



Master in  
Computer Vision  
Barcelona

# M5 Project: Cross-modal Retrieval

## Week 3

Introduction to Object detection and  
Instance Segmentation with Detectron2

Rubèn Pérez Tito  
[rperez@cvc.ua  
b.cat](mailto:rperez@cvc.ua<br/>b.cat)

Ernest Valveny  
[ernest@cvc.ua  
b.cat](mailto:ernest@cvc.ua<br/>b.cat)

# General comments on the report

- In general, good update of state of the art taking into account feedback from last week
- Methodology should not be a generic description of the methods (as the description you would include in an extended state of the art). It should include some more technical details on each of the components of the method, as it was "our method" (explain what an RPN is and how it works, give details on how the segmentation branch works, ...). Explain the method, not its implementation in detectron.
- For the final report, move all details on implementation to a specific section on implementation details (either on methodology or experiments). Include there details on detectron, backbones, hyperparameters, ...
- Datasets: include details on train/validation split. How have you split training set into train and validation? Include number of images in each split per class.

# Specific comments on the report

- Group 1: you can give some more numbers on training/validation/test (number of images per class in each case) and include some more detail on the description of the methods.
- Group 2: cite a paper in the text every time it is needed, not only the first time it appears. You can give some more details on methods and datasets. Organize experiments by task, not week by week. Not necessary to include all the experiments you have done. Only the most relevant experiments should be included
- Group 3: Include more technical details on Faster R-CNN, do not describe it as an evolution of a series of methods as you would do in a state of the art. In the final report include description of all datasets used, not only KITTI-MOTS
- Group 4: More details on the methods, less on the implementation. Move implementation details to a different subsection. Include specific subsection for datasets and metrics. Do not group experiments by weeks, but by different tasks with a summary of main results and experiments.
- Group 5: Although the method should be described as "our method", it is not "our method". Avoid "we... " when describing the method. You can include more technical details on each component of the network and more details on dataset splits.
- Group 6: you can give more technical details on methods and move implementation details to another section. In datasets section describe the dataset, not the task or the experiment. Describe the dataset only once (even if it is used in several experiments).
- Group 7: you can give some more details on the methods and the datasets (split, numbers,...)