# AMBULANT

# Annotation of Benthic Species Workshop [AMBULANT Project]

MCAST Research Expo 2023

Date: 14th December 2023      Duration: 1 hour

## 1. Introduction by David (5 minutes)

· Welcome to participants and outline the workshop's objectives.

· The AMBULANT project: an overview of its impact on marine biology studies

## 2. Benthic Species in the Maltese Islands by Namate (12 minutes)

· Overview of the Maltese island 'benthic species: importance to the local ecosystem.

· Distribution of visually rich educational booklets for reference during and after the workshop.

· Interactive session.

## 3. Roboflow Registration and Annotation Tutorial by Sean (12 minutes)

· Images collection of benthic species using an ROV

· Step-by-step guidance on the use of Roboflow for image segmentation.

· Labeling benthic species images: ensuring a solid foundation for data annotation.

## 4. Hands-on Labeling Session by David, Daren, Sean and Namate (15 minutes)

· Interactive labeling session where students practice labeling images in the Roboflow repository, solidifying their understanding of the process.

· Personalized support from the team to address individual questions and foster an environment of collaborative learning.

## 5. Exporting Dataset and Computer Vision Techniques by Daren and David (10 minutes)

· Tutorial on how to export the annotated datasets, with an emphasis on the importance of this data for computer vision tasks.

· Explanation of the computer vision techniques implemented in species identification: making complex concepts accessible.

· Live demonstration of a model used for identifying fish species: showcasing a real-world application.

## 6. Conclusion and Interactive Q&A by David (5 minutes)

· Recap and Key takeaways of the workshop, ensuring the participants have a clear understanding of what they've learned.

**Trainers:**
· Sean Dimech (AquaBiotech)
· Namate Sililo (AquaBiotech)
· David Deguara (MCAST – IICT)
· Daren Scerri (MCAST – IICT)

**Tutor:**
· Tama S Klenczner (AquaBiotech)

**Coordinators:**
· Stela Karovic (AquaBiotech)
· Ines Boujmil (AquaBiotech)
· David Deguara (MCAST – IICT)

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