

## **Robots, vision, and industry 4.0**

*Prof. Paolo Rocco, Politecnico di Milano, Milano, Italy*

Collaborative robotics is a key ingredient of the ongoing 4<sup>th</sup> industrial revolution. In the new smart factory, physical separation between robotic manipulators and humans is no longer necessary. Safety issues however arise in this scenario, while productivity has to be maximized, reaping full benefit from the new opportunities given by the collaboration between human and robot. In this talk, we will discuss how vision can be used for perception and interpretation/prediction of human's actions, so as to establish a safe, fluent, and productive, man-machine collaboration. Experiments on both single-arm and dual-arm manipulators in cooperation with human operators will be shown.