

MARINE AUTONOMY & TECHNOLOGY SHOWCASE

12-14 NOVEMBER 2019

National Oceanography Centre

conference.noc.ac.uk/matshowcase

MATS 2019

Day 3 – Session Theme Generating Information from Data

Session Chair – Eleanor Frajke-Williams NOC



Dr Blair Thornton

Associate Professor of Marine Autonomy -University of Southampton
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3D visual mapping and rapid understanding of multi-hectare benthic habitats

Blair Thornton leads Ocean Perception at the University of Southampton UK and has an adjunct position at the University of Tokyo, Japan. He currently holds an EPSRC Innovation Fellowship for developing robotic and AI systems for ocean research.

Blair's research develops scalable methods for visual and in-situ chemical seafloor observation through improved sensing and autonomy. He is dedicated to deploying systems in the field and overcoming bottlenecks in information flow from data-collection through to human insight. Blair has spent over 450 days at sea and has been PI of 29 ocean expeditions, including the recent #AdaptiveRobotics campaign of the Falkor and DY109 of the RRS Discovery.

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Dr. Natàlia Hurtós Vilarnau

Software product Manager -IQUA Robotics
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Soundtiles: creating informative mosaics out of forward-looking sonar data

Dr. Natàlia Hurtós is currently working as software product manager in Iqua Robotics S.L. She holds a B.S. degree in Computer Science (2007), an European Master in Computer Vision and Robotics (VIBOT, 2009) and a PhD in Computer Engineering (2014). Since 2006 she has participated in multiple research projects (both national and European) related to underwater robotics and has been involved in several technology transfers bringing research results to the market.

She has an extensive experience in developing and integrating software for Autonomous underwater vehicles as well as in applications involving the use of sonar devices for mapping underwater environments.

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Dr Carolina Dopico-Gonzalez
National Oceanography Centre
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Risk & Reliability Engineering of MARS AUVs: Fault Management and Data analysis Tools

Dr Carolina Dopico-Gonzalez holds a bachelors degree in Industrial Engineering at the University of Malaga (Spain), a MPhil in Sports Biomechanics at the University of Granada (Spain), and a PhD in Bioengineering at the University of Southampton (UK). She worked for several years as a post-doctoral researcher in the field of bioengineering, and then switched to her interest to the marine field. She is an Associate Member of the Institute of Marine Engineering, Science and Technology (IMarEST) and has extensive experience as a Risk and Reliability Engineer for marine autonomous systems. She currently works in the Marine Autonomous and Robotic Systems (MARS) at the National Oceanography Centre in Southampton (NOCS).

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Dr Justin J.H. Buck

Senior Data Manager – National Oceanography Centre

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The Oceanids C2 data system – now and next

Is a data specialist and software product owner at the British Oceanographic Data Centre focusing on the collection and processing of data from autonomous ocean observation platforms.

This is a mixture of large global datasets such as an international profiling float collaboration to small datasets where relatively little is currently understood in emerging technologies such as ocean gliders.

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Dr Scott Reed

Director of Engineering – SeeByte

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Dealing with the data problem: leveraging machine learning approaches in maritime robotics

Dr Scott Reed is the Director of Engineering at SeeByte. He has oversight of SeeByte's engineering group who specialise in producing software products and solutions for the maritime robotics domain. He is also responsible for the delivery of SeeByte's engineering solutions worldwide, ensuring SeeByte's engineering group fulfils their technical, support and training requirements.

Having earned his Master's degree in Astrophysics, Scott attended the Ocean Systems Laboratory at Heriot-Watt University where he completed his PhD specialising in automated detection and classification techniques for side-scan sonar systems. Scott joined SeeByte in 2004 as a Research Engineer specialising in image processing techniques and in 2005 was an invited scientist at the NATO Undersea Research Centre in La Spezia, Italy. Scott became SeeByte's Head of Engineering in 2009 and a director of the company in 2018.

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Jeremy Sitbon

Chief Robotics Engineer - ecoSUB

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ecoSUB coral reef surveys in Zanzibar – bringing autonomy to developing/lower income countries

Jérémy Sitbon graduated from the engineering school Polytech Paris-UPMC, part of Pierre et Marie Curie University (Paris, France), with a major in Robotics Engineering, where he undertook an internship with the French Defence Procurement working on micro-UAV vision systems. Jérémy joined the ecoSUB team in 2015 as a Software Engineer and is currently appointed as Chief Robotics Engineer, acting as Technical Lead on the ecoSUB range of AUVs. Jérémy is based at the ecoSUB R&D facility at the Marine Robotics Innovation Centre located within the National Oceanography Centre, Southampton.

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Matthew Brannan

Area Sales Manager, EIVA

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Matthew has over 11 years' experience in the offshore subsea, survey & positioning industry. After graduating from Aberdeen University, he started his career at Subsea 7 working offshore as a Senior Data Processor before moving onshore to support projects as a Geomatics Specialist.

Matthew has worked for EIVA since 2015 and is the UK & Ireland EIVA sales representative, supplying hardware and software to their Clients. In his support capacity he provides training & technical support to EIVA users, develops the suite of offline eLearning modules as well as being involved in software development and improvements. He is also one of EIVA's data processing experts. In his career he has manually processed and delivered thousands of km's of pipeline inspection campaigns, so understands the need for increased automation within our industry.