Dear Sir/Madam,

I am writing to submit our manuscript entitled " **Synergizing Decentralized Machine Learning and Sustainability: Federated Average Distilled Conditional Learning in Waste Identification** " to be considered for publication in **Machine Learning Journal**. We believe that this manuscript presents innovative research in machine learning domain and aligns well with the scope and high standards of your esteemed journal.

The objective of this study is to address the need for a secured decentralized machine learning algorithms for solving sustainability problems like Waste management based on image analysis using Federated Learning with applications of knowledge distillation and conditional mutual learning and averaging. Furthermore, our manuscript covers important aspects related to Federated Learning and its applications in various fields. I am confident that the information in my abstract will be of great interest to your readers. The information provided in this abstract can help researchers, practitioners, and students comprehend the most recent developments in this subject and how they might be used to address other sustainability and waste management issues. We confirm that this manuscript has not been published previously and is not currently under consideration for publication elsewhere. We have followed the guidelines and formatting requirements provided by Machine Learning Journal meticulously during the preparation of the manuscript.

Thank you for considering our submission. We are confident that our research will make a significant contribution to the field of machine learning and bring in more advanced technologies to handle such issues. We appreciate the opportunity to submit our work to Machine Learning and look forward to your favourable response.

Sincerely,

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