



SDAIA T5 BOOTCAMP

fashion classification project

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Introduction and main goal

The main goal of this project is to build a classification model that classify the clothes by input the images of the clothes



why don't we create our own DATASET?

WE WEB Scraped these web sites



How the dataset look like?

ROWS AND FEATURES

Each row is a grayscale image, each image is 28 pixels in height and 28 pixels in width, for a total of 784 pixels in total.

WHAT ARE THE VALUES?

The pixel-values are integers between 0 and 255, Each value is the darkness of the pixel



***The input image
before and after
manipulation***

we reshaped the images
to minimize the features



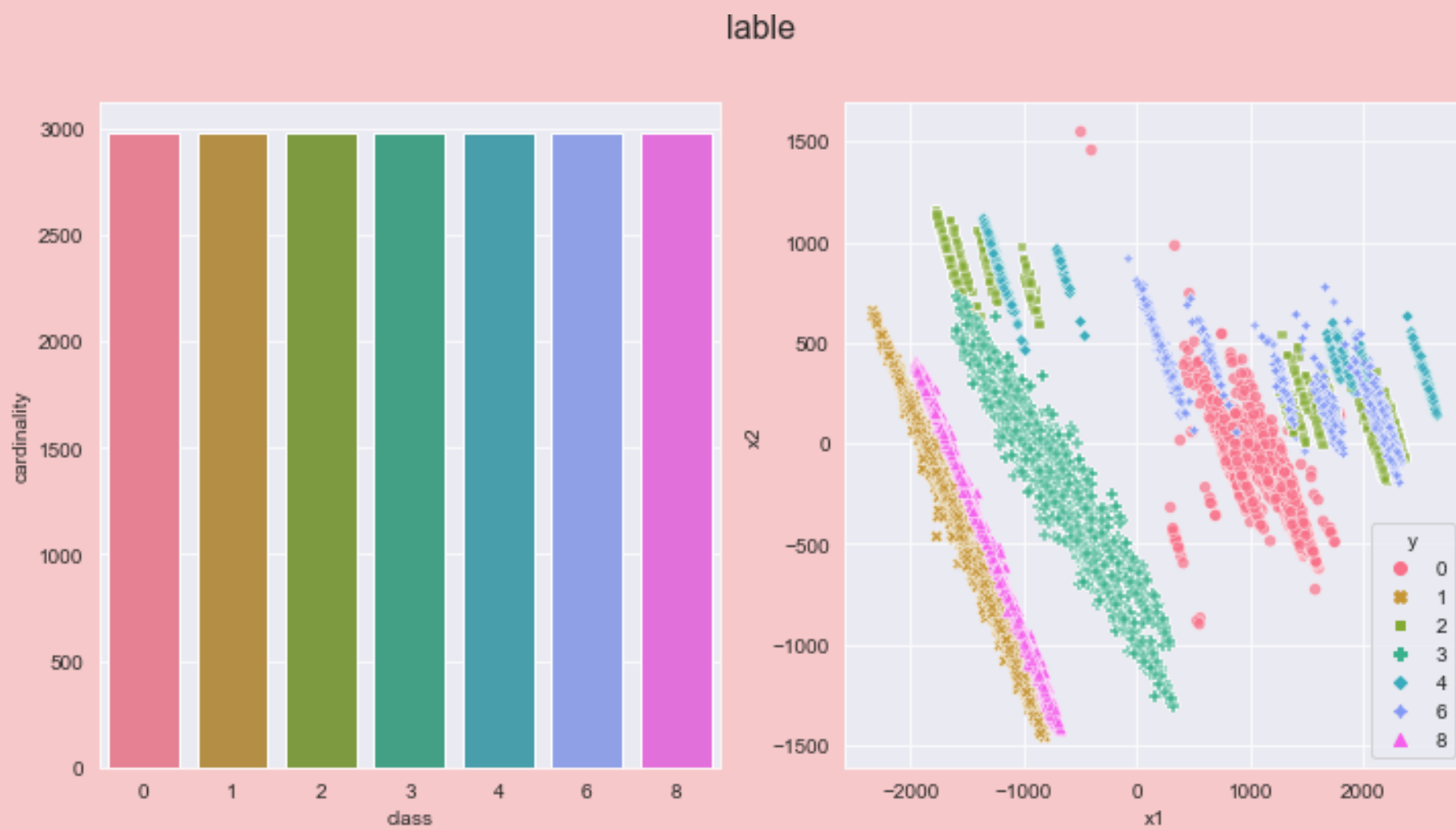
Our DataSet

labels

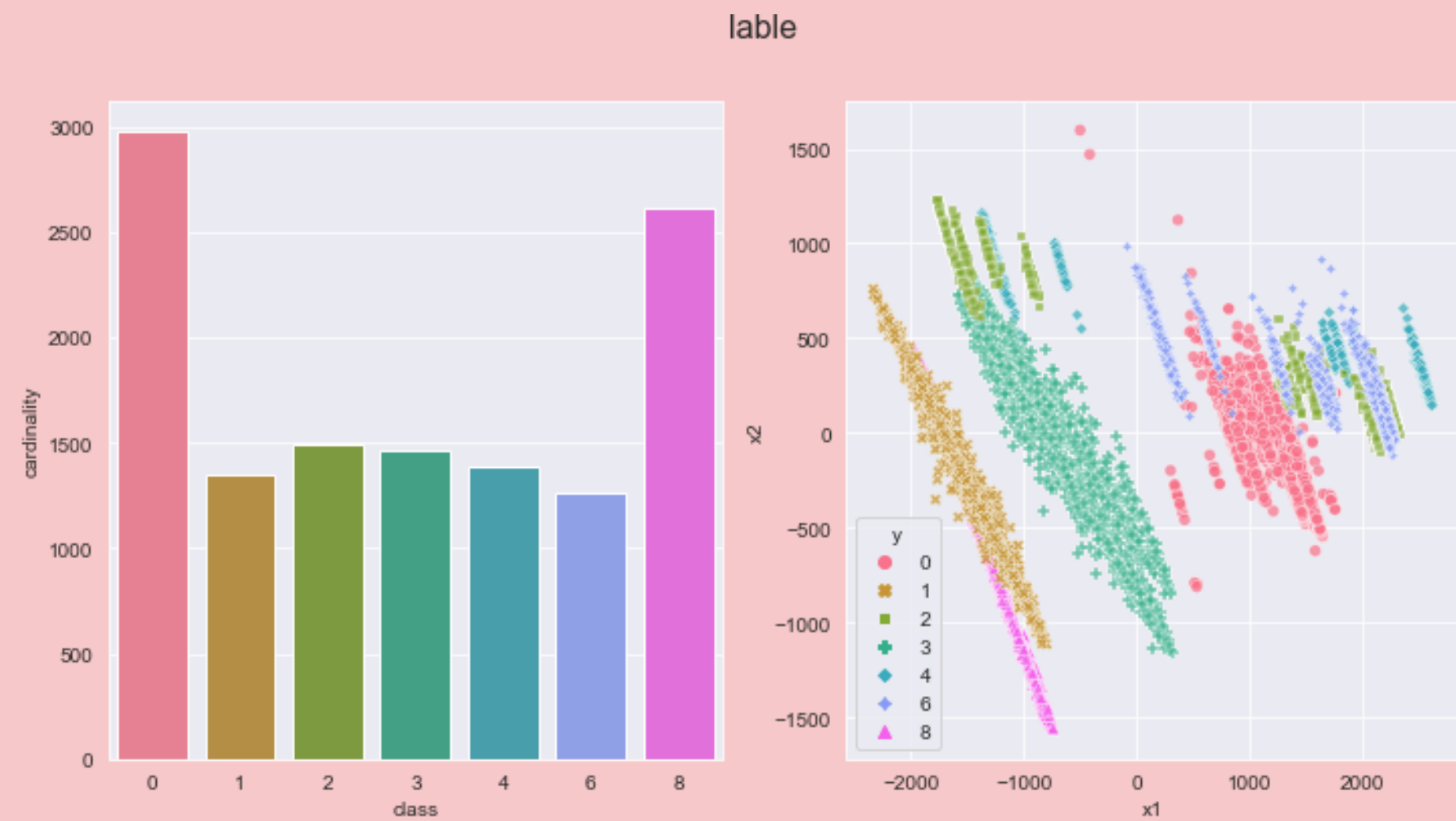
The labels are:

- 0 T-shirt/top
- 1 Trouser
- 2 Pullover
- 3 Dress
- 4 Coat
- 5 Sandal
- 6 Shirt
- 7 Sneaker
- 8 Bag
- 9 Ankle boot





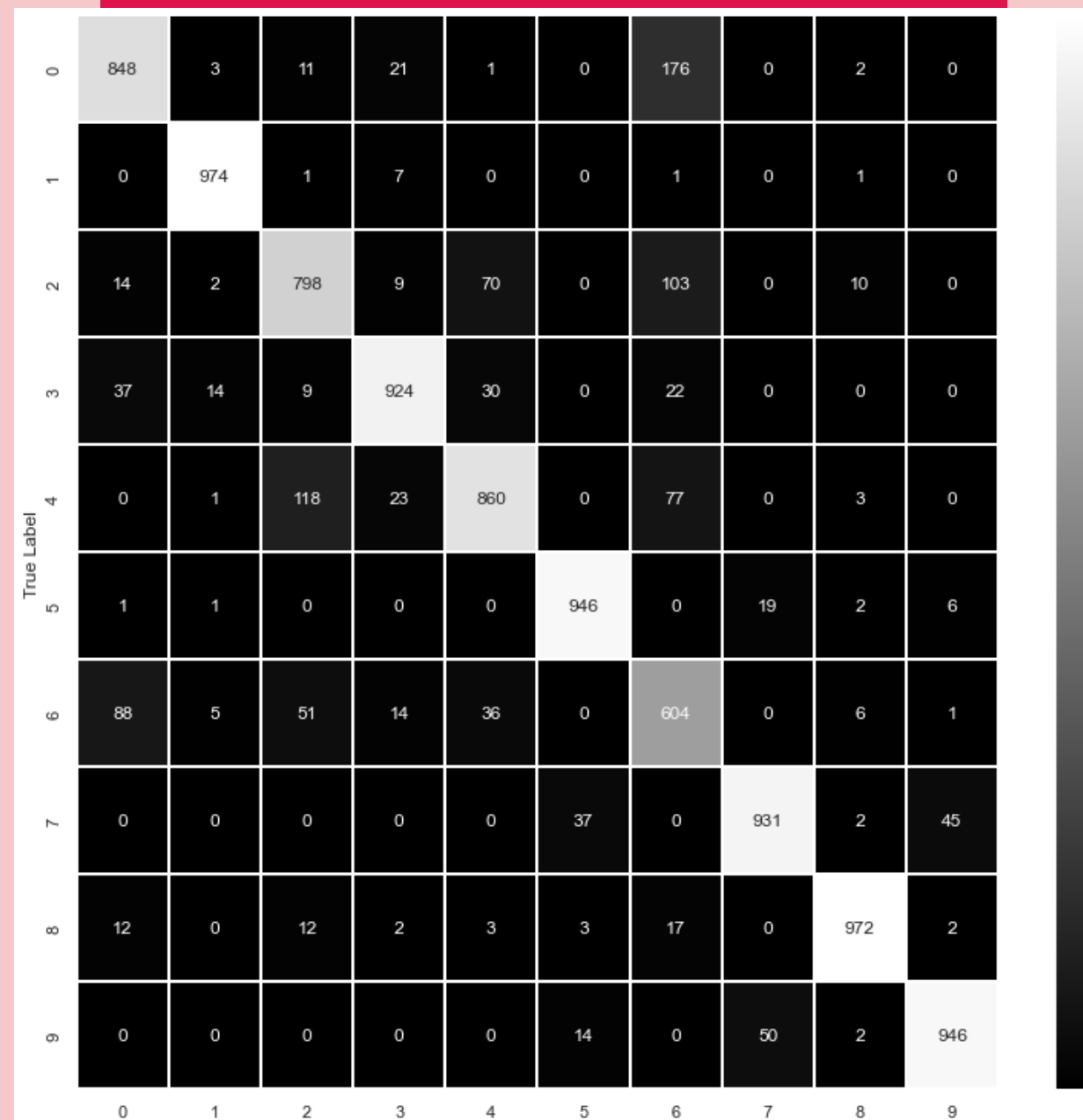
***The
DATASET
after
balancing it***



***The
DATASET
Before
balancing it***

Confusion matrix

This plot shows the true values and the predicted values of Random forest model





The models comparasion

THE RESULTS OF VALIDATION AND TEST
1-SVM (0.89)

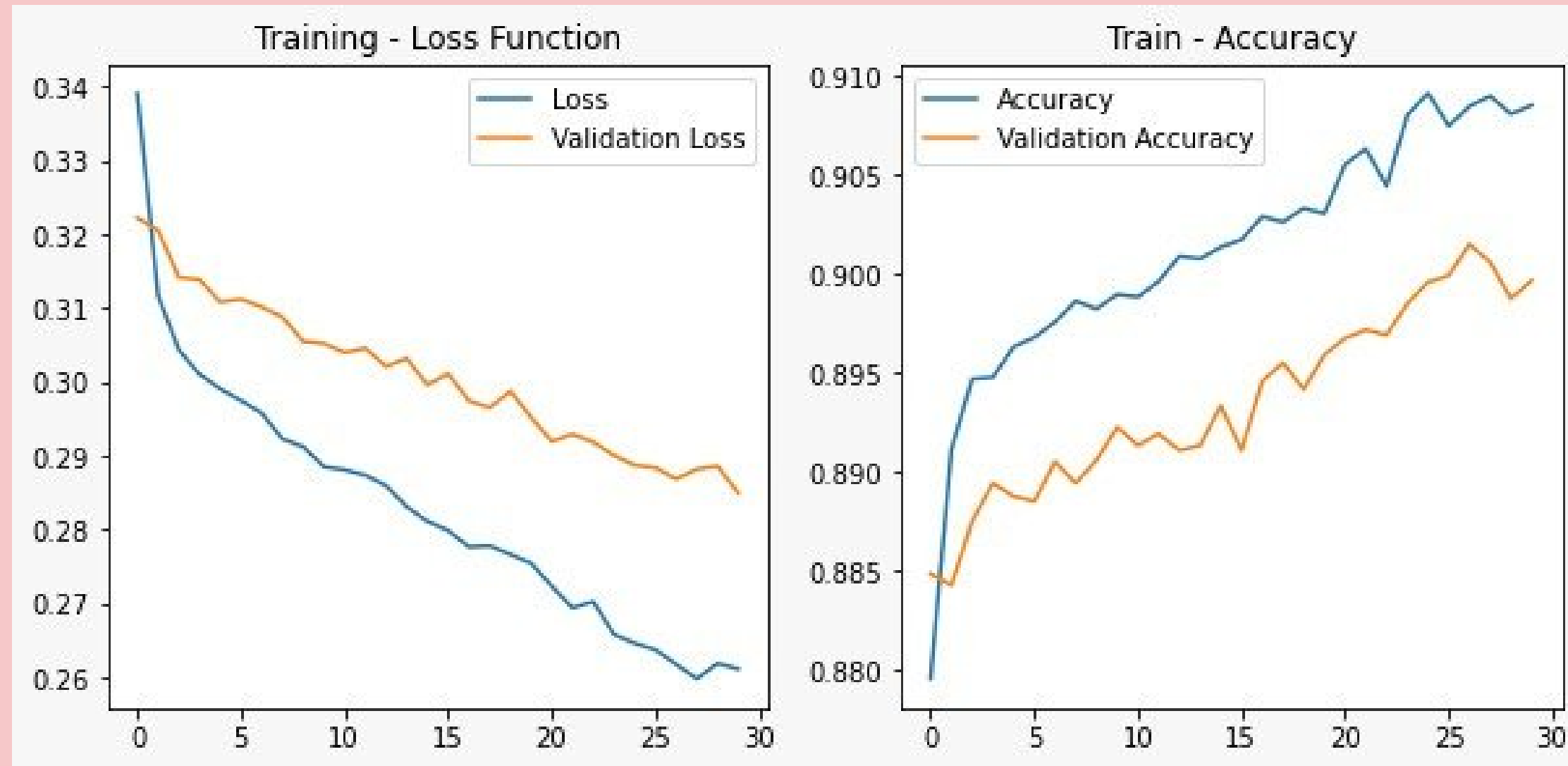
2-KNN (0.84)

3-NN (0.84)

4-CNN (0.91)

5-RANDOM FOREST (0.87)

6-LOGISTIC MODEL(0.84)



– *Accuracy* –

conclusion and Future Works

to conclude our work..

it appears that CNN had the best result with the highest accuracy with 0.918

to improve our work

- 1- buiding a model takes Higher resolution images.
- 2-buiding a model takes colorful images.
- 3-try more models



***Thanks for
your time!***

M SQUARE ARE LOOKING
FORWARD TO HEAR FROM YOU
;)



" WHEN IN DOUBT, WEAR
BLACK"

Quite..