

# Ocean Eyes

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with the support of:




TOOLBOX

Datapizza









**MA IO CHE CAZZO NE SO SCUSI?**

# Dataset, Model and Deployment



Dataset: 11 classes of ocean fishes



Model architecture: nano classification model




Model evaluation: 78% F1

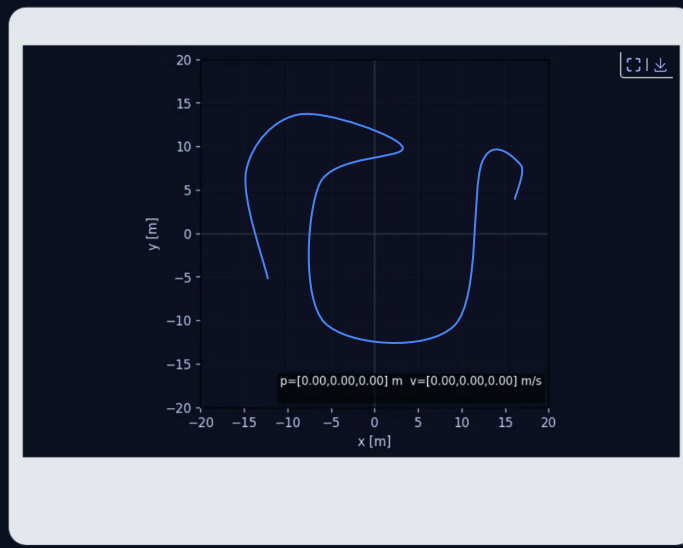


Get IMU and camera data → run fish classification!

# Demo & User Experience

## Live Capture (Video + Trajectory)


Real-time feed (left) and top-down trajectory (right). Switch to **Nicla close-up** to view a fixed small map. If a Nicla serial device is found, the IMU status shows **Serial** ; otherwise it runs in **Demo**.





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No camera



☐ Freeze view (for tagging)

☐ Nicla close-up view

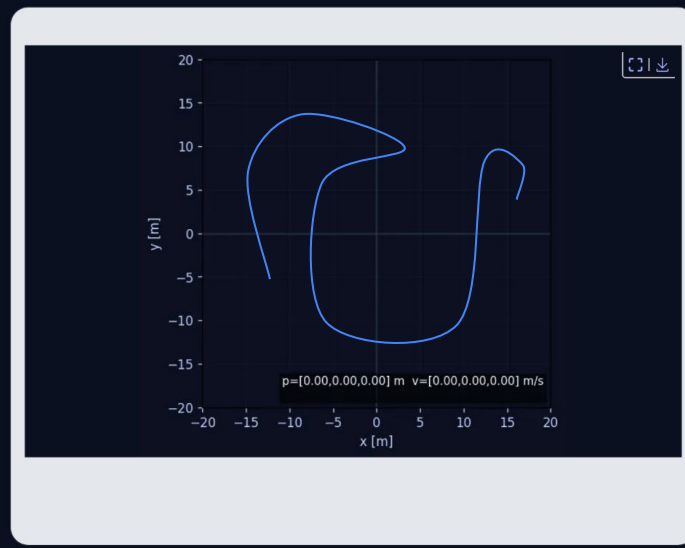
Pesce pagliaccio 100%

Close-up radius [m]

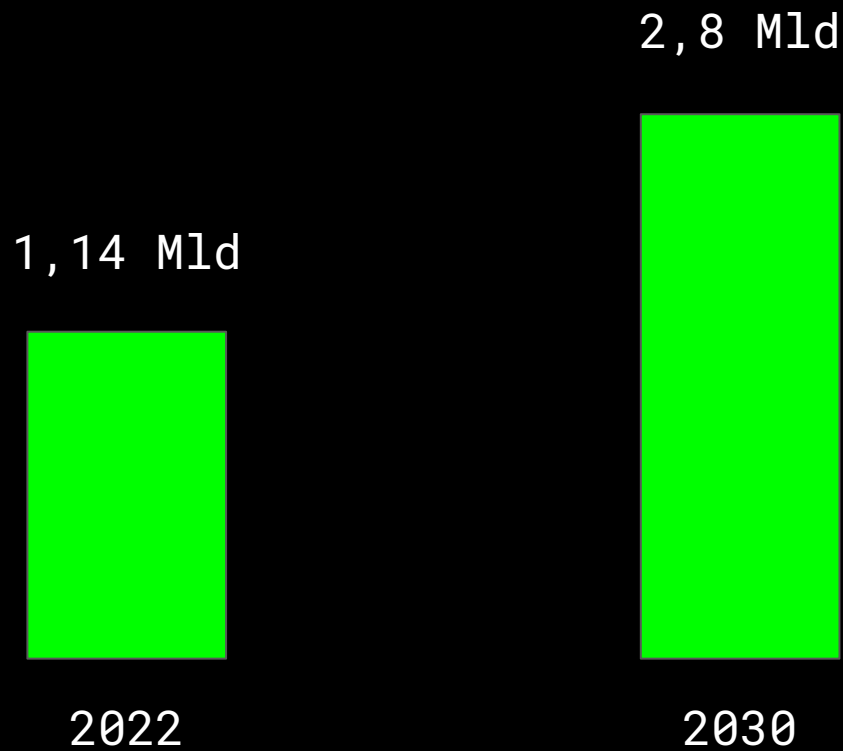
2







## Market





# Future Works

TINY\_HACK

Future Works

Make something work :)

TINY\_HACK

## Motivation

Amatorial sub often do not pay attention to what they are watching, but mostly on the safety rules they have to respect. Moreover, what if you have interesting fishes behind you, you of your very limited field of view?

Here we go!

## Ocean Eyes