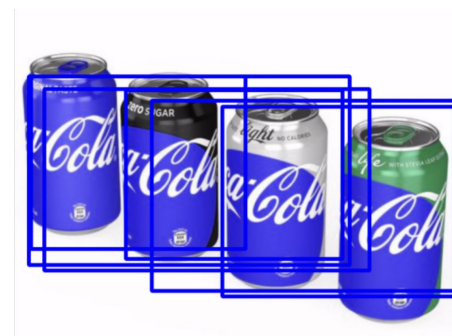# Alpha Garbage

A Simple Solution to garbage detection & classification.

- Boundary detection
- Garbage type classification

- **RetinaNet**

  - Boundary detection

  - Bad Performance when garbage are gathered/ covered

- MobileNetV2

Alpha
Garbage

- RetinaNet

- **MobileNetV2**

What went well

- Our models are able to detect the garbage from different environments

- Our models are able to classify the garbage

Didn't go well

- Some of the categories do not exist in pre-built model, so we did a mapping to make it fit

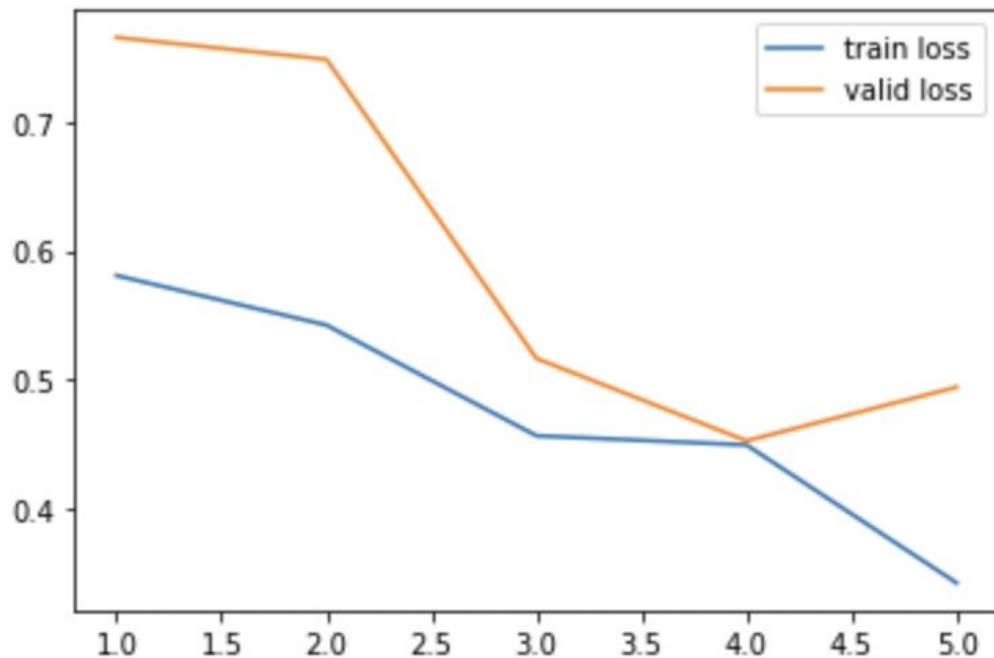- RetinaNet is slow, hard to tune hyperparameters

Overall level:

- More garbage class type

- More accurate boundary detection

Model level:

- RetinaNet is sensitive to learning rate, using lr_scheduler to control learning rate

- More hyperparameter tuning

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- Object detection

  Loss

Alpha Garbage

Thank You!