

GREENIFY YOUR RECYCLE MENTOR



2023 Google HPS Group 9

Alice Du, Angel Chen, Berlin Chen,
Oliver Hua, Scott Lin, Sean Liu(Mentor)

What are we solving?

Taiwan generates an average of **417kg** of waste per person per year.
94% of Taiwan's population has recycling habits,
yet only **26%** properly segregate their recyclables.

What can we do?

Automatic Classification

- ML Image Recognition
- Mechanism Design

Recycle Education

- Educational story-telling animation

Our Goal!

1. **Easy** waste disposal education
2. Enhancing recycling **accuracy**
3. **Attracting** storyline for Office Workers and School Students

Feature & Progress



Mechanism

Signal

Story Setting

REACT

ML

Power

Educational Content

HTTP

Flask

Biggest Difficulty

Frontend

- UI / UX
- Touch Panel



HTTP
↔

Backend

Flask
Model Inference (EfficientNet)



Hardware

- RaspPi
- Arduino
- Stepper

