# CVAUI 2022



**Sunday, 21 August 2022 - Sunday, 21 August 2022**

# Program

All times are given in EDT.
All invited talks and presentations are in-person, unless otherwise specified.
A downloadable program is available here.

9:00-9:10 Welcome and Introduction *Alexandra Branzan Albu*

9:10-10:10 **INVITED TALK:** Machine Learning and AI for Underwater Imagery Analysis: a benthic ecologist's perspective. *Filippo Ferrario*, Fisheries and Oceans Canada

10:10-10:30 Coffee break

**10:30-11:50 Technical talks**

10:30-10:50 Automatic Evaluation of Herding Behaviour in towed fishing gear using end-to-end training of CNN and attention-based networks *Orri Steinn Guðfinnsson*
10:50-11:10 (virtual) Repeatability Evaluation of Keypoint Detection Techniques in Tracking Underwater Video Frames *Ghulam Sakhi Shokouh*
11:10-11:30 Underwater Fish Tracking-by-Detection: An Adaptive Tracking Approach *Divya Velayudhan*
11:30-11:50 From TrashCan to UNO: Deriving an Underwater Image Dataset To Get a More Consistent and Balanced Version *Cyril Barrelet*

11:50-13:30 Lunch (on your own)

13:30-14:30 **INVITED TALK**: Enabling Ecologically Curious Robots for Monitoring Coral Reefs *Yogesh Girdhar*, Woods Hole Oceanographic Institution

**Technical talks**
14:30-14:50 Separating Particles from Plankton Images *Nina S. T. Hirata*
14:50-15:10 Automated Blue Whale Photo-Identification Using Local Feature Matching *Marc Lalonde*
15:10-15:30 Towards Depth Fusion into Object Detectors for Improved Benthic Species Classification *Matthew Dawkins*
15:30-16:00 Coffee Break
16:00-16:20 Toward Data-Driven Glare Classification and Prediction for Marine Megafauna Survey *Joshua Power*
16:20-16:30 Closing Remarks *Alexandra Branzan Albu*