AI & IMAGE RECOGNITION ON RETURN GOODS
For a fashion retailer, at the end of every season, approx. 1 million of returned boxes are collected in the warehouse. All of them needs to be manually checked in order to define: box status, label status, product status and product / box match.

It's a SEASONAL JOB, with peaks of activity and where a good knowledge of the catalogue can increase efficiency.
AIM OF THE PROJECT

- Smart automation of the returned items workflow
- Autonomous recognition of:
  - Label status
  - Box status
  - Product/label match
- Support to warehouse operator
COMPUTER VISION: FEATURE EXTRACTION

Label features extraction
- Label structure
- Text information

Box features extraction
- Shape
- Structure
- Texture
MACHINE LEARNING: RECOGNITION & EVALUATION

Classification models:
- Neural Network
- Decision Tree
- Random Forest
- Clustering
- Keypoints Matching
COMPUTER VISION + MACHINE LEARNING

Images from Warehouse

Feature Extraction
- OpenCV

Machine Learning Models
- Jupyter
- TensorFlow
- Keras

Neural Network Models

Evaluation Models

Product Catalogue

From Warehouse Machine Learning Models

AI & Image Recognition on Return Goods

Model: ABCXYZ
Year: 2018
Version: 123456
Color: Taupe
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