

Shop The Look

Snap it. Shop it.

“ Personalization, AI,
& Product Discovery ”

By Whiskey Team




**BUSINESS
ANALYTICS**
Master of Science

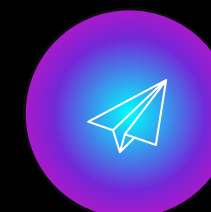




1. BUSINESS CASE



2. IMPLEMENTATION

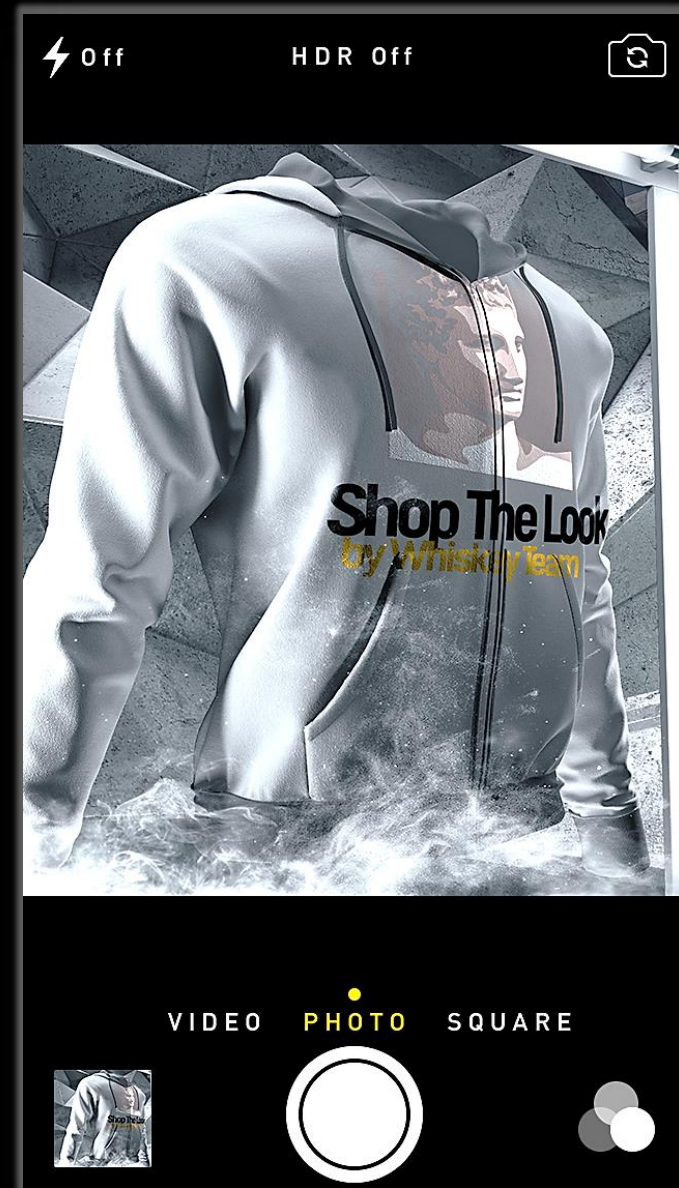


3. CONCLUSIONS

Business Case

section one

“ A goal without a plan is just a wish”
— Antoine de Saint-Exupéry





What is “Shop The Look”



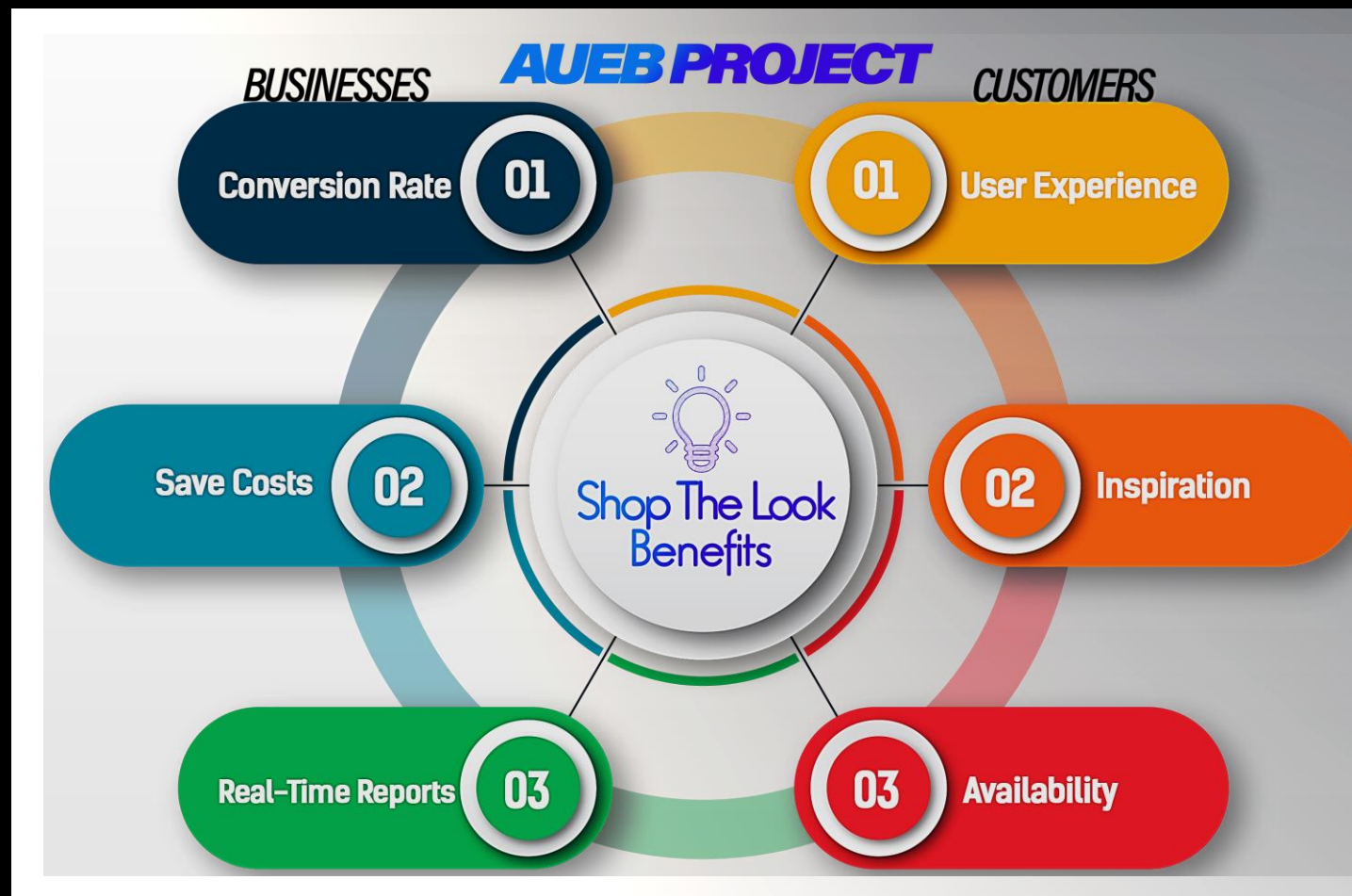
01

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What is —————>

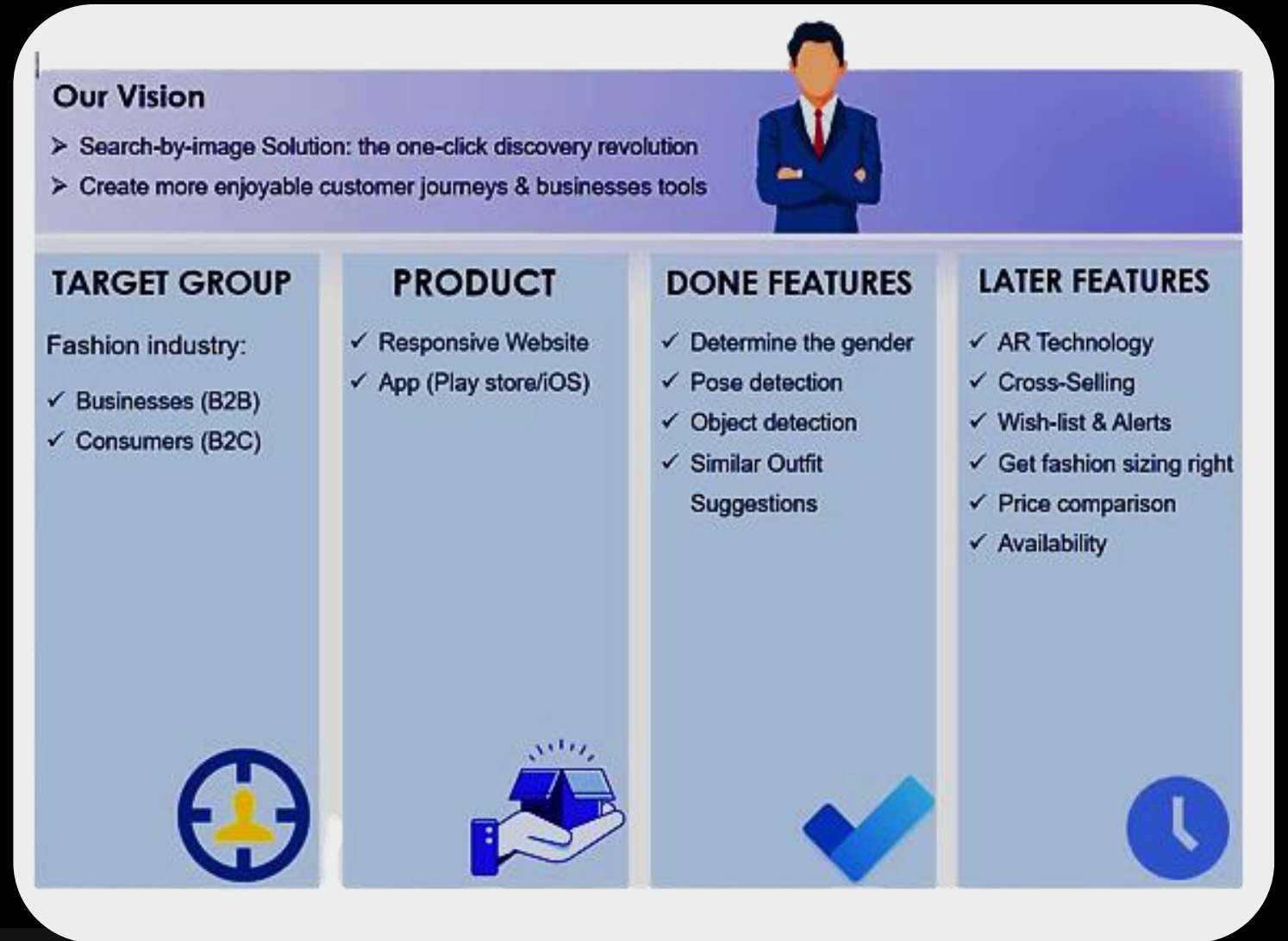


Why to use Shop The Look





What is our vision





Why online fashion industry

FASHION

E-SHOPPERS

Fashion e-commerce, Year in review 2021

Ετήσια Ανασκόπηση της Ελληνικής
Αγοράς και των τάσεων που θα την
διαμορφώσουν το 2022.

1,010 δις. €

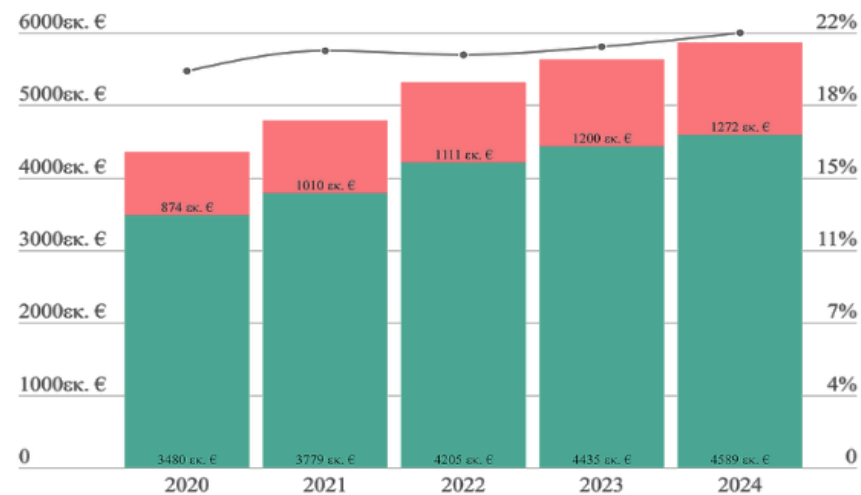
Κύκλος εργασιών
online μόδας 2021

10%

Προβλεπόμενη ανάπτυξη
ηλεκτρονικού εμπορίου 2022

1,111 δις. €

Αναμενόμενος κύκλος
εργασιών online μόδας 2022



Πηγή: fashion-research.gr - Glami

04

+

Fashion Industry →



Why online fashion industry

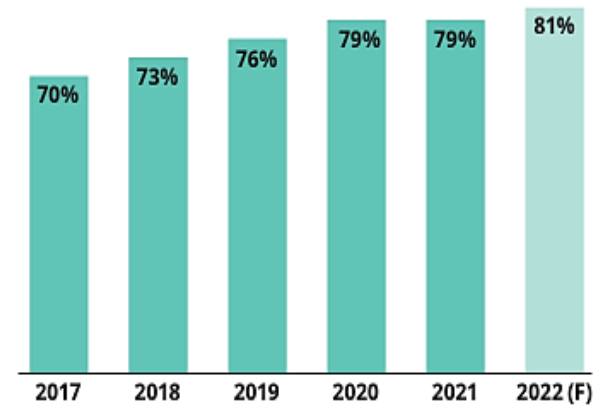
FASHION

E-SHOPPERS

Greece

Internet usage

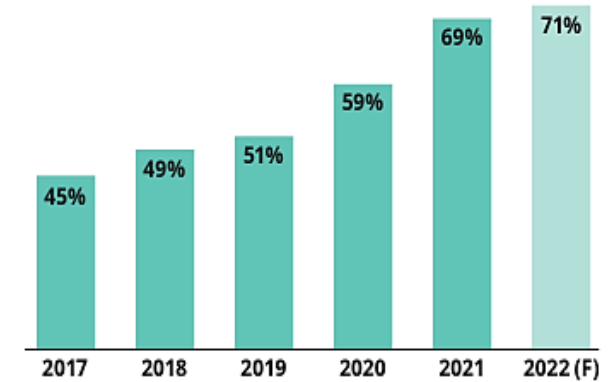
Percentage of the population accessing the internet



SOURCE: EUROSTAT

E-Shoppers

Percentage of internet users that bought goods or services online



SOURCE: EUROSTAT

05

+

E-Shoppers



Implementation

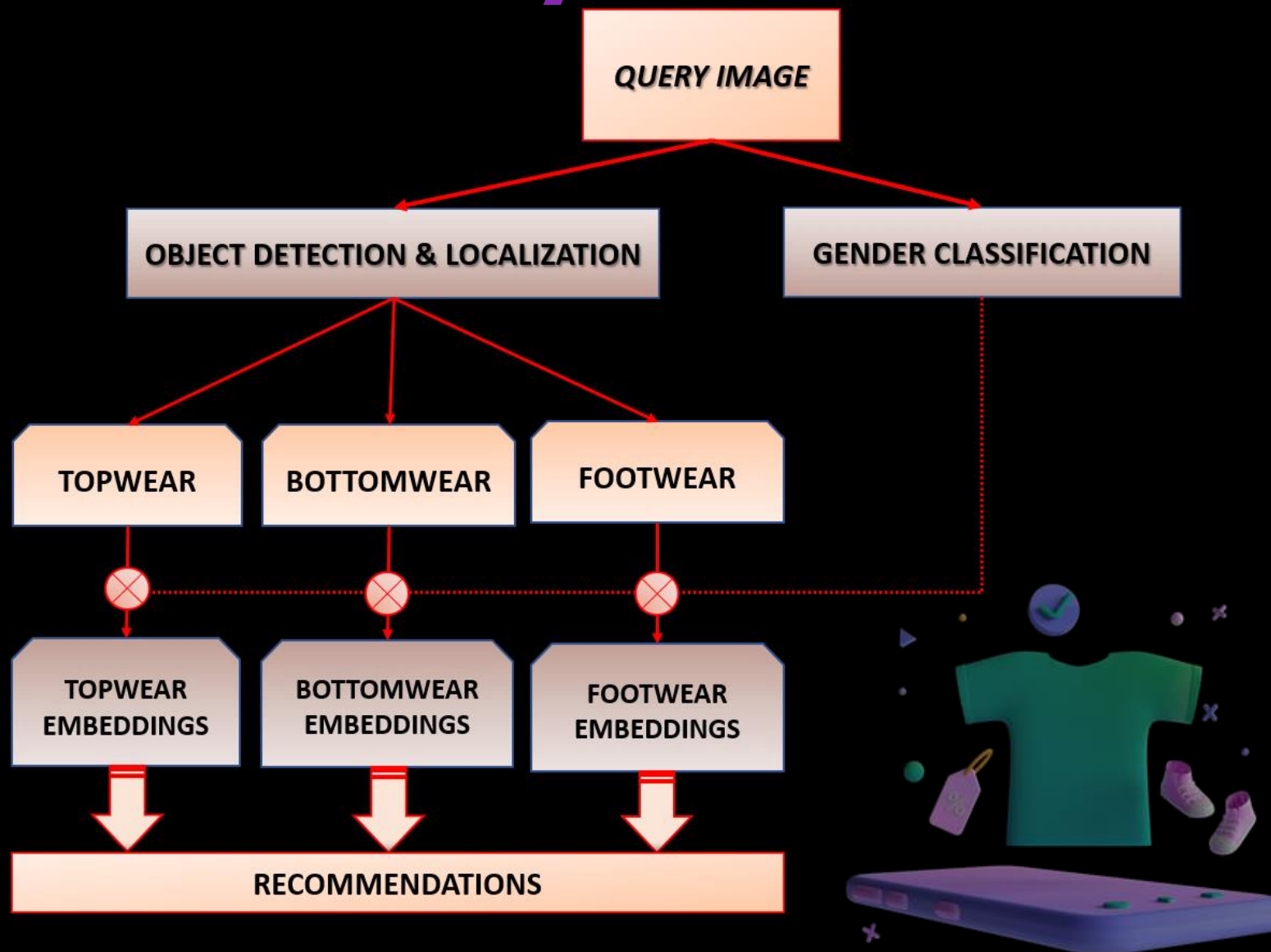
section two

*"Never make a human do a machine's job.
Never tolerate doing a machine's job. "*





Directory Structure



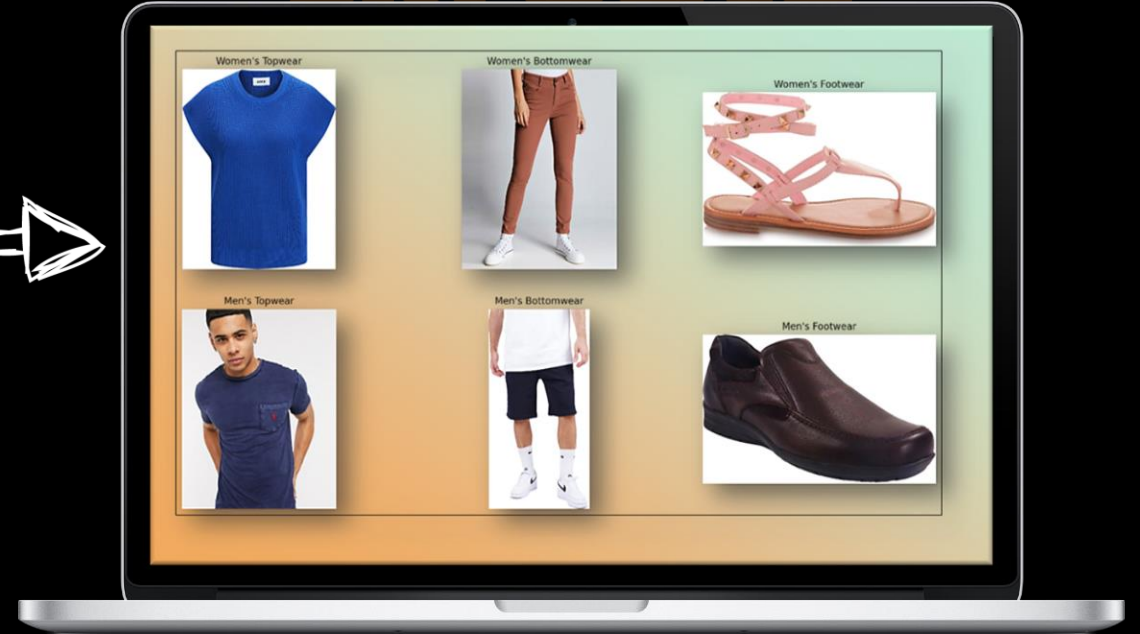


Dataset

9600 Fashion Products
6 Fashion Categories

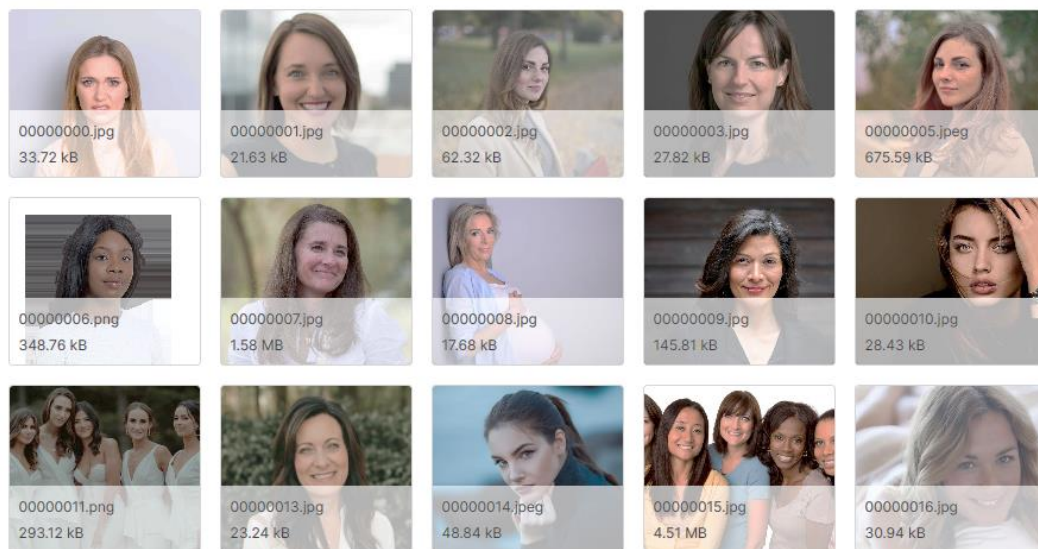


skroutz

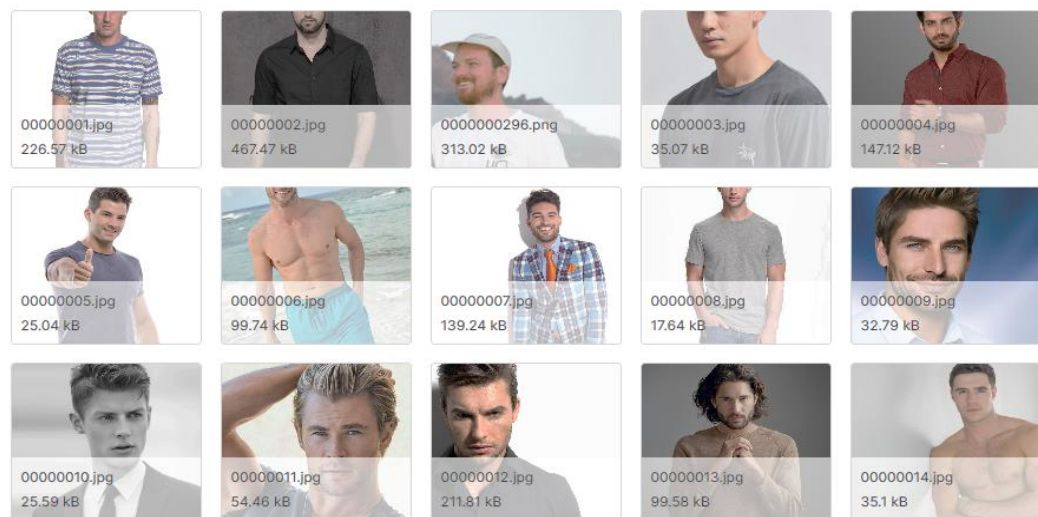




women (1912 files)



men (1418 files)



1. Gender Classification

Kaggle Dataset
"Men/Women Classification"

3.354 pictures



ResNet50



Model Metrics

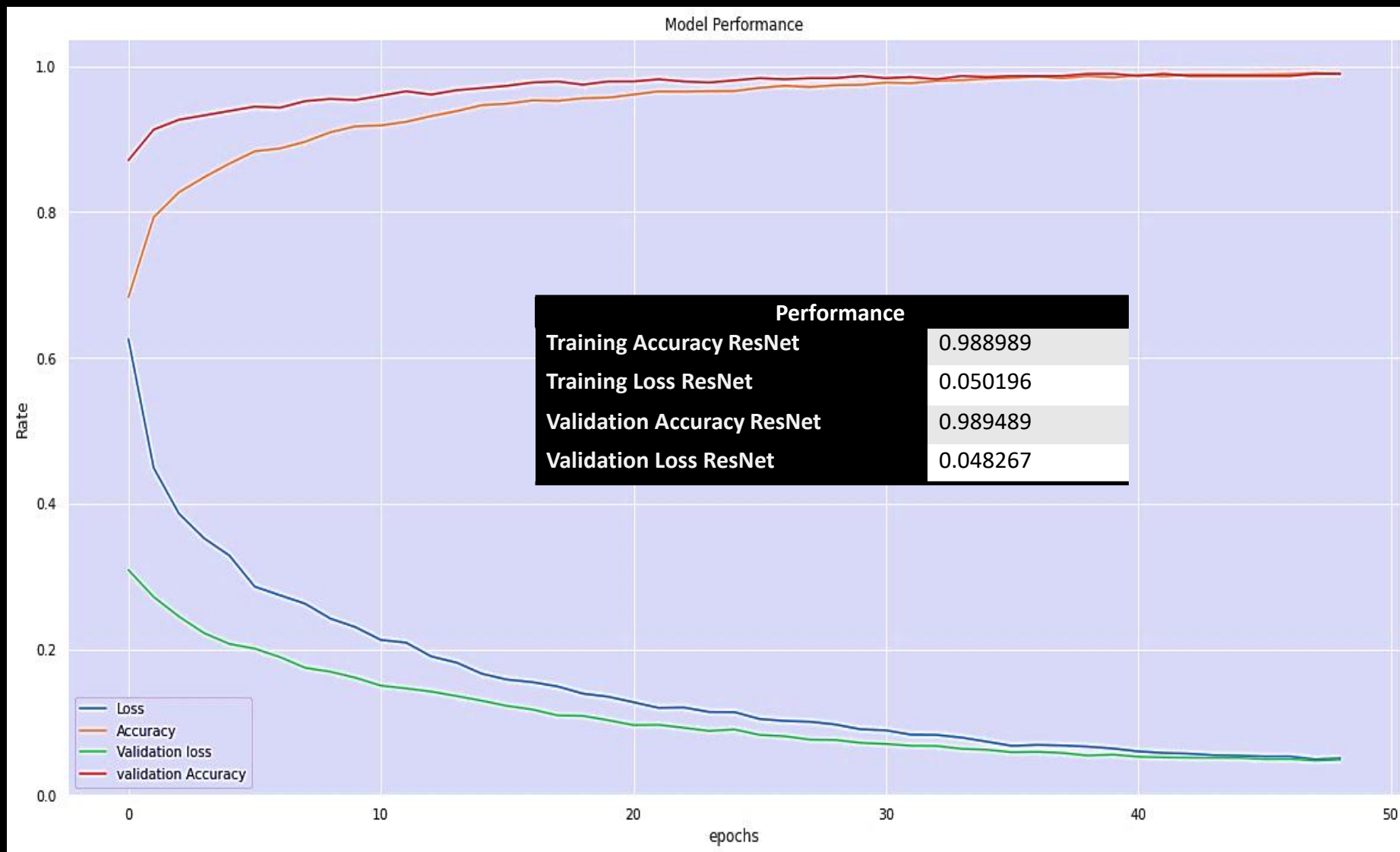
Loss

Accuracy

V. Loss

V. Accuracy

V*: validation

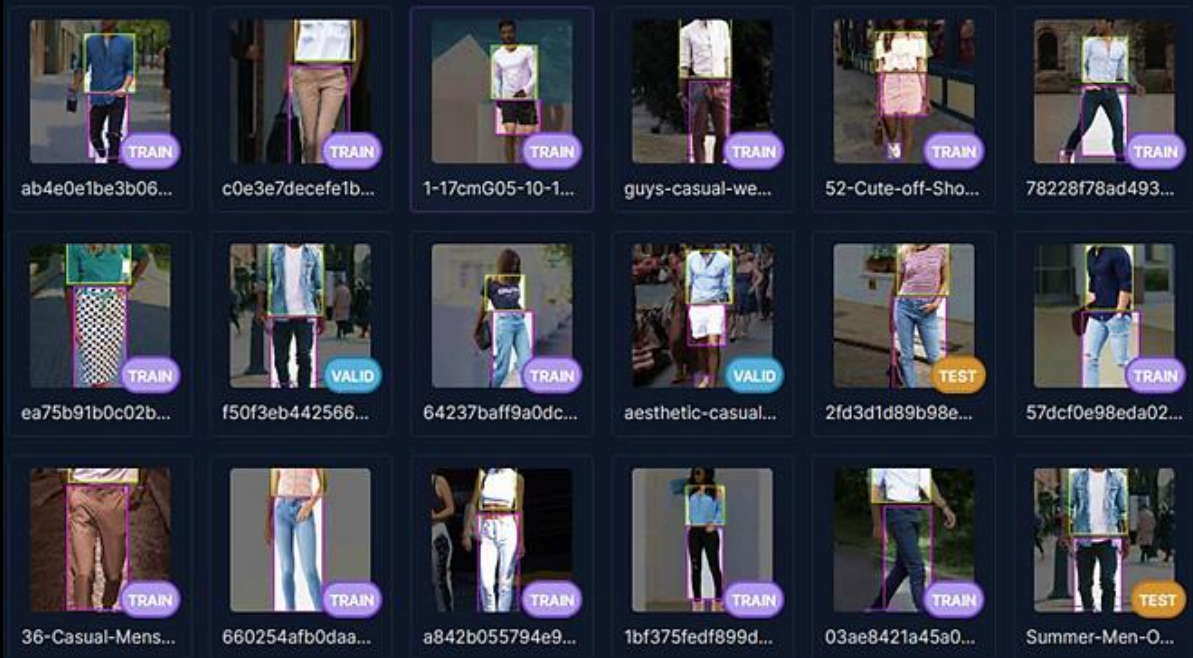




Custom Roboflow Dataset

Browse

Filename : Split : **ANY (180)** TRAIN (126) VALID (36) TEST (18) Classes: ALL CLASSES

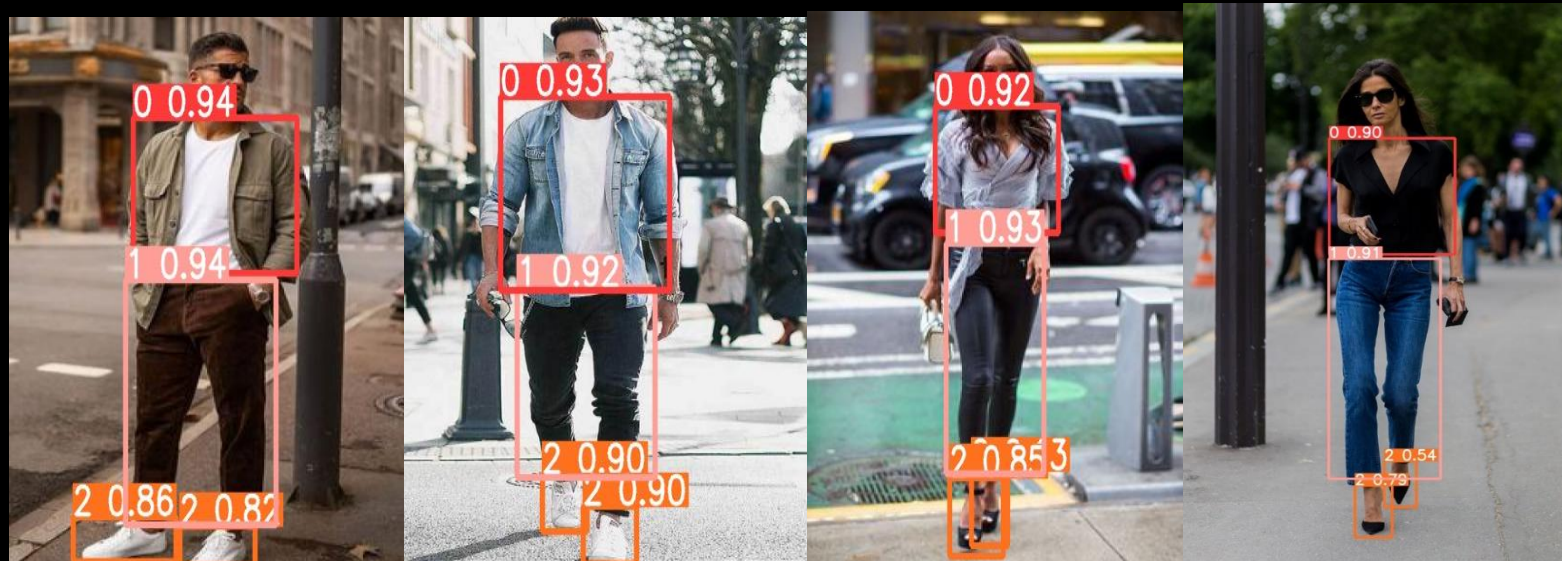


2. Yolo Object Detection

► “fashion_obj_detection” Image Dataset

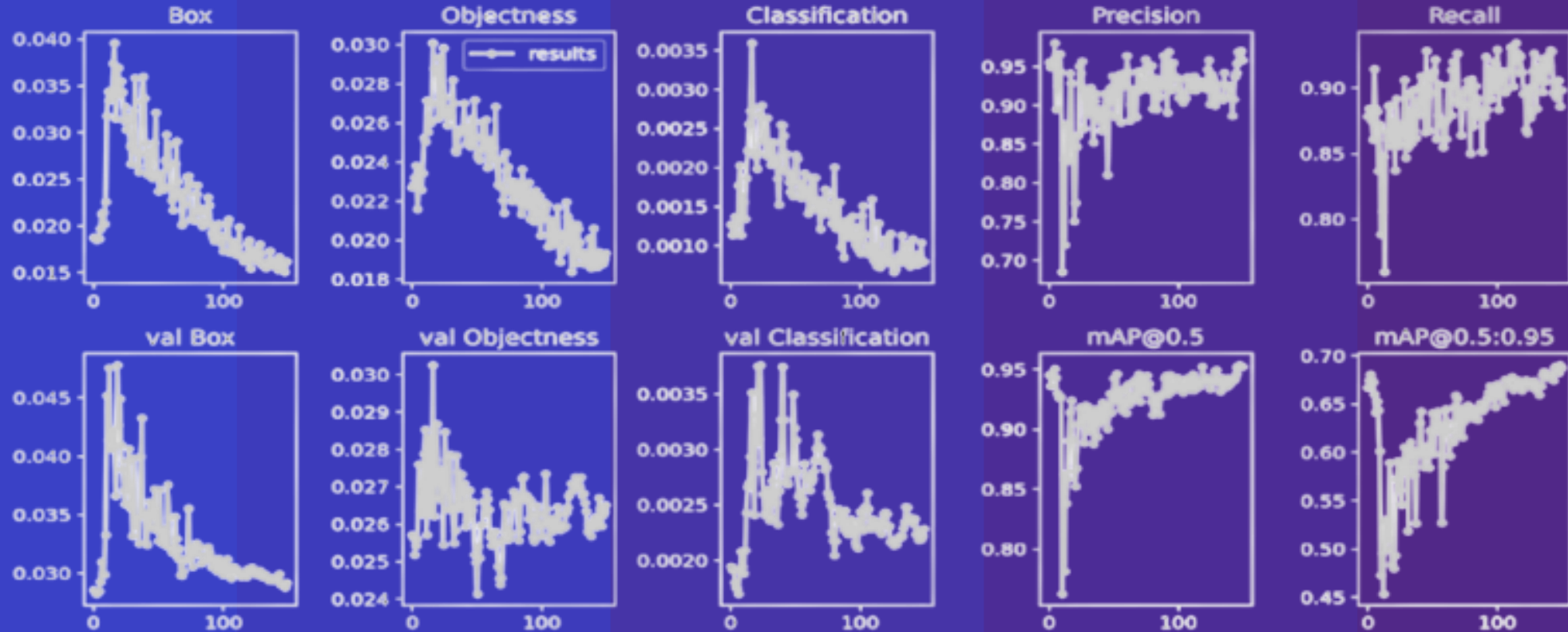


2. Yolo Object Detection Version 5





Yolo v5 Results





Yolo v5 Results





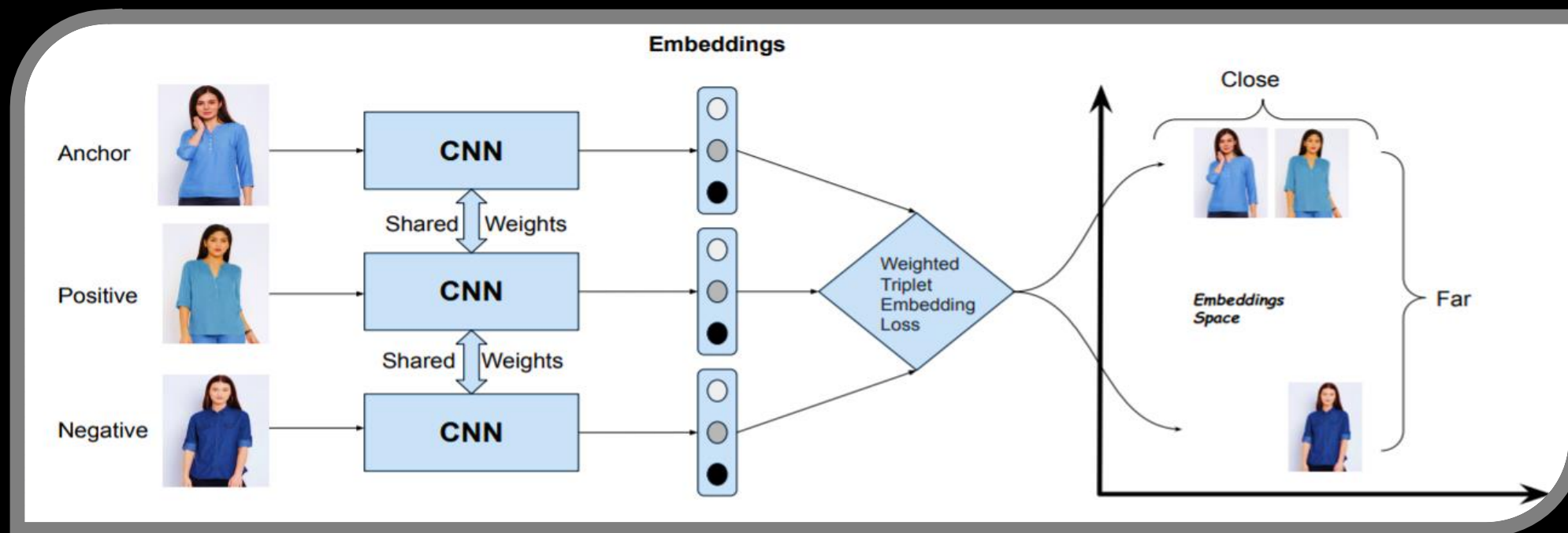
3. Embedding Generation

Siamese Network

Input

Loss Function

Output



3. Embedding Generation

Topwear Example



Anchor



Positive



Negative

Footwear Example



Anchor



Positive



Negative

Bottomwear Example



Positive



Anchor



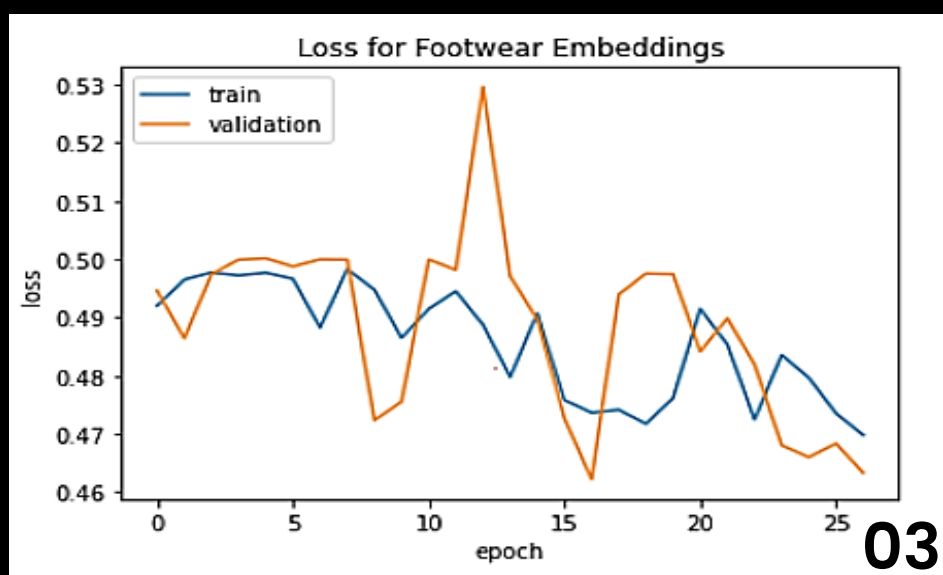
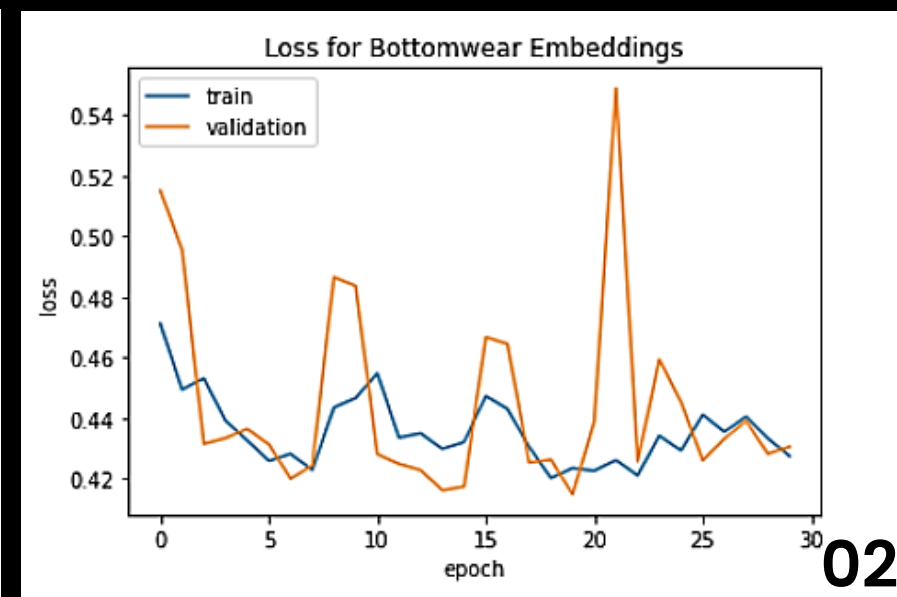
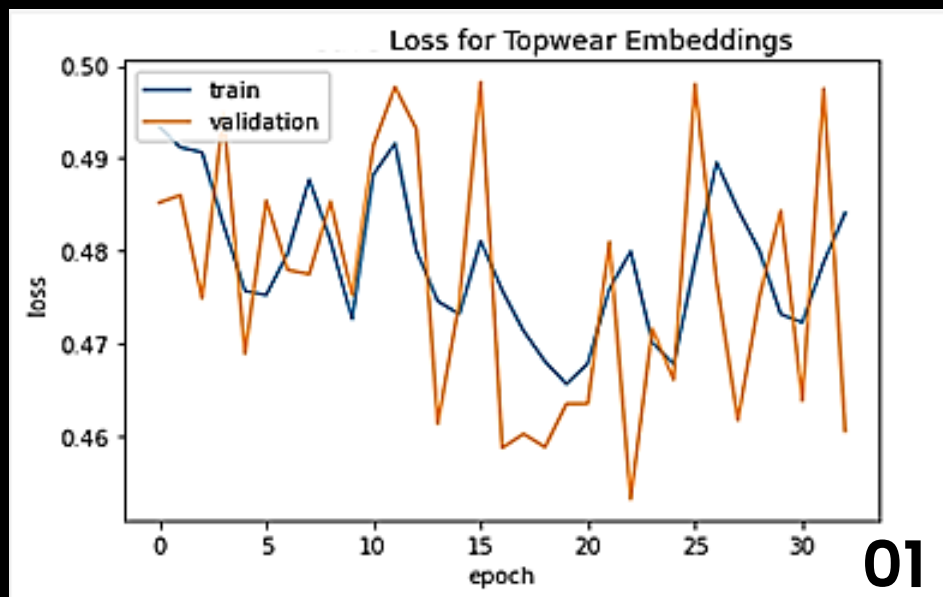
Negative



Siamese Network Losses

Train

Validation

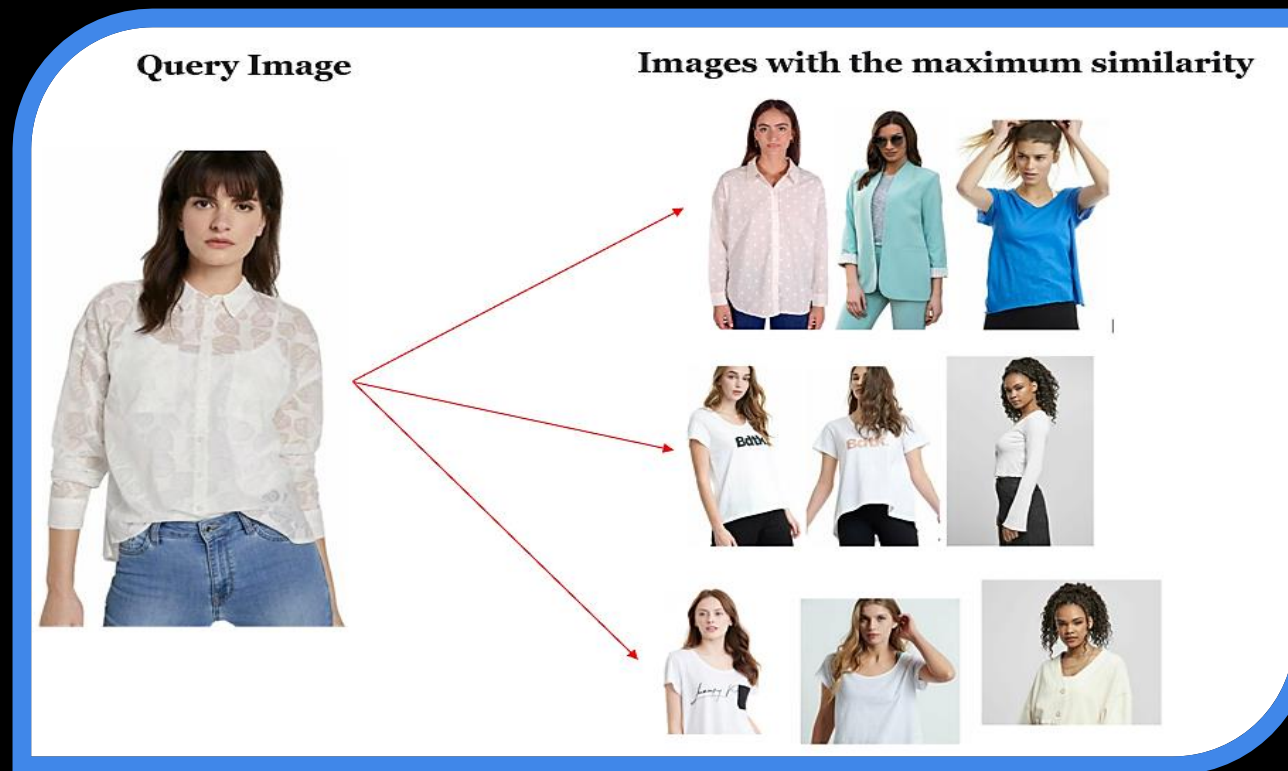
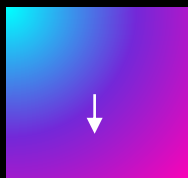


01 Topwear
02 Bottomwear
03 Footwear



3. Embedding Generation

Checking
Similarity
Similarity
Similarity





Query Image



Bottomwear Recommendation



Topwear Recommendation



Footwear Recommendation

Final Pipeline

► ALL MODULES TOGETHER

MODULES

/01
Gender Classification

/02
Yolo Object Detection

/03
Siamese Network

RECOMMENDATIONS

Topwear
Bottomwear
Footwear



Final Pipeline

▶ ALL MODULES TOGETHER

MODULES

/01

Gender Classification

/02

Yolo Object Detection

/03

Siamese Network

RECOMMENDATIONS

Topwear
Bottomwear
Footwear



Query Image



Bottomwear Recommendation



Topwear Recommendation



Footwear Recommendation

Final Pipeline

► ALL MODULES TOGETHER

MODULES

/01

Gender Classification

/02

Yolo Object Detection

/03

Siamese Network

RECOMMENDATIONS

Topwear
Bottomwear
Footwear

Video Promotion*

Thank You

Shop The Look

