

## **CV 703: Assignment 2**

### **Instance Segmentation**

Assignment 2 carries 10 marks in total. It consists of two sub-tasks:

1. Train an instance segmentation method on the iSAID dataset.
2. Study the effect of pre-training on the final accuracy. The study should show the effect of different pre-training datasets (e.g ImageNet vs. COCO) as well as the effect of freezing different layers during fine-tuning.

**Dataset:** The instance segmentation method should be trained and evaluated on the [iSAID dataset](#) (same as the project). The previously provided annotations ([here](#) and locally under '/apps/local/shared/CV703/datasets/iSAID') contain mask information that are required for the instance segmentation training. The evaluation is required to be done on the **validation set**.

A reference code (for the Mask-RCNN) is provided in the notebook. The implementation uses the [Detectron2](#) platform. ***Please note that this is just a reference repo/implementation, and you are free to choose any code base.***

**Deadlines:** The deadline to submit the technical report summarizing all the details along with respective code is by the end of **November 22, 2021 (23:59 UAE time)**. All the required material should be zipped in one folder (per group).

**Assignment Deliverables:** For all the tasks, there are two deliverables: a completed code and a technical report. The completed code in the form of Jupyter notebook should be submitted in a zipped folder. The technical report (no longer than 3 pages) is expected to describe the introduction to the problem, implementation details, a discussion about the results obtained, as well as qualitative results.

**Submission Procedure:** Code and technical report should be submitted in one zipped folder. In case the zipped folder exceeds the Moodle upload limit, please contact the lab supervisors.