# Intelligent Robotic Systems

## for Quality Control

In this project, we want to explore how we can use intelligent robots for quality assessment of our products. Our long-term vision is to use modern collaborative robots with video cameras. The robots should be able to pick an object from the production line, look at it and decide whether or not it is good or bad.



🏠 Tetra Pa

In this project we start by exploring how difficult it would be for a robot to pick Tetra Pak objects.

This project will be a collaboration between Tetra Pak and the LTH robotics lab. We will provide you with a set of sample objects, and your task is to implement and test a picking solution. You will be able to use existing robotics software for picking objects, but you will have to adapt it to our object and test the performance. This project is suitable for two students.

This project comes with the possibility of a subsequent employment as Industrial PhD student at Tetra Pak.

### To do this work, you should have

- Very good grades
- · Very good python skills.
- Good knowledge of linux
- Done a course in Robotics, Intelligent Autonomous Systems and/or Machine Learning
- Good knowledge of ROS, the Robotics Operating System. If you really want to do
  this project and you do not know ROS, then we can provide you with some very
  good and fun on-line courses. However, you would have to do these ROS courses
  before(!!) you start this project.
- Ideally, you have also a good software engineering background.

#### Apply with your CV and transcript at jobs.tetrapak.com

#### Contact:

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