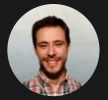
LOOKING FOR SOMETHING FASHION?
DEEP LEARNING CAN HELP!

DSPT
DATA SCIENCE PORTUGAL

Rui Machado
Co-Founder and Chief Executive Officer

Hélder Russa
Co-Founder and Chief Technology Officer

Jorge Ferreira
Co-Founder and Chief Marketing Officer



Pedro Esmeriz
Co-Founder and Chief Product Officer

SHOPAI.CO

Beg 2015

FEP FACULDADE DE ECONOMIA
UNIVERSIDADE DO PORTO

SHOPAI.CO

2015

FEP
FACULDADE DE ECONOMIA
UNIVERSIDADE DO PORTO

FEUP
FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO

universidade
de aveiro

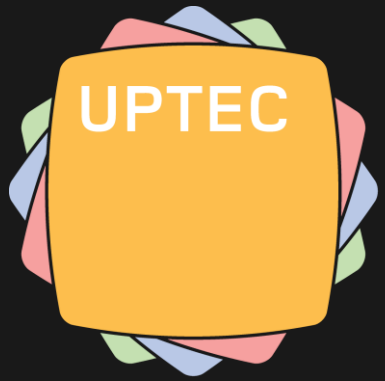
SHOPAI.CO

Beg 2017

SHOPAI.CO

Beg 2015

XXI CENTURY

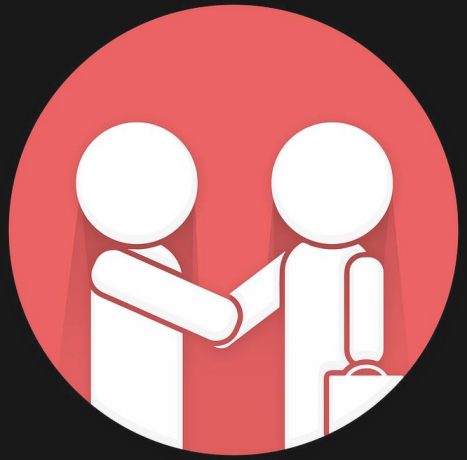


GARAGE COMPANY

SHOPAI.CO

Mid 2017

FIRST CUSTOMER



FROM SOUTH AFRICA

SHOPAI.CO

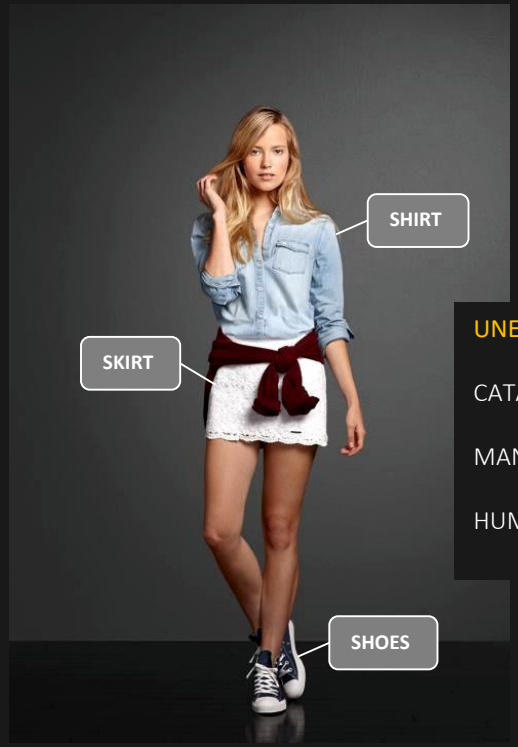
Mid 2017

U.PORTO Spin-off

SHOPAI.CO

Mid 2018

UNDERSTANDING THE PROBLEM

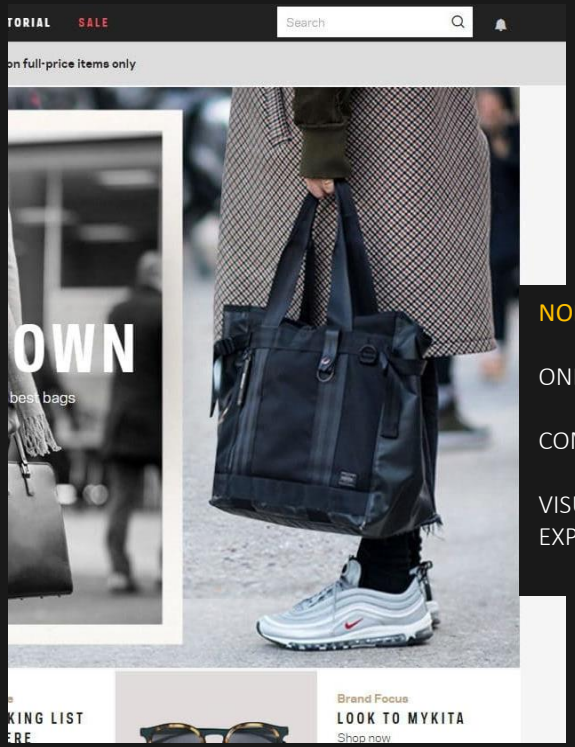


UNEFFICIENT VISUAL PROCESSES

CATALOG CLASSIFICATION

MANUAL ANNOTATIONS

HUMAN ERROR



NON EXISTING IMAGE SEARCH

ONLY TEXT INPUT

COMPLEX VISUAL PATTERNS

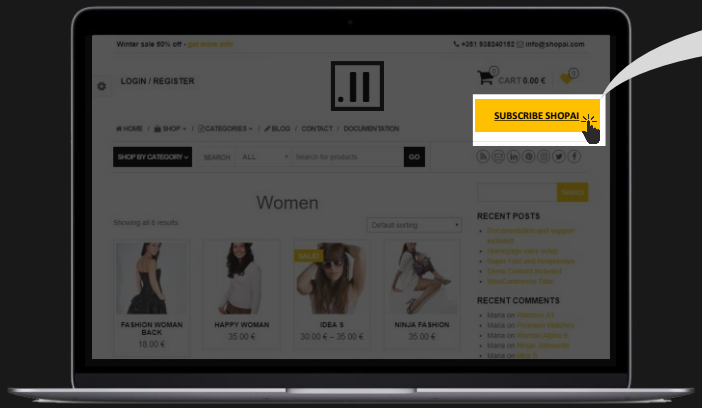
VISUAL FEATURE CATALOG EXPLORATION

BRAND PERSPECTIVE

CUSTOMER PERSPECTIVE

UNDERSTANDING THE BRAND SOLUTION

Based on image processing

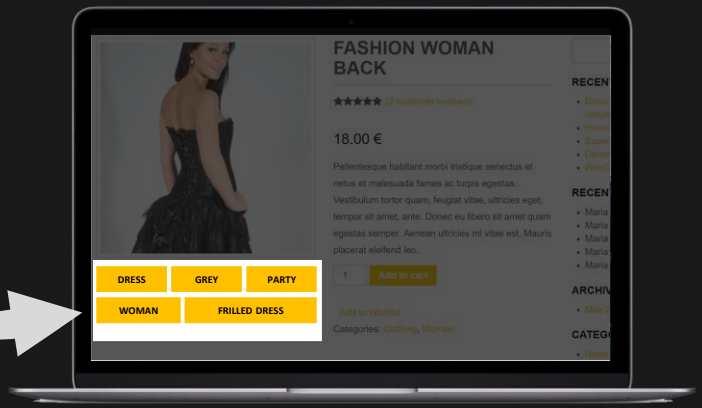


SUBSCRIBE SHOPAI
AS SERVICE

BRAND'S CATALOG IMAGES SYNCING

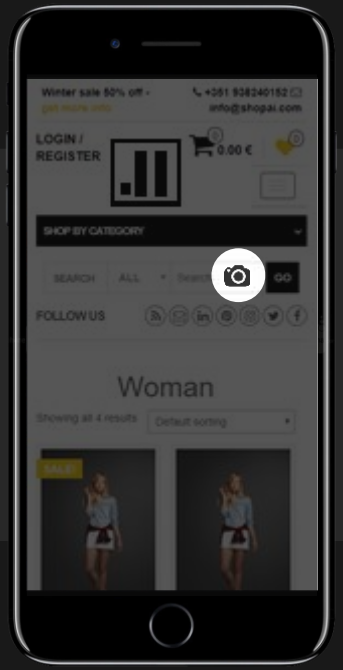
VISUAL FEATURES DATA BASE

SHOPAI ENGINE



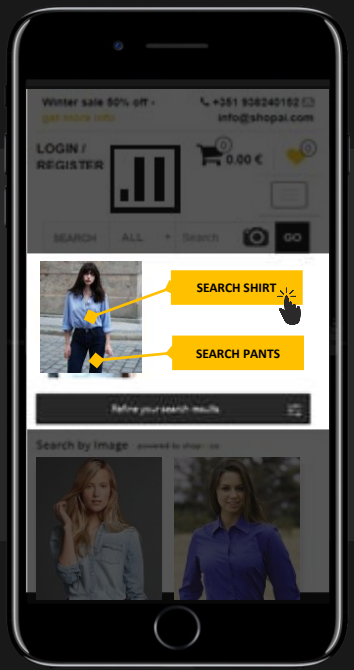
PRODUCT SUGGESTIONS
AND AUTO-TAGGING BASED
ON PRODUCT EXTRACTED
ATTRIBUTES

UNDERSTANDING THE CUSTOMER SOLUTION

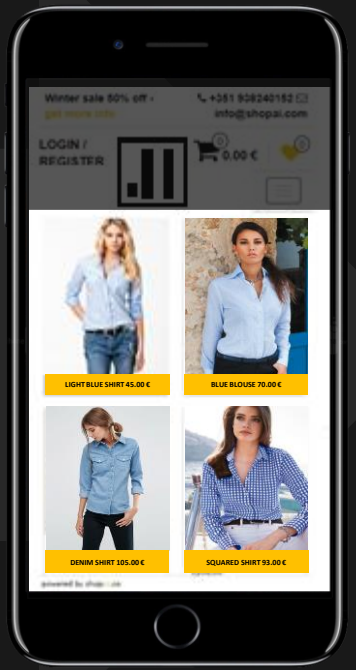


CLICK THE SHOPAI CAMERA ICON

SHOOT YOUR FAVOURITE CLOTHE



SEARCH WITH OUR VISUAL ENGINE

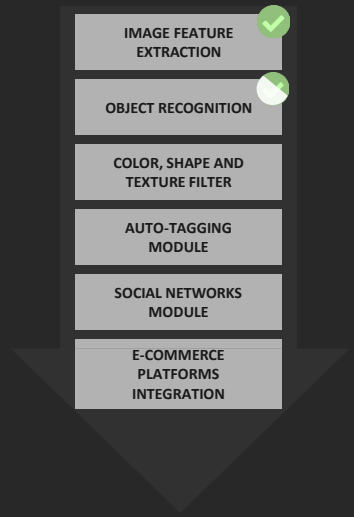


EXPLORE SIMILAR LOOKS

HOW SHOPAI IS PRODUCTIZING DEEP LEARNING?

PRODUCT USE CASES AND INTEGRATION SERVICES

OUT OF STOCK ALTERNATIVES	▪ CATALOG INTEGRATION ▪ FEATURE EXTRACTION ▪ MACHINE LEARNING DISTANCE COMPARISON ▪ SORTING AND STOCK RULES
TREND BASED SORTING & ASOS "AS SEEN ON ME"	▪ SOCIAL NETWORKS INTEGRATION
YOU ALSO MAY LIKE	▪ COLOR, SHAPE AND TEXTURE FILTER
EMBEDDED PLUGINS	▪ E-COMMERCE PLATFORMS INTEGRATION
IMAGE BASED SEARCH ENGINE	▪ OBJECT RECOGNITION
AUTOMATED CATALOG MANAGEMENT	▪ AUTO-TAGGING MODULE



TECHNOLOGICAL DEVELOPMENTS

VISUAL SEARCH MODULE IS THE CORE OF OUR APP

Image

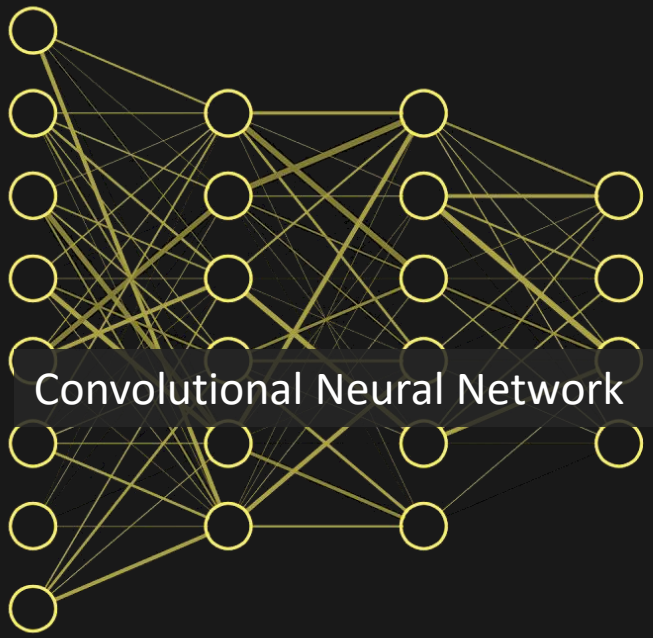


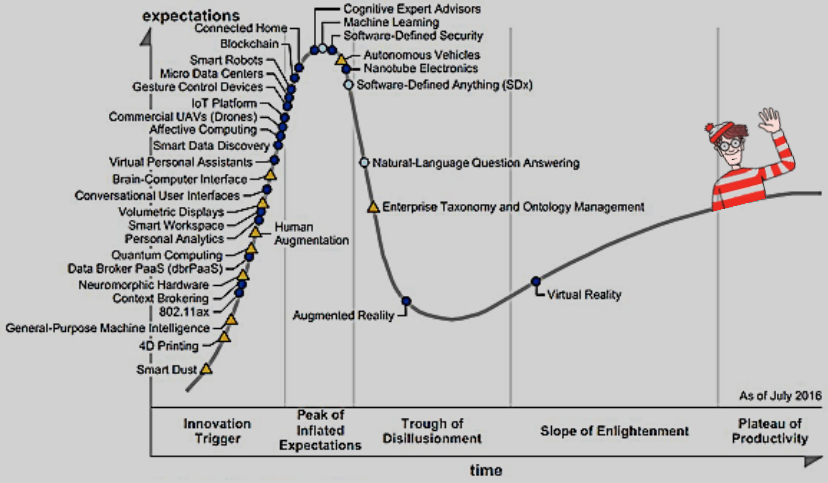
Image relevant features

Similar images

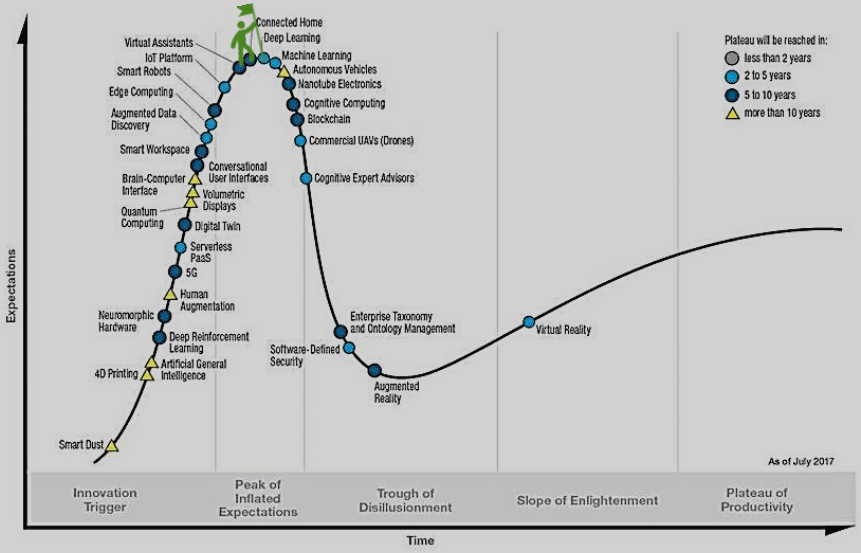
Deep learning? Better search for Wally…

Deep learning? On top of Hype mountain!

2016



2017



Comparing the expectations of the two last years…

Gartner hype cycle for emerging technologies

RESULTS SIMILARITY MODULE DEMO I

Calling SHOPAI API in a 16.500 SKU database

REQUEST 1
Flip flops

RESPONSE
(3 Similar)

REQUEST 1
Tshirt

RESPONSE
(3 Similar)

zando

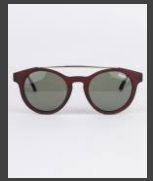
RESULTS SIMILARITY MODULE DEMO II

Calling SHOPAI API in a 16.500 SKU database

REQUEST 1
Shoes

RESPONSE
(3 Similar)

REQUEST 1
Tshirt



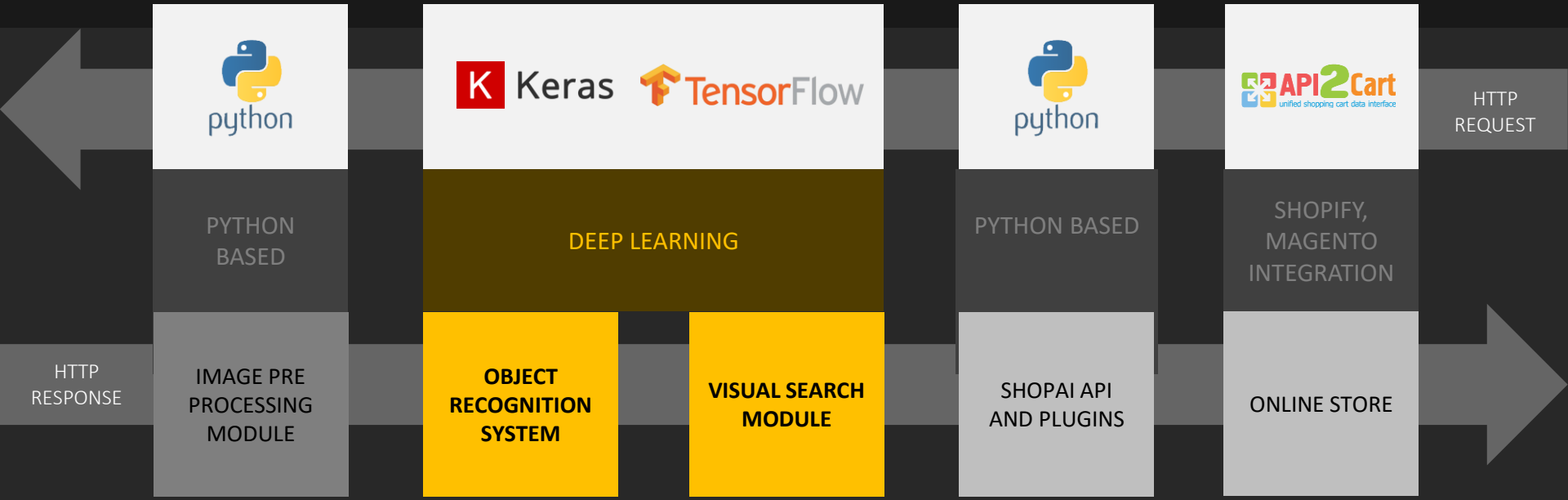
RESPONSE
(3 Similar)

zando

OBJECT RECOGNITION SYSTEM

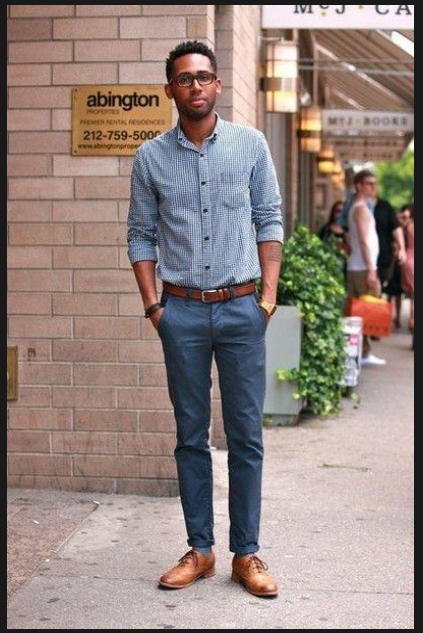
TECHNOLOGICAL OVERVIEW

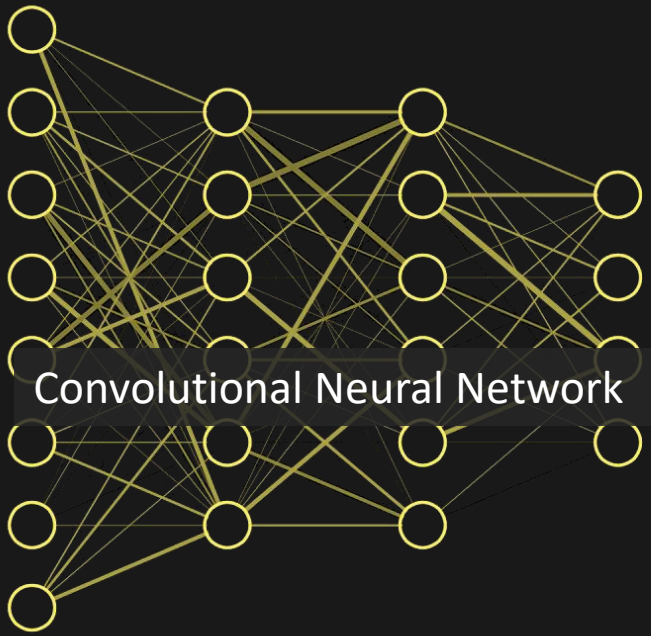
SHOPAI relies on Deeplearning models to create a multi-layer technology



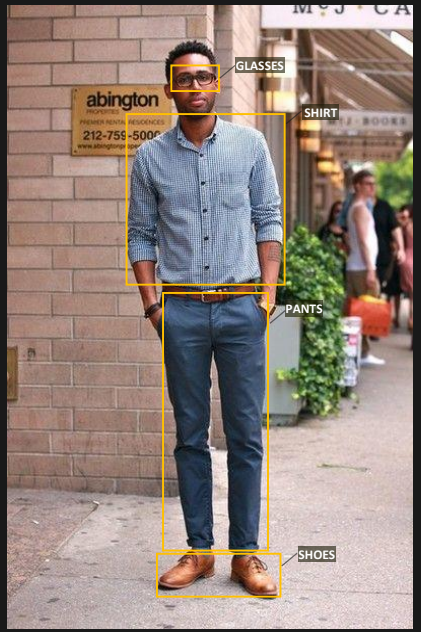
OBJECT RECOGNITION MODULE

Input Image



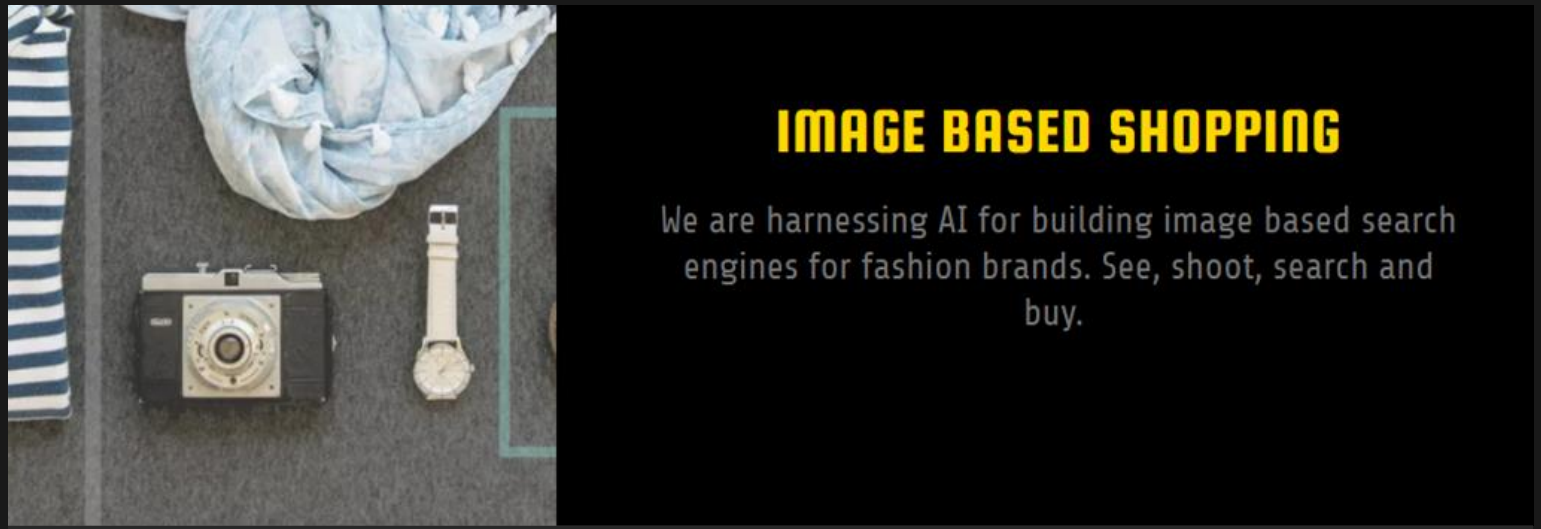


Expected Image



THANK YOU!

LET'S GRAB SOME BEERS AND CONTINUE TALKING



WWW.SHOPAI.CO