

## Introduction to computer vision – project description

The following document describes the expected deliverables based on the chosen image dataset. Each module needs to be adequately implemented to pass the learning outcome.

MODULE 1 (21 points): prepare an image dataset for model training purposes, divide into a training and validation dataset, and pick an adequate model for training.

MODULE 2 (21 points): define classes of objects that the model detects on images and measure the precision of object detection. Compare different architectures of models to improve the results.

MODULE 3 (21 points): implement an algorithm in Python for localization of images and demonstrate the detection and classification of a random image.

MODULE 4 (21 points): use semantic annotation and rectangle annotation for annotating objects on images to enhance the dataset and measure the accuracy of detection.