# KU LEUVEN

Faculteit Industriële ingenieurswetenschappen / Elektronica - ICT

Dylan Van Assche, Anton Peeters, Olivier Van Den Eede, Cédric Gullentops, Simon Vandevelde

# CoaCo: Cold Drink Fetcher

## Mission

1) Look for cans
2) Differentiate between cold (good) and warm (bad) cans
3) Move the warm can over to the bin
4) Loop to step 1)

## Design

| Perception | Decision | Actuation |
|---|---|---|
| • Thermal camera<br>• Raspicam | • Raspberry pi | • Motor: Control wheels<br>• Gripper |

## Features

| Can Detection | AruCo detection | Thermal imaging |
|---|---|---|

## Timeline

|  | 20/2 | 27/2 | 6/3 | 13/3 | 20/3 | 27/3 | 3/4 | 27/4 | 8/5 |
|---|---|---|---|---|---|---|---|---|---|
| Introduction | ■ | | | | | | | | |
| Basic Functions<br>• Driving and grabbing<br>• Reading the cameras | | ■ | ■ | | | | | | |
| Next-level functions<br>• Orientation<br>• Can detection | | | | ■ | ■ | ■ | ■ | | |
| Integrate | | | | | | | | ■ | |
| Test | | | | | | | | | ■ |