work is an excellent fit for the Journal of Knowledge and Information Systems. The journal's focus on advanced research in the areas of knowledge and information systems aligns well with our research, and the methodological improvements proposed in our work could significantly advance the field. Our findings may guide future research and applications in various fields that rely on crowd-sourced data, including machine learning, data science, and citizen science.

We appreciate your consideration of our manuscript for publication in the Journal of Knowledge and Information Systems, and we look forward to your response.

Sincerely,

Jeffrey J. Rodriguez  
Assoc. Professor