Welcome to the workshop on Computer Vision for the Analysis of Underwater Imagery (CVAUI 2014), held in conjunction with the International Conference on Pattern Recognition (ICPR) on August 24th 2014 in Stockholm, Sweden.

Monitoring marine ecosystems is of critical importance in gaining a better understanding of their complexity, including the effects of climate change and other anthropogenic influences on marine environments. The collection of underwater video and imagery, whether from stationary or moving platforms, provides a non-invasive means of observing submarine ecosystems in situ, including the behaviour of organisms. The analysis of underwater imagery imposes a series of unique challenges, which need to be tackled by the computer vision community in collaboration with biologists and ocean scientists.

This workshop provides a forum for researchers to share and discuss new methods and applications for underwater image analysis. We received 19 full-length paper submissions, out of which 11 were accepted based on a thorough double-blind peer review process. We thank the members of Program Committee for lending their time and expertise to ensure the high quality of the accepted workshop contributions.

The technical program of the symposium covers a variety of topics and applications, such as seafloor classification, species identification, image enhancement and restoration, etc. We are also pleased to announce three keynote talks given by prominent researchers in oceanography and automated analysis. Dr. Jules Jaffe, a research oceanographer with the Marine Physical Laboratory at Scripps Oceanography, U.C. San Diego, will give a talk entitled “Underwater Optical Imaging: Past, Present, and Prospects.” Dr. Benjamin Richards, from NOAA Pacific Islands Fisheries Science Center, will talk about the “NOAA Fisheries Strategic Initiative on Automated Image Analysis.” Finally, Dr. Robert Fisher, Professor in the School of Informatics, Edinburgh University, will update the participants on a major European initiative in his talk, “Data Acquisition and Analysis in the Fish4Knowledge Project.”

We hope that all workshop attendees will be inspired in their research by participating at CVAUI, and that this workshop will foster many fruitful conversations and open new areas for collaborative interdisciplinary research in underwater image analysis.

Alexandra Branzan Albu and Maia Hoeberechts

*CVAUI 2014 Workshop Co-chairs*