

밤과 음악 SAI

프로젝트 목적

지나가는 사람의 옷을 알고싶음



사진을 찍거나 그 옷을 그림



옷의 카테고리를 예측!

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PreProcessing

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플라스크로 꾸미기

'훌륭한' 모델 뽑기

Train data



Train data/255



Train data

(Reshape)

255로 Division

(1,28,28,1)로
Reshape

Test data



Test data/255



Test data/255

(Reshape)

'훌륭한' 모델 뽑기

Conv2D(3,3)(64)



Conv2D(3,3)(32)



Conv2D(5,5)(32)



Conv2D(3,3)(64)



Conv2D(3,3)(32)



MaxPooling2D(3,3)



Dropout(0.2)



Relu(128)



Flattern()



Softmax(10)

'훌륭한' 모델 뽑기

Optimizer = Rmsprop

Loss = Sparse categorical crossentropy

Epochs = 10, Batch_size = 64

PreProcessing

Train data에는 Edge가 없음

그래서 자체적으로 Edge를 만듦

우리의 데이터 $\text{Full} = \text{Edge} + \text{Inner}$

실제 데이터 $\text{Full} - \text{Inner} = \text{Edge}$

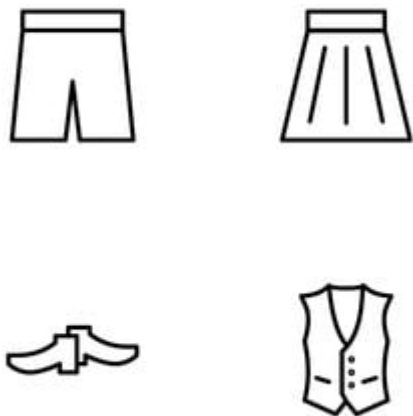
PreProcessing

이미지 Generator를 이용한 이미지 확장

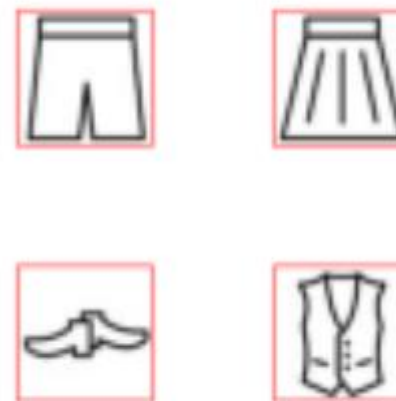
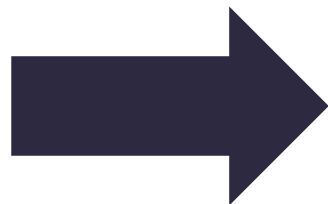
+

Gan을 사용하여 이미지 생성

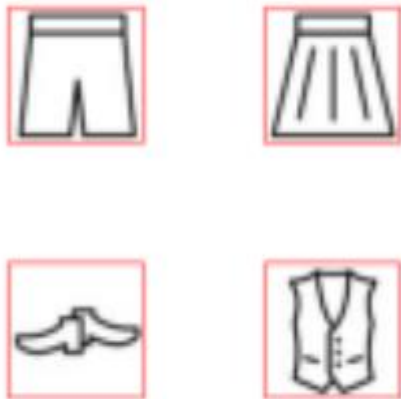
Localization



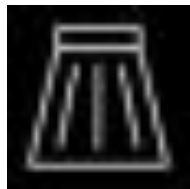
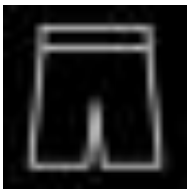
Edge 따기



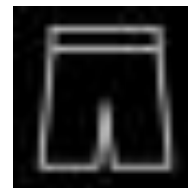
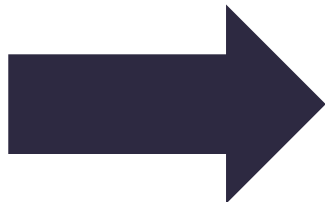
Localization



Localization



예측



바지



치마



신발



셔츠

플라스크로 꾸미기

SAI-1 Kfashion MNIST Project

Clothes Image Classifier

NUM =

Choose Image

SAI-1 Kfashion MNIST Project

Clothes Image Classifier

NUM =

Choose Image



Predict Start!!

SAI-1 Kfashion MNIST Project

Clothes Image Classifier

NUM =

Choose Image



Result: Dress,Trouser