# Homework 3 - Segmentation
# Computer Vision - Fall 2022

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## 1 General

In class we have looked at segmentation algorithms using classical computer vision approaches and unsupervised learning (e.g. clustering). It is also possible to use a different pipeline in order to perform the task, which is based on supervised learning. In this homework, you will play with supervised learning, as the segmented areas need to be labeled. What we have seen in class was a non-labeled segmentation.

## 2 The Task

We will work on a current open challenge, linked to the 1st Workshop on Maritime Computer Vision (MaCVi), which will happen on the 2nd January 2023. The task is to segment images taken by an autonomous surface vessel (ASV) into three categories: sky, water or obstacle. You can find all the details and dataset here: `seadronessee.cs.uni-tuebingen.de/wacv23_MODS`

## 3 Submission

Due to the competition deadline, this HW will have a submission on Tuesday 25th October. There are two different submissions:

- normal HW submission, with MsTeams, for the HW assignment (the important one for the class)

- submission for the competition, following the instructions on the website.

Please note that submission deadline for the competition is usually midnight PST, unless otherwise specified. So, do the submission for the hw first. Submit for the general competition, only in case of some acceptable results. Whilst you want to submit anyway for the homework submission, in order to try to get points, even if very few, you may want to be more selective when submitting internationally.

## 4 Deadlines

As always indicated, submission deadlines are strict. In case the competition will accept later submissions, this does not grant extension for the homework submission - you can submit two different sets of results for the hw and for the competition.

## 5 Other competition tasks

On the same webpage there are other competition tasks about object detection. As the deadline is the same for all tasks, and we have not reached object detection in class, I do not plan to use the other tasks for this class. In case you have interests and time, I would still like to encourage you to address them, but only after this one :-)