

Sea Sponge Detection

Objective: Build and train a system to perform object detection of **Sea Sponges**

Task Details:

This task includes collection and preparation of data and training a deep learning model to achieve the objective.

Instructions,

1. Develop a python based solution preferably using DL libraries such as Detectron2, Pytorch, TensorFlow. You should define the functions present in the model.py. You are only allowed to use the model and cannot copy/call other train/test/detect scripts from publicly available libraries. Any other form of submission would not be considered for further rounds.
2. You can use as much as data required. Special points if you can train with a very small amount of data.
3. You can use any model you deem fit.
4. You are free to use augmentations of your choice.
5. Make sure you have separate training and validation sets. Final performance would be tested on a private test set.
6. You must plot training graphs and save them for visualization.

You need to help us find the sea sponges in a given image.

Submission Instructions:

1. The code must follow the structure given in this folder.
2. You must include the code, weights, training graphs, datasets and performance of the model on the dataset in the submission folder.
3. Name your folder in the format **Submission_<Name>** and zip it and mail me the submission at **sourav.agrawal@dronebase.com**.

Happy Coding!