

# COMPUTER VISION

**Project** 



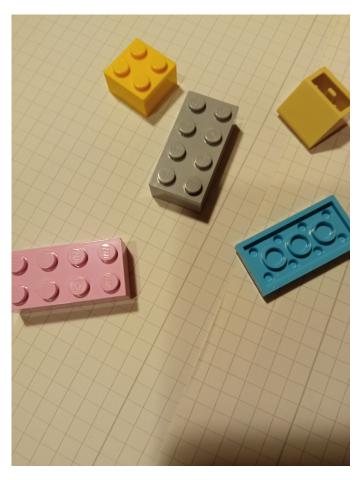


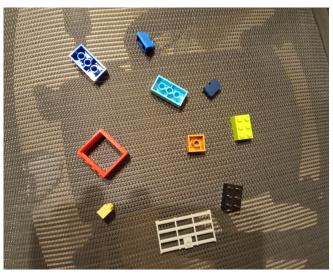
#### Input:

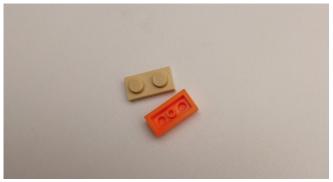
Image containing one or more LEGO bricks

#### Output:

- Total number of bricks
- Position of the bricks (bb)
- Number of different colours

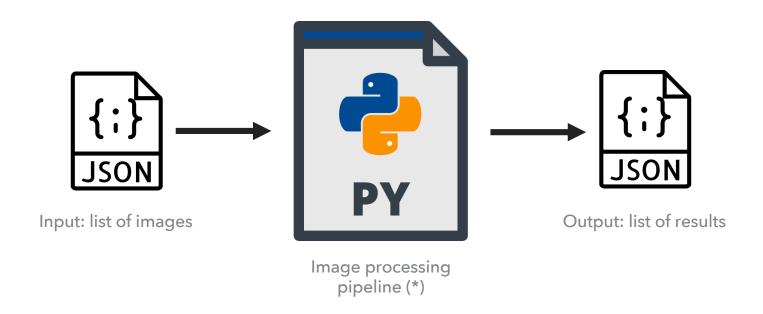






Dataset: https://mostwiedzy.pl/en/open-research-data/tagged-images-with-lego-bricks,202309140833448152311-0

- Dataset:
  - 50 images randomly chosen from a public dataset
  - The results will be tested in 10 undisclosed images
- Deliverables:
  - Short report (2 pages max) presenting the methodology and some results
  - Python script (only one file)
- Deadline: April, 5 (23:59 AoE)



(\*) using only OpenCV and other common libraries, like numpy and matplotlib

- Grading
  - Task 1 accounts for 30% of the overall project grade
  - Elements being considered: methodology, report and quality of the results

Task 1 Tasks 2 + 3 Presentation

- Important remarks
  - Follow strictly the JSON structure for the input and output files
  - It is **okay** to use AI tools while developing your work, but it is **not okay** to use them without acknowledging it
  - All members of the group are expected to understand the methodology and the submitted code