

CVAUI 2022 Program

5th Workshop on Computer Vision for Analysis of Underwater Imagery

21 August 2022

International Conference on Pattern Recognition 2022, Montreal, Canada

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	
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 , Týr Vilhjálmsson, Martin Eineborg, and Torfi Thorhallsson
10:50-11:10 virtual	Repeatability Evaluation of Keypoint Detection Techniques in Tracking Underwater Video Frames	Ghulam Sakhi Shokouh , Baptiste Magnier, Binbin Xu, Philippe Montesinos
11:10-11:30	Underwater Fish Tracking-by-Detection: An Adaptive Tracking Approach	Divya Velayudhan , Adarsh Ghimire, Jorge Dias, Naoufel Werghi, and Sajid Javed
11:30-11:50	From TrashCan to UNO: Deriving an Underwater Image Dataset To Get a More Consistent and Balanced Version	Cyril Barrelet , Marc Chaumont, Gérard Subsol, Vincent Creuze, and Marc Gouttefarde
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 , Alexandre Morimitsu, and Antonio Goulart
14:50-15:10	Automated Blue Whale Photo-Identification Using Local Feature Matching	Marc Lalonde , David Landry, and Richard Sears
15:10-15:30	Towards Depth Fusion into Object Detectors for Improved Benthic Species Classification	Matthew Dawkins , Jon Crall, Matt Leotta, Tasha O'Hara, Liese Siemann
15:30-16:00	Coffee Break	
16:00-16:20	Toward Data-Driven Glare Classification and Prediction for Marine Megafauna Survey	Joshua Power , Derek Jacoby, Marc-Antoine Drouin, Guillaume Durand, Yvonne Coady, and Julian Meng
16:20-16:30	Closing Remarks	Alexandra Branzan Albu