## CVAUI 2020 Program

4<sup>th</sup> Workshop on Computer Vision for Analysis of Underwater Imagery

## 10 January 2021

International Conference on Pattern Recognition 2020, Milan, Italy

14:00-14:15	Introduction	Maia Hoeberechts & Alexandra Branzan Albu
Invited talk		
14:15-15:15	Working with Robots at Depth	Michael Jenkin, York University
15:15-15:20	Break	
Technical talks: Underwater Robotics		
15:20-15:40	Deep Sea Robotic Imaging Simulator	<b>Yifan Song</b> , David Nakath, Mengkun She, Furkan Elibol, and Kevin Köser
15:40-16:00	Optimization of Multi-LED Setups for Underwater Robotic Vision Systems	<b>Yifan Song</b> , Jan Sticklus, David Nakath, Emanuel Wenzlaff, Reinhard Koch, and Kevin Köser
16:00-16:20	Learning Visual Free Space Detection for Deep-Diving Robots	Nikhitha Shivaswamy, Tom Kwasnitschka, and Kevin Köser
16:20-16:25 Break		
Technical talks: Underwater Image Enhancement		
16:25-16:45	Removal of Floating Particles from Underwater Images Using Image Transformation Networks	<b>Lei Li</b> , Takashi Komuro, Koichiro Enomoto, and Masashi Toda
Technical talks: Species Classification and Enumeration		
16:45-17:05	Video-based Hierarchical Species Classification for Longline Fishing Monitoring	Jie Mei, Jenq-Neng Hwang, Suzanne Romain, Craig Rose, Braden Moore, and Kelsey Magrane
17:05-17:25	Robust Fish Enumeration by Multiple Object Tracking in Overhead Videos	Hung-Min Hsu, Ziyi Xie, Jenq-Neng Hwang, and Andrew Berdahl
17:25-17:30	Closing Remarks	Maia Hoeberechts & Alexandra Branzan Albu