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(57) Abstract :

Disclosed is a system (100) for sustainability analysis including a user device (102) configured to enable a user to upload image data of an item and processing circuitry (118) coupled to the user device (102). The processing circuitry (118) is configured to receive image data of the item from the user device (102), process the image data using machine learning techniques to classify the item into at least one category selected from reusable, recyclable, resalable, and compostable, generate personalized disposal recommendations based on the classification of the item, calculate carbon footprint reduction data associated with the disposal recommendations, and transmit the personalized disposal recommendations and the carbon footprint reduction data to the user device (102). The system (100) further includes a database (120) coupled to the processing circuitry (118) for storing classification data and recommendation data. FIG. 1 is selected

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