# Real-time faulty detection

Developer of A.I. and builder of the hardware prototype

## The challenge

Integrating real-time faulty detection with a production pipeline

### The solution

We needed to create an Industry 4.0 Factory Simulator, to be used as a prototype for our customers, and Google Cloud Platform offered us the best environment for it. In fact, thanks to AutoML Vision Object Detection, we trained a custom model to successfully detect and discriminate different kinds of objects in a little amount of time, and export it directly in a TF Lite mobile-compatible format.

#### The result

100% accuracy in the controlled environment 10x faster object detection thanks to the Coral TPU (~10 ms)

Training on Google Cloud Vision and deployment on Google Coral DevBoard of a neural network capable to perform real-time object detection.

Raffaele Fraudatario, Business and Digitization Area di Ricerca Scientifica e Tecnologica di Triasto



### About Area di Ricerca Scientifica e Tecnologica di Trieste

To create links between the worlds of research and business, promote collaboration between the public and private worlds, and foster the development of innovation processes capable of fueling the growth and competitiveness of territories. These are the main objectives of Area Science Park, a national research and innovation organization

Vertical/horizontal solution: Other

Primary project location: Italy



#### About Ennova Research srl

We are leader in AI, cloud and digital transformation, offering innovative GCP-based solutions and advanced GWS collaboration systems



### **Products**

Google Cloud Platform