



找衣服

WAYNE LIN, KELSON LIN, YOUNG-JOO YUN
VISUAL INTELLIGENCE DEPARTMENT
UNDER THE SUPERVISION OF BRANDON SYU, PUSEN WEN, AND
SIMON PU

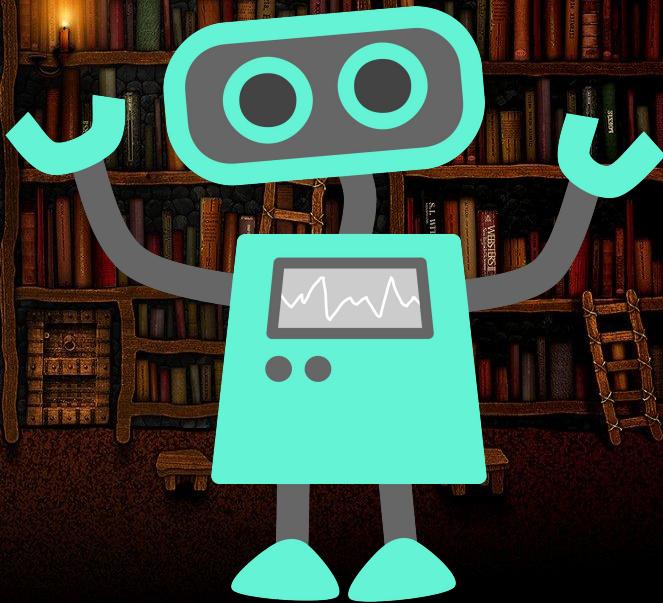
WHAT WE WANTED TO DO:



IT'S A SLEEVELESS TOP
AND A LONG SKIRT

我的名字是找衣服

我很聰明



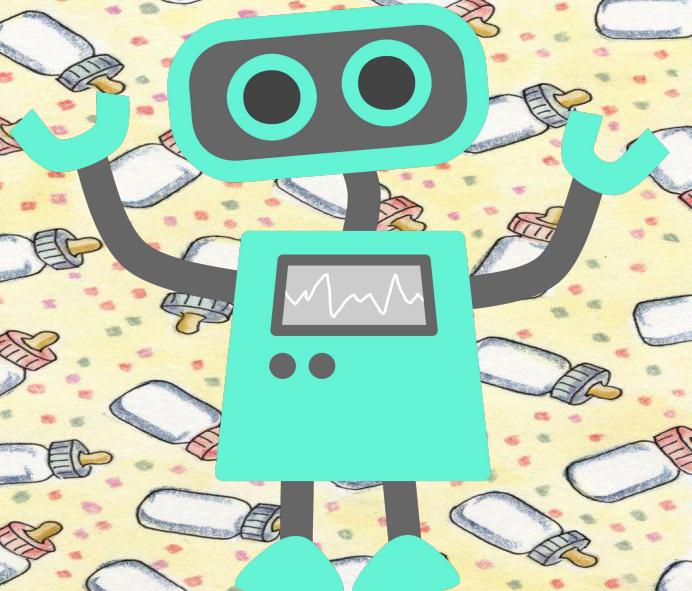
WHAT WE ENDED UP DOING:

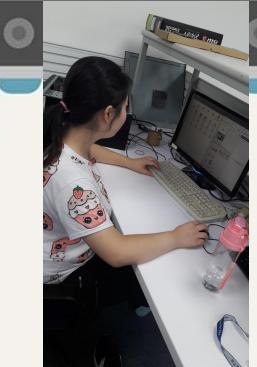


UMMM... MAYBE...
I THINK... A
SLEEVELESS TOP... AND
LONG PANTS...?

我的名字仍然
是找衣服

但我不聰明





WE WERE PREPARED TO TRAIN OUR MODEL NOW,
SO WE RECEIVED OUR GIANT DEEP FASHION
DATASET. WE WERE VERY EXCITED.



OUR 找衣服
WILL EAT US AND LEARN
HOW TO 找衣服

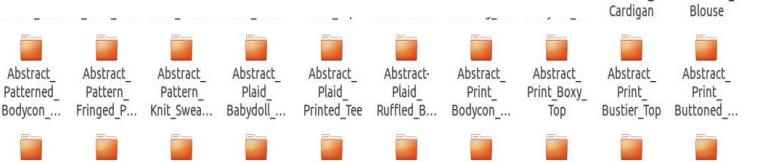
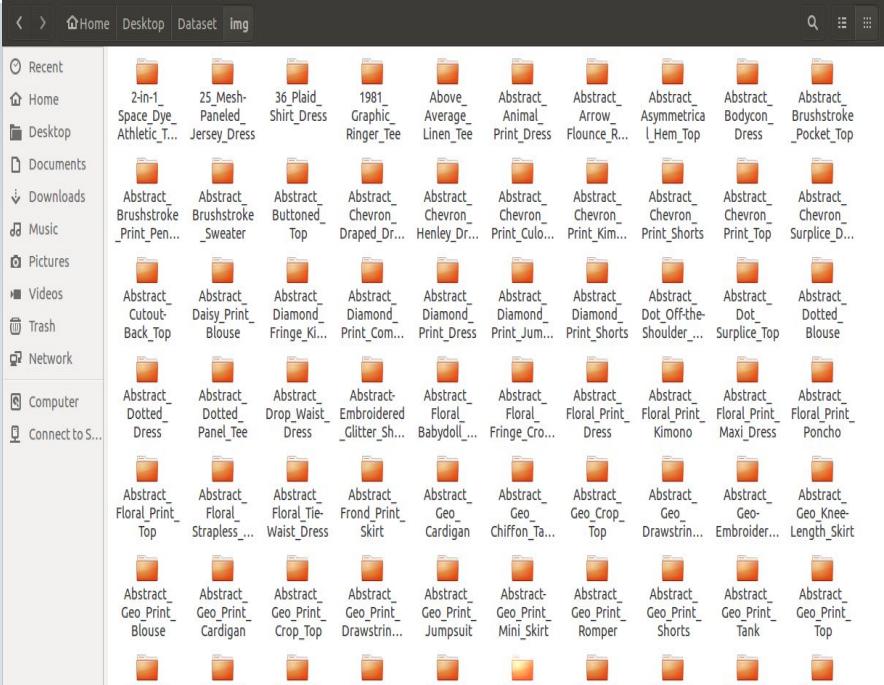


DEEP FASHION DATASET

- A RESEARCH GROUP AT THE CHINESE UNIVERSITY OF HONG KONG (CHUK)
- 239,222 IMAGES
- TEXTFILES WITH ANNOTATIONS



香港中文大學
The Chinese University of Hong Kong



HOWEVER, THE INITIAL RESULT WAS BAD. WE
LEARNED THAT THE QUALITY AND QUANTITY OF
THE DATASET IS VERY IMPORTANT IN MACHINE
LEARNING



真的

這很重要

THESE ARE OUR 老大



WE ALSO LEARNED THAT... SOME THINGS, SUCH AS CLEANING DATA CAN ONLY BE DONE MANUALLY, BY HUMAN BEINGS.



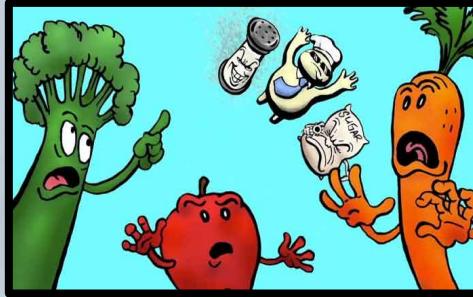
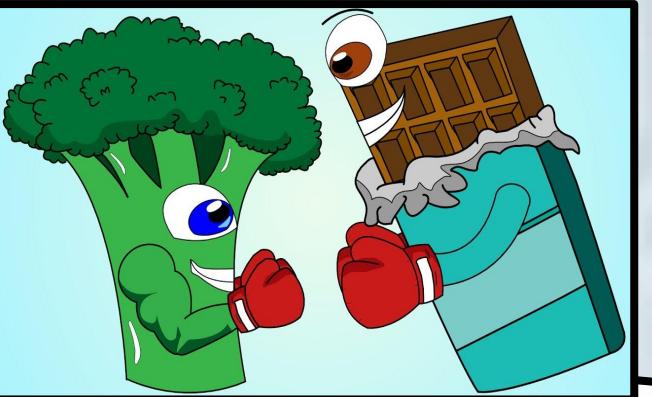
NO MORE UNHEALTHY FOOD!

AND THIS TOOK A LONG... LONG... TIME...

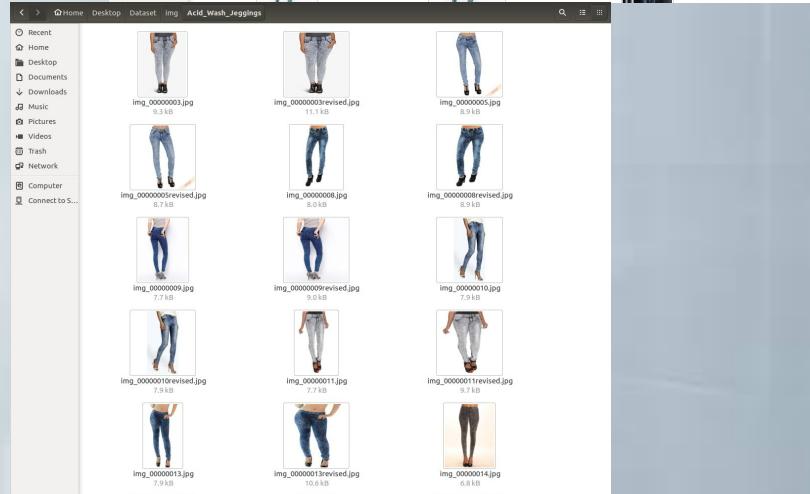
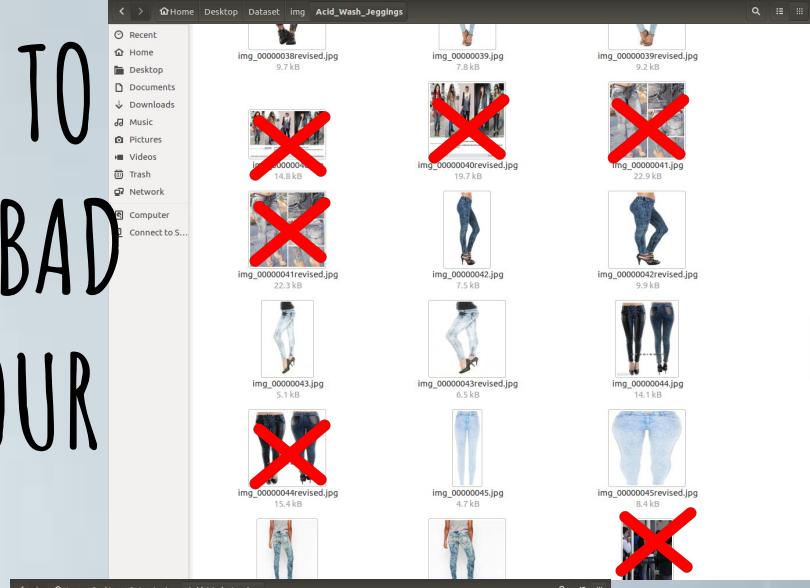
OOPS..... ! QQ



DUE TO OUR BIG DATASET



WE DECIDED TO FIRST DELETE BAD IMAGES IN OUR DATASET





WE THEN DECIDED TO COLLECT MORE
DATA

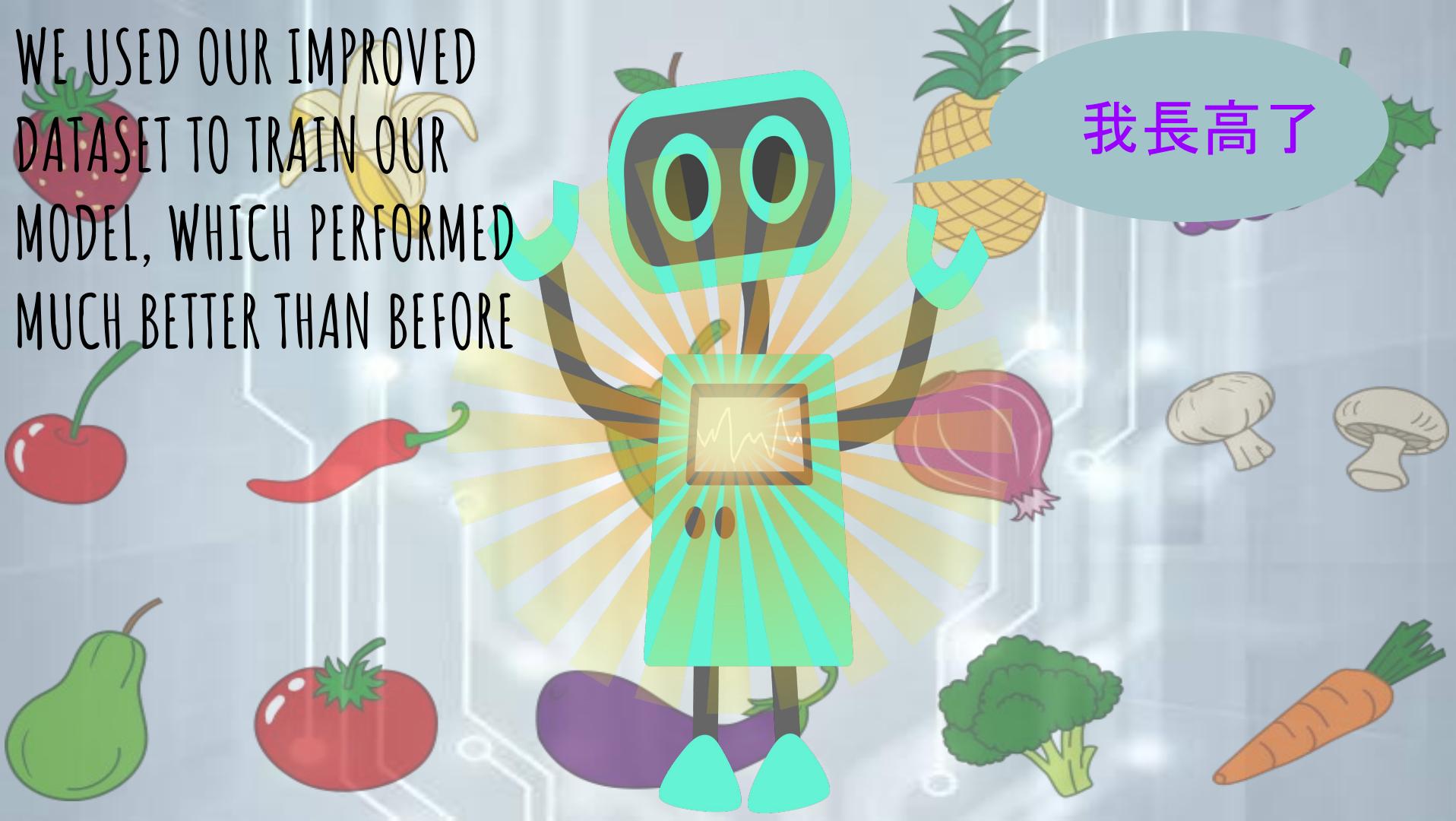


WE WROTE CODES TO AUTOMATE AS MUCH OF THE PROCESS AS POSSIBLE TO SAVE TIME, SUCH AS FOR GENERATING TEXT FILES, FINDING BOUNDING BOX COORDINATES, ETC, ETC.

Raw

```
5 lines (3 sloc) | 1022 Bytes
1 import os
2 import itertools
3 import cv2 as cv
4 import numpy as np
5 import PIL
6 from PIL import Image
7
8 #PLEASE HAVE ALL THE FILES YOU NEED TOGETHER IN ONE FILE#
9 #FILL IN THE PATH TO THE FOLDER THAT CONTAINS ALL OF YOUR FILES#
10 PATH_TO_FILES = '/home/young-joo/Desktop/obj_detection/'
11
12 #YOU DON'T NEED TO CHANGE ANY OF THIS
13 TEXT_LOCATION_LABEL = PATH_TO_FILES + 'list_category_img.txt'
14
15 def convert_image(text_location_label):
16     images_addr = list()
17     our_file = open(text_location_label, 'r')
18     our_file = our_file.read().splitlines()
19     for our in itertools.islice(our_file, 2, None):
20         our_string = ''.join(our)
21         our_string = our_string.split()
22         images_addr.append(our_string[0])
23         length = len(images_addr)
24     for i in range(length):
25         split = images_addr[i].split('.')
26         img = Image.open(PATH_TO_FILES + images_addr[i])
27         img = img.resize((299, 299), PIL.Image.ANTIALIAS)
28         img.save(PATH_TO_FILES + split[0] + "revised.jpg")
29     print "converted %d out of %d images" % (i, length)
30
31 convert_image(TEXT_LOCATION_LABEL)
32
```

WE USED OUR IMPROVED
DATASET TO TRAIN OUR
MODEL, WHICH PERFORMED
MUCH BETTER THAN BEFORE





LET'S SEE WHAT
找衣服 CAN DO!

