Ochrona Wielkiej Rafy Koralowej - wykrywanie COTS

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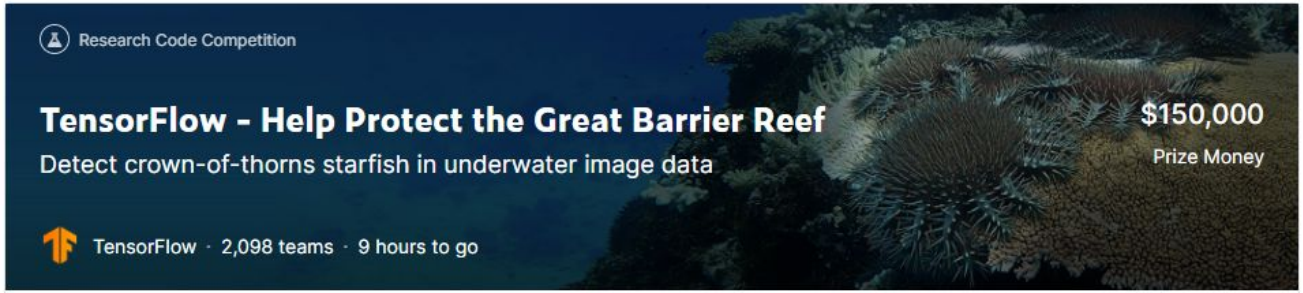
Wielka Rafa Koralowa w Australii jest największą rafą koralową na świecie i domem dla 1500 gatunków ryb, 400 gatunków koralowców, 130 gatunków rekinów, płaszczek i ogromnej różnorodności innego życia morskiego.

Korona cierniowa - COTS

- Jedna z największych gatunków rozgwiazd obecnych w przyrodzie
- Szacuje się, że aż 40% strat w przeciągu ponad 27 lat spowodowane zostało przez COTS



Overview

Description
Evaluation
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Prizes
Code Requirements
About Co-Sponsor CSIRO

Goal of the Competition

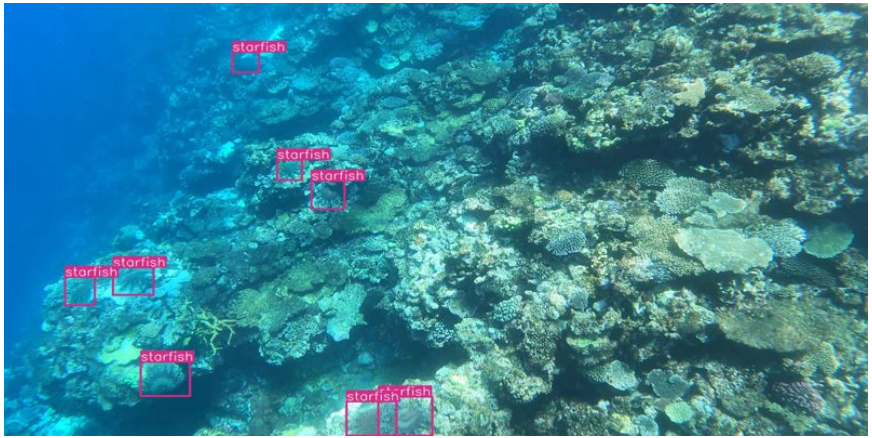
The goal of this competition is to accurately identify starfish in real-time by building an object detection model trained on underwater videos of coral reefs.

Your work will help researchers identify species that are threatening Australia's Great Barrier Reef and take well-informed action to protect the reef for future generations.

Context

Australia's stunningly beautiful Great Barrier Reef is the world's largest coral reef and home to 1,500 species of fish, 400 species of corals, 130 species of sharks, rays, and a massive variety of other sea life.

Unfortunately, the reef is under threat, in part because of the overpopulation of one particular starfish – the coral-eating crown-of-thorns starfish (or COTS for short). Scientists, tourism operators and reef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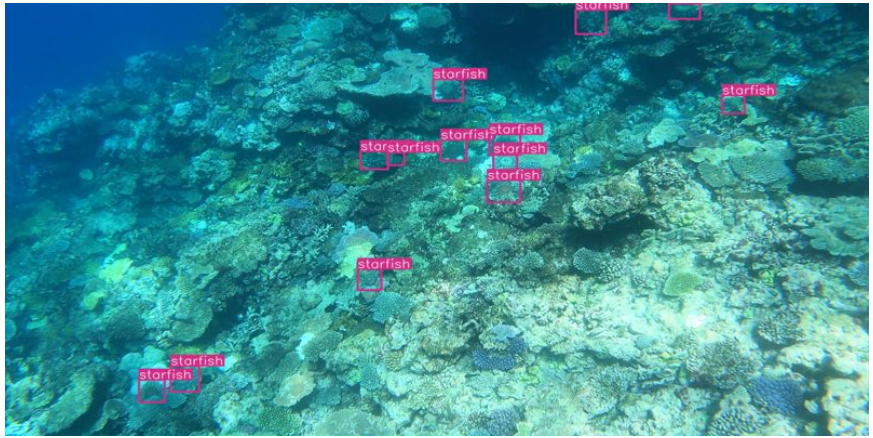
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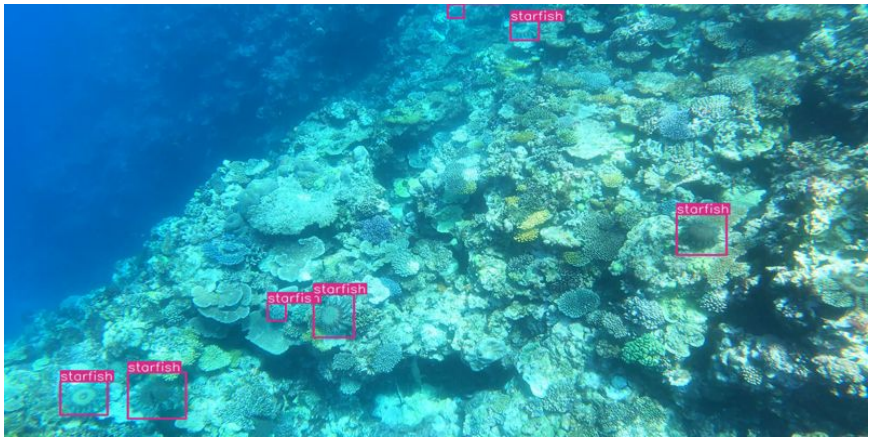
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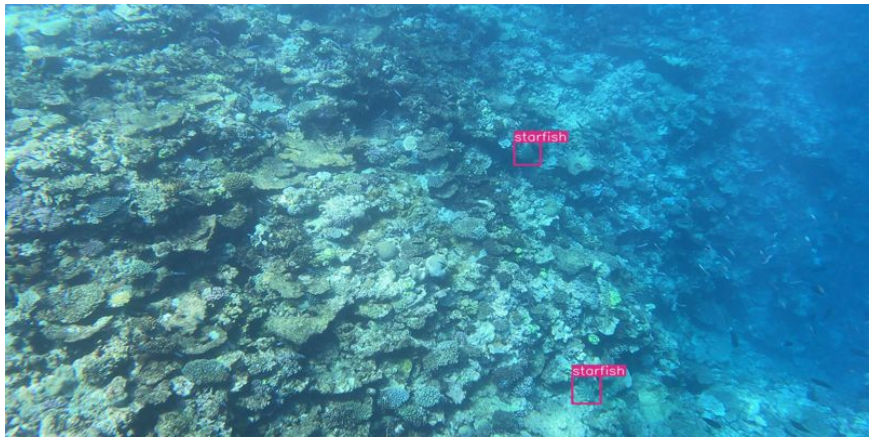
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Create Team

Home

Projects

Search
adnovac/great-barrier-reef-public
adnovac/uncategorized
adnovac/great-barrier-reef
adnovac/YOLOv5
adnovac/great-barrier
Create new project

Profile

adnovac

Teams

Create new team

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Community
Quickstart

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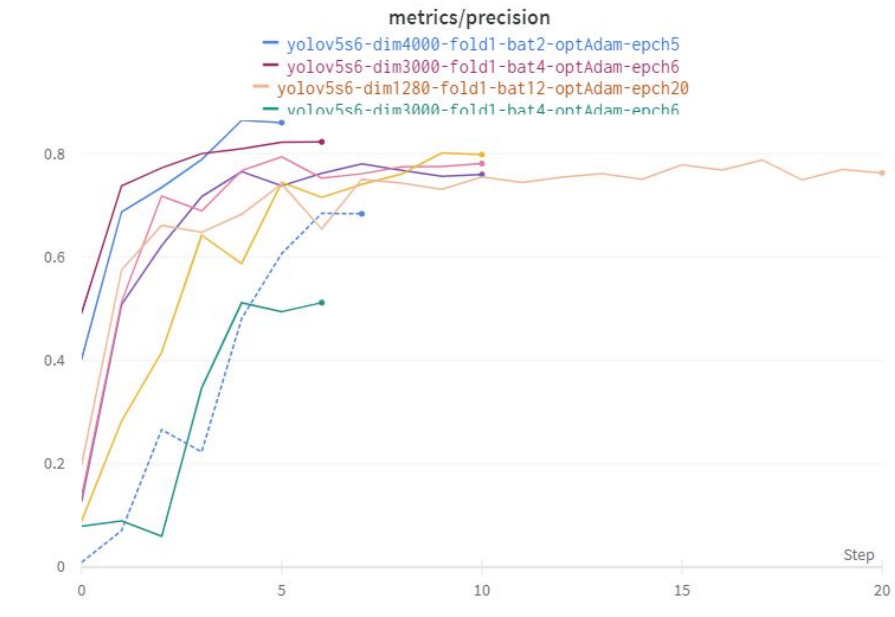
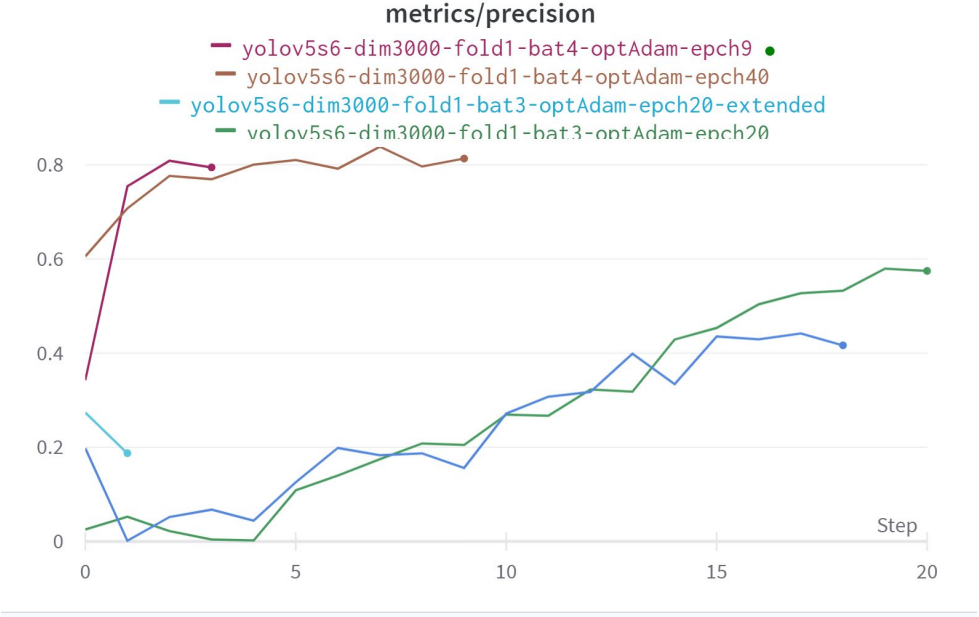
Name	Project	State	Created
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	running	4 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	17 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	18 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	18 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	18 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	20 hours ago
still-cherry-22	uncategorized	finished	20 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	23 hours ago
different-brook-9	YOLOv5	crashed	23 hours ago
yolov5s6-dim3000-fold1-bat...	great-barrier-reef-public	crashed	23 hours ago

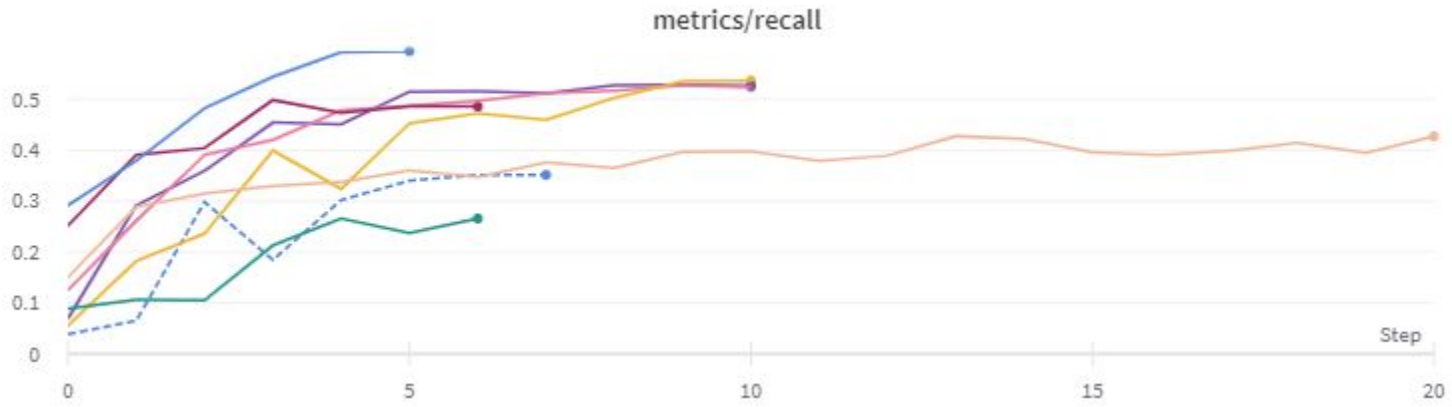
Reports

You haven't created any reports yet.

Liczba epok	Batch size	Rozmiar obrazu	Augumentacja	Precyzja	F2 Score na zbiorze docelowym
5	2	4000	Nie	0.86	0.596
5	4	3000	Tak	0.8228	0.494
10	4	3000	Tak	0.8132	-
10	6	2300	Nie	0.7982	0.481
20	12	1280	Tak	0.7626	0.435
10	8	1280	Nie	0.7808	0.43



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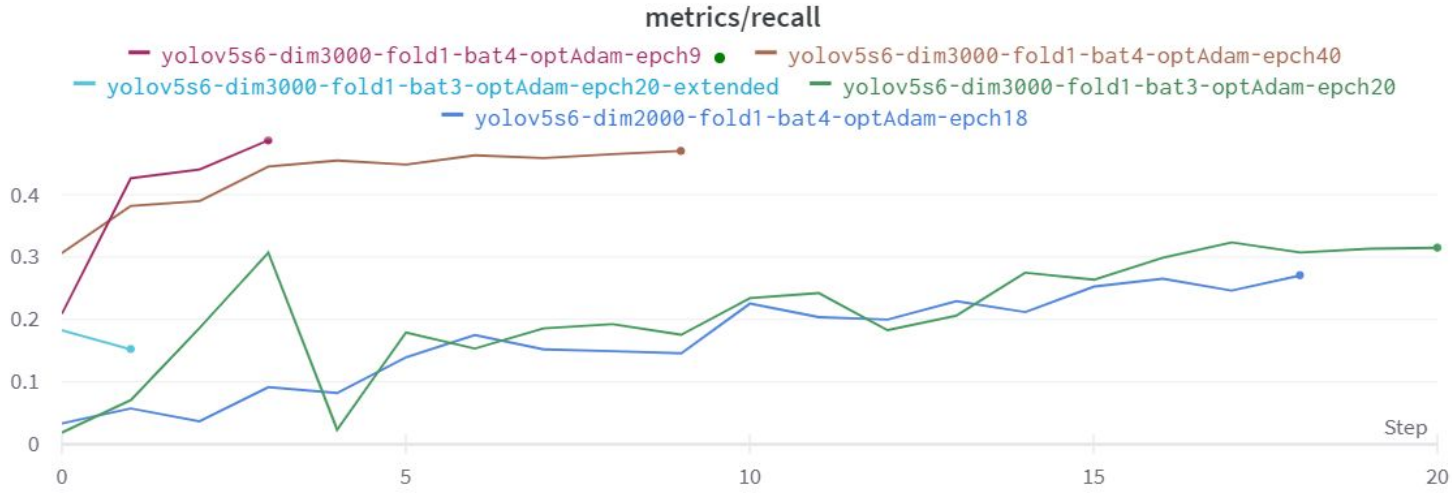
metrics/recall
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yolov5s6-dim3000-fold1-bat3-optAdam-epch20-extended
yolov5s6-dim3000-fold1-bat3-optAdam-epch20
yolov5s6-dim2000-fold1-bat4-optAdam-epch18
0.4
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Co byśmy zmienili?

1. Potężniejsze GPU (limit 16 GB na kaggle)
2. Większe DIM
3. Więcej Epok (ograniczenie 12 godzin ciągłej pracy jądra na Kaggle)
4. Większe modele - YOLOv5m, YOLOv5l itp.
5. Wypróbowanie innych modeli takich jak YOLOx
6. Więcej wiedzy z zakresu CV