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Alexandra Constaratas

EDUCATION

Ph.D. student 2022 – current

Biology Department, Norwegian University of Science and Technology (NTNU), Trondheim, Norway.

Water and Environment engineering degree: Hydrosystems focus 2019

National School for Water and Environmental Engineering of Strasbourg (ENGEES), Strasbourg, France.

Hydro-ecology, fluid mechanics statistics, ArcGIS, R.

MSc Marine Sciences: Marine Biology and Ecology focus

2019

Pytheas Institute, Marseille, France.

Top of the class (out of 40 students). Statistics, signal processing, machine learning, MATLAB, R.

RESEARCH EXPERIENCE

Soundscape data analyst

2020 - 2021

Blue World Institute of Marine Research and Conservation, Veli Lošinj, Croatia.

Research project: Cetacean click and whistle detection in the Adriatic Sea.

Analysis of HARP acoustic recordings from South Adriatic. Automated detection of cetacean clicks, classification methods, whistles detection, clustering.

Research intern, graduation project

2019

National Institute of Water and Atmospheric Research (NIWA), Wellington, New Zealand.

Research project: Detection of boats and fin whales in the Ross Sea Marine Protected Area and the Cook Strait region using passive acoustic techniques.

Developing signal processing algorithms for detection of passing boats, measurement of tonal sounds produced by boats, detection of fin whale 'doublet' calls.

Practical engineering intern

2017

Marine Biology and Ecology Research Centre, Marine Institute, Plymouth University, Plymouth, England.

Research project: Assessing changes in planktonic community vertical distribution profiles in response to ocean turbulence.

Analysis of ADCP data and assessment of animals' motility in fluids.

PUBLICATIONS

Constaratas, AN, MA McDonald, KT Goetz, G Giorli. 2021. Fin whale acoustic populations present in New Zealand waters: Description of song types, occurrence and seasonality using passive acoustic monitoring. *PLoS One*, 16(7): e0253737.

PRESENTATIONS

Constaratas, AN. 2022 Cuvier's beaked whale presence in the southern Adriatic Sea. *The Society for Marine Mammalogy (SMM) conference*, Palm Beach, Florida, USA. (Delivered virtually)

Constaratas, AN. 2022 Automated detection and classification of Cuvier's beaked whale, sperm whale, and delphinid clicks from the Adriatic Sea and comparison of algorithm performance on DCLDE Oahu dataset. *Detection, Classification, Localization, And Density Estimation (DCLDE) Of Marine Mammals Using Passive Acoustics*, Oahu Hawaii, USA.

Constaratas, AN. 2019. Long Term Passive Acoustic Monitoring in the Ross Sea Marine Protected Area (poster 62). *New Zealand Antarctic Science Conference, Antarctica New Zealand*, Christchurch, New Zealand.

LANGUAGE PROFICIENCY

French: Native proficiency

English: Fluent spoken and written (TOEFL IBT 17/11/2019: 99/120).