

# Recycling using Deep learning

## Goal of the Project:

The objective of this project is to take images of a single piece of recycling or garbage and classify it into six classes consisting of glass, paper, metal, plastic, cardboard, and trash. We also create a dataset that contains around 400-500 images for each class. This project will help people in Saudi Arabia learn how to properly sort their garbage.

plastic



paper



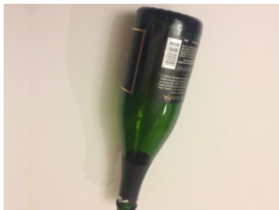
metal



paper



glass



paper



paper



metal



metal



plastic



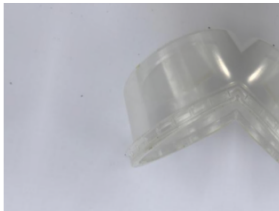
plastic



metal



plastic



paper



cardboard



paper



## TEST CONFUSION MATRIX:

Resnet34 is a CNN with 34 layers

The model seems to have confused metal for glass and plastic for glass. With more time, I'm sure further investigation could help reduce these mistakes.

