# REPORT

Objective: Scrap IKEA for Products and build a CNN Classifier.
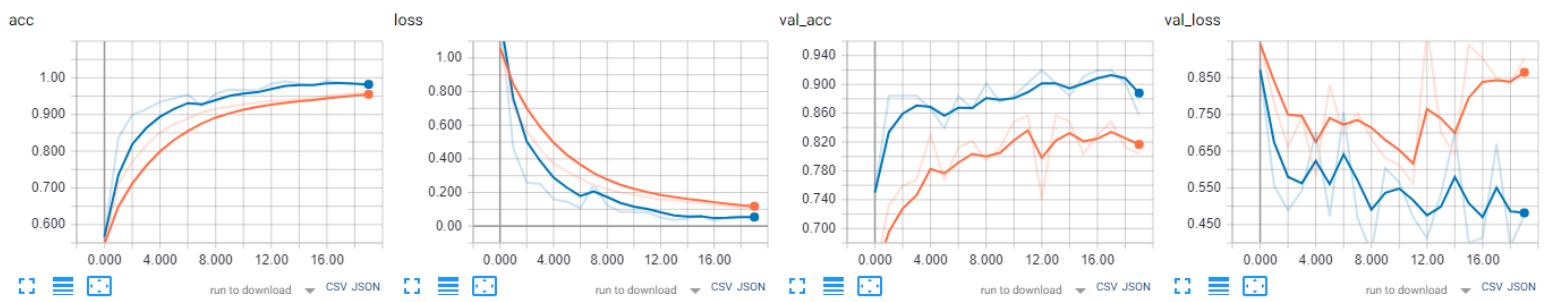
To reproduce the same results:

python scrap.py -d "All sofas" "Dining tables" "Dinnerware" "Outdoor dining furniture" "Sink cabinets"
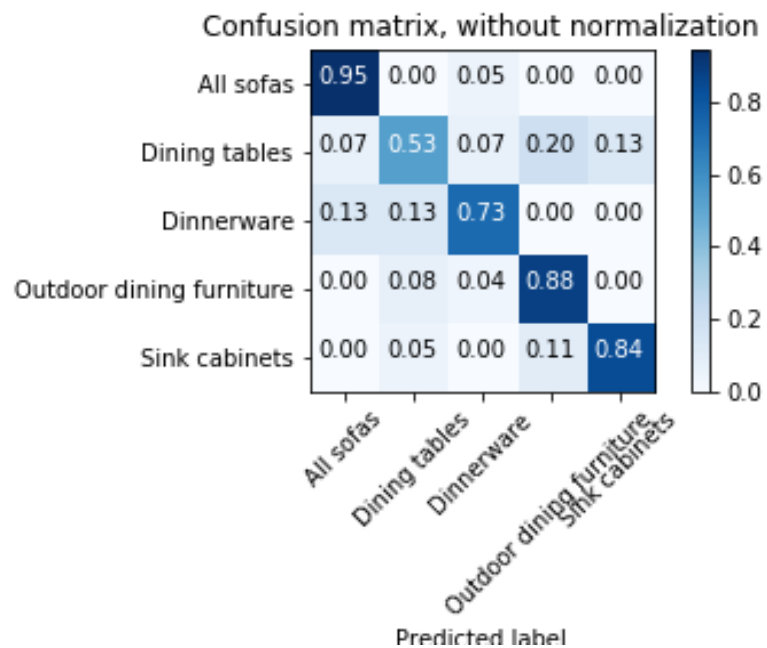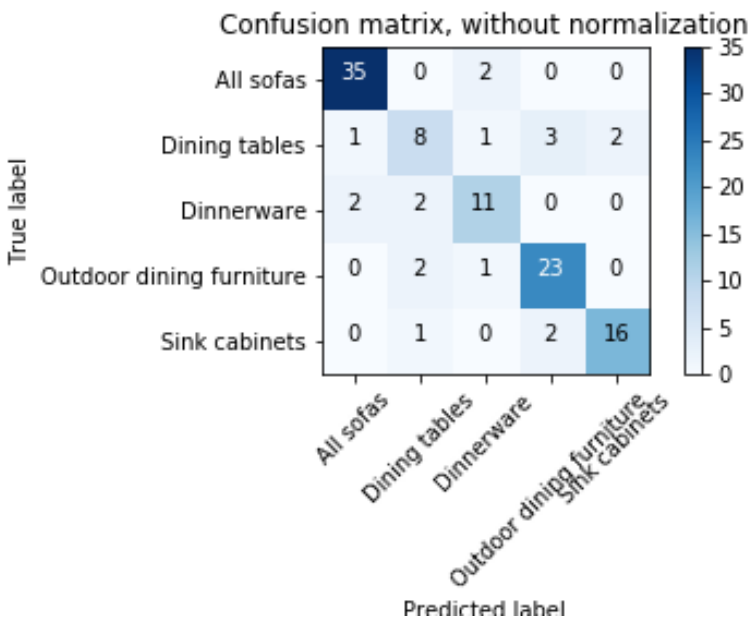
python model.py

CUSTOM MODEL

VGG16



Approaches

1. Custom Model
2. Pretrained Model (VGG16)

Results

1. Custom Model Confusion Matrix.

2. VGG Model Confusion Matrix.



Confusion matrix, without normalization

|  | All sofas | Dining tables | Dinnerware | Outdoor dining furniture | Sink cabinets |
|---|---|---|---|---|---|
| All sofas | 36 | 0 | 0 | 1 | 0 |
| Dining tables | 0 | 13 | 0 | 1 | 1 |
| Dinnerware | 0 | 0 | 15 | 0 | 0 |
| Outdoor dining furniture | 0 | 4 | 0 | 21 | 1 |
| Sink cabinets | 2 | 1 | 0 | 1 | 15 |

Confusion matrix, without normalization

|  | All sofas | Dining tables | Dinnerware | Outdoor dining furniture | Sink cabinets |
|---|---|---|---|---|---|
| All sofas | 0.97 | 0.00 | 0.00 | 0.03 | 0.00 |
| Dining tables | 0.00 | 0.87 | 0.00 | 0.07 | 0.07 |
| Dinnerware | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Outdoor dining furniture | 0.00 | 0.15 | 0.00 | 0.81 | 0.04 |
| Sink cabinets | 0.11 | 0.05 | 0.00 | 0.05 | 0.79 |