

Human-in-the-loop Artificial Intelligence

## Altilia is a Spin-off of ICAR-CNR



The purpose of the lab is studying AI and ML methods, models, algorithms, and approaches for managing and analyzing heterogeneous big data such as texts, images, video, graphs, in order to promote the creation of innovative smart technologies that help in having better everyday life and working activities.



Altilia is a deep tech company focused on continuous innovation. Our value proposition mainly lies in proprietary sophisticated Al technologies, cutting-edge Al competencies, and talented people. Altilia mission is to make the adoption of Al and machine learning, in real world scenarios across industries, as easy as using search engines and spreadsheets.

### The Problem we Address

How to help business of any size and industry to build enterprise-grade AI solutions?

Al algorithms promise to automate tasks and processes previously performed only by humans

Al algorithms are widely available, but Al solutions need very large amount of labeled data

Algorithms Coding Data Programming

The need for labeled data is causing an epochal revolution: the shift from algorithms coding to data programming

# The Solution we Propose

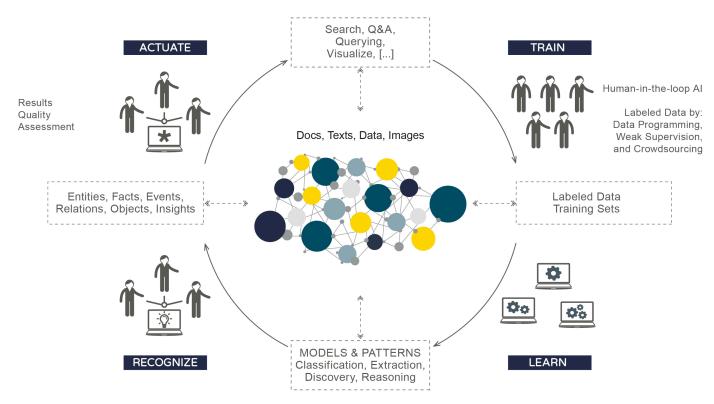
Data Programming as Human-in- the-Loop ML accelerates and simplify Al adoption in all industries and domains

# Augmented Intelligence

combines human and machine intelligence to solve everyday challenges.

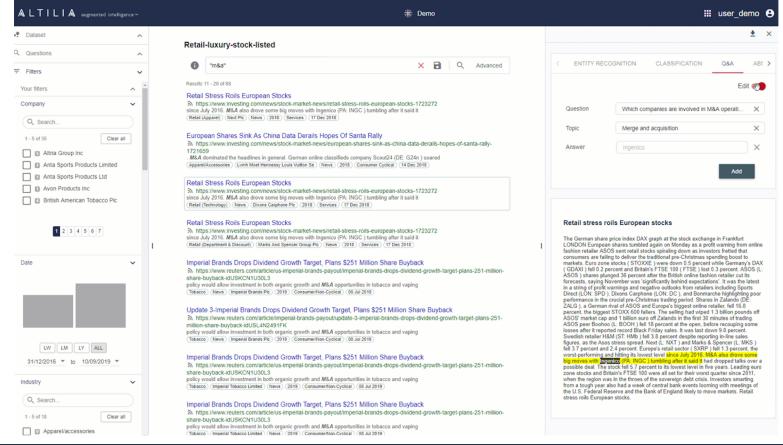
It is a combination of data programming techniques and machine learning technologies that enables humans and algorithms to easily cooperate.

### The Solution: Augmented Intelligence Paradigm™



Interactive, Collaborative Human/Machine Training & Learning

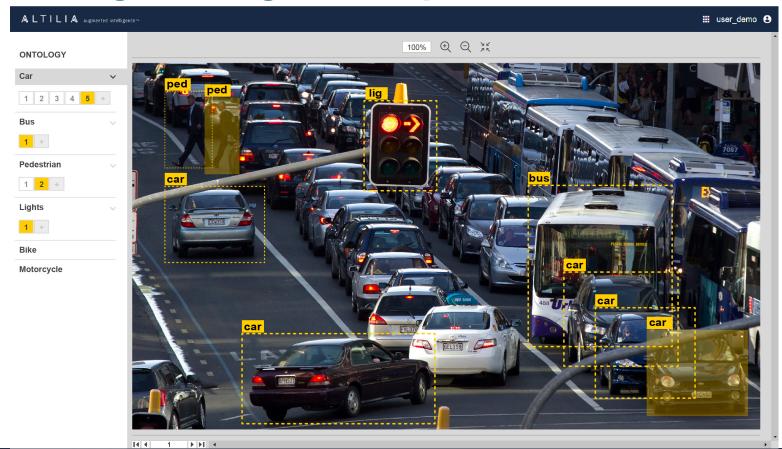
### **Data Programming for Textual Data**



© Copyright 2019 ALTILIA s.r.l. - All Rights Reserved

altilia.ai

### **Data Programming for Computer Vision Data**



#### **Cognitive Search**

Step 1: Review the Assorted Garments



Step 2: Categorize the Assorted Garments

#### Is this a DRESS?

- Yes
- O No

#### What is the PATTERN of the dress?

- O None/Solid/Other
- O **Dots** (repeated round spots)
- O Stripes (consistent colored pattern)
- O Checked (repeated squared/rectangule pattern)

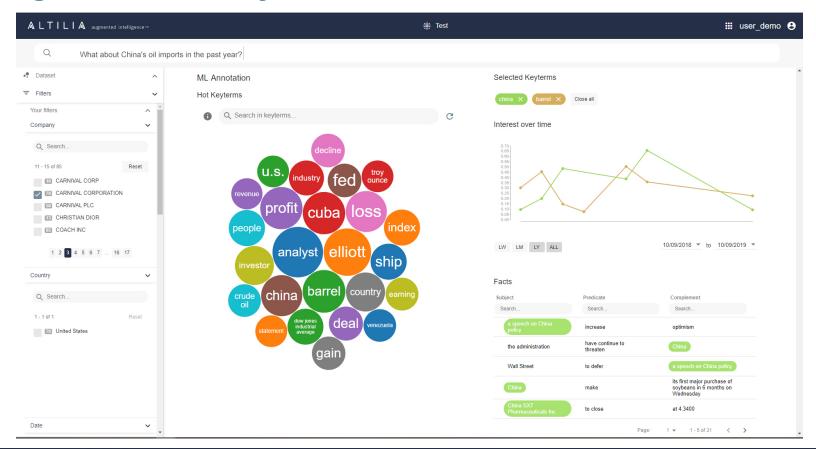
#### What is the SLEEVE LENGTH?

- Short
- Medium
- O Long
- Bare
- Strap
- Sleeveless

#### What is the FIT?

- O Slim
- Regular
- Flare
- O Loose

### **Augmented Analytics**



#### Massimo Ruffolo

massimo.ruffolo@altiliagroup.com +39 334 6792080

Thanks.



Copyright © 2019 ALTILIA s.r.l. All Rights Reserved P. IVA IT 10780921002

The company, product and service names used in this presentation are for identification purposes only.

All trademarks and registered trademarks are the property of their respective owners.