The 5th UK-RAS Conference for PhD Students & Early Career-Researchers on *'Robotics for Unconstrained Environments'*

Aberystwyth University
26th August 2022

08:30 – 09:30	**Registration, Penbryn**
	Session Zero: Robotics for unconstrained environments Chair: Frédéric Labrosse. Hugh Owen, C22
09:30 – 09:45	Welcome and Introduction, **Patricia Shaw (Aberystwyth)**
09:45 – 10:15	Keynote talk: **Matthew Nancekievill (Ice9)**
10:15 – 10:45	**Tea/Coffee, Penbryn, Medrus Mawr**
	Session One: Robotics outdoors and in hazardous environments Chair: Frédéric Labrosse. Hugh Owen, C22
10:45 – 11:00	Web based ROS interface for telepresence **Sean Katagiri, Joshua Roe, Matthew O'Hara, Jonatan Scharff Willners, Sen Wang and Yvan Petillot (Heriot-Watt University).** Paper #1600
11:00 – 11:15	Analysis of VR Usability in Mobile Manipulator Teleoperation, **Yuhui Wan, Christopher Peers, Dimitrios Kanoulas and Chengxu Zhou (University of Leeds).** Paper #1659
11:15 – 11:30	Blockchain Crop Assurance and Localisation, **Garry Clawson and Charles Fox (University of Lincoln).** Paper #2786
11:30 – 11:45	Localising Weeds Using a Prototype Weed Sprayer, **Madeleine Darbyshire, Adrian Salazar-Gomez, Callum Lennox, Junfeng Gao, Elizabeth Sklar and Simon Parsons (University of Lincoln).** Paper #7712
11:45 – 12:30	Poster Teaser Session
12:30 – 13:30	Group photo Posters and Lunch, Penbryn, Medrus Mawr
	Session Two: Indoor and assistive robotics Chair: Myra Wilson. Hugh Owen, C22
13:30 – 14:00	Keynote talk: **Virginia Ruiz Garate (Bristol Robotics Lab)**, Hugh Owen, C22
14:00 – 14:15	Robotic Action-state Evaluation via Siamese Neural Network, **Xiang Chang and Fei Chao (Aberystwyth University).** Paper #4693
14:15 – 14:30	Opening a Spring-Loaded Door with a Legged Manipulator, **Jun Li, Christopher Peers, Songyan Xin and Chengxu Zhou (University of Leeds/Edinburgh).** Paper #5068
14:30 – 14:45	Smart wheelchairs: Visual perception pipeline to improve prediction of user intention, **Tomos Fearn, Frédéric Labrosse and Patricia Shaw (Aberystwyth University).** Paper #7173
14:45 – 15:45	Tour of labs Tea/Coffee, Penbryn, Medrus Mawr

	Session Three: Outdoor sensing Chair: David Jones. Hugh Owen, C22
15:45 – 16:15	Keynote talk: Railway robots for infrastructure inspection **Andrew Starr (Cranfield University)**
16:15 – 16:30	Evolving complex terrain navigation: Emergent contour following from a low-resolution sensor, **Dexter Shepherd and James Knight (University of Sussex).** Paper #3626
16:30 – 16:45	An End-to-End Task Allocation Framework for Autonomous Mobile Systems, **Song Ma, Jingqing Ruan, Yali Du, Richard Bucknall and Yuanchang Liu (University College London).** Paper #2277
16:45 – 17:00	Use of deterministic AI and a multi-user virtual test environment for drone inspection mission safety, **Hirad Goudarzi, Conor Marsh, Arthur Richards, William Crowther and Ben Parslew (Bristol Robotics Lab).** Paper #6381
17:00 – 17:15	Event-based Spatio-temporal Down-sampling, **Anindya Ghosh, Thomas Nowotny and James Knight (University of Sussex).** Paper #7219
17:15 – 17:30	Closing remarks and best paper awards **Patricia Shaw (Aberystwyth University)**
17:30	Drinks and canapes, Penbryn, Medrus Mawr

We would like to encourage you to join the discussion on social media by sharing your thoughts and highlights from the conference using the hashtag **#UKRAS22**.