

Robots, artificial intelligence and virtual reality: Tour and demonstrations

Dr Frédéric Labrosse: Senior Lecturer, **Dr Patricia Shaw**: Lecturer, **Dr Helen Miles**: Associate Lecturer, and **Dr Marek Ososinski**: Research Associate, Department of Computer Science, Aberystwyth University

The tour will show four of our current facilities, discussing the research done in each:

VR Lab

We will visit our new VR Lab which contains state-of-the-art immersive virtual reality equipment to transport you across space and time to places you can't easily visit in reality.

Intelligent Systems Laboratory

The Intelligent Systems Laboratory is home to various indoor robots. Specifically, this tour will introduce the iCub humanoid robot and MIRO a biomimetic robot designed for social care applications. This tour will discuss the developments and potential applications of these robots in the future.



Field and Applied Robotics Lab

The FARL is home to the robots used in real outdoor environments with real customers. Applications range from scanning disused quarries in Wales to making 3D models of river beds in New Zealand and glaciers in Greenland. Some of the robots will be shown and discussed, with one or two movies thrown in.



Lightstage

The Lightstage is a geodesic dome supporting an array of cameras and LEDs; placing an object at the centre allows it to be lit and photographed from many different directions. From these photographs, we can create highly detailed and accurate 3D reconstructions. We will show the current progress in the construction of our Lightstage.