



[UKRAS19: Embedded Intelligence](#)

Thursday 24th January 2019, Loughborough University

Time	Event
08.30	Coffee & Registration
08.45	Welcome & Introduction
09.00	<i>ARM computational platforms for CV/Image Processing for future Robots: NN accelerator vs. fixed NN HW</i> Dr. Slava Chesnokov (ARM) (25min + 5min for Q&A)
	<i>4 Presentations (15mins each - 12mins + 3 for Q&A)</i>
09.30	1. Underwater Scene Segmentation by Deep Neural Network
09:45	2. A Deep Adaptive Framework for Robust Myoelectric Hand Movement Prediction
10:00	3. Evaluation of U-shaped weld prep identification and tracking
10:15	4. A Bioinspired Approach for Mental Emotional State Perception towards Social Awareness in Robotics
10.30	Coffee Break
10.50	<i>Development of Robotic Systems for Nuclear Applications</i> Prof. Barry Lennox (Manchester) (25min + 5 min for Q&A)
11.20	2 Minute Poster-Paper Presentations
12.20	Lunch, Posters, and Lab Tours
14:00	<i>Robots for education: from social to non-social, a look at the challenges of tomorrow</i> Dr. Séverin Lemaignan (BRL) (25min + 5 min for Q&A)
	<i>5 Presentations (15mins each - 12mins + 3 for Q&A)</i>
14:30	1. MoDSeM: Modular Framework for Distributed Semantic Mapping
14:45	2. Controlling a Bipedal Robot with Pattern Generators Trained with Reinforcement Learning
15:00	3. Development of a Debris Clearance Vehicle for Limited Access Environments
15:15	4. Model based 3D point cloud segmentation for automated selective broccoli harvesting
15:30	5. Enabling functional resilience in autonomous multi-arm and multi-vehicle cooperative tasks
15:50	Coffee Break
16:10	<i>The Future of Robotic Agriculture</i> Prof. Tom Duckett (Lincoln) (25min + 5 min for Q&A)
	<i>3 Presentations (15mins each - 12mins + 3 for Q&A)</i>
16:40	1. In process monitoring and control of automated TIG welding processes
16:55	2. Dynamic, Anytime Task and Path Planning for Mobile Robots
17:10	3. An Information Theoretic Approach to Path Planning for Frontier Exploration
17:30	Awards ceremony, concluding remarks, farewell