

**JOB DESCRIPTION**

**Vacancy Ref: A2944**

<b>Job Title:</b>	Research Associate (AELARS)	<b>Present Grade:</b>	6
<b>Department/College:</b>	School of Computing and Communications		
<b>Directly responsible to:</b>	Dr Wenjie Ruan		
<b>Supervisory responsibility:</b>	None		
<b>Other contacts</b>			
<b>Internal:</b> Staff and Students at the University; colleagues in the School of Computing and Communications			
<b>External:</b> Project partners, ORCA Hub, Liverpool University			
<b>Major Duties:</b>			
<ol style="list-style-type: none"> <li>1. Developing novel safety verification or testing algorithms to measure the robustness or safety of various deep learning models that are widely used in robotic/autonomous systems.</li> <li>2. Developing a novel interpretability method to enable the end-users to understand the decisions from learning- enabled autonomous systems.</li> <li>3. Implementing the above algorithms as a toolbox, and further testing it on various learning- enabled autonomous robotic systems, especially on their perception tasks and decision-making process.</li> <li>4. To collaborate with industrial and research project partners in the coordination of research and development activities.</li> <li>5. Participation in all project meetings, preparation and presentation of talks, posters and reports to disseminate the results of these studies</li> <li>6. Participation in national and international conferences and workshops to present the results of the project to a wider audience and to learn about current advances in the field.</li> <li>7. Preparation of conference and journal papers for publication of project findings.</li> <li>8. Participation in writing new research proposals that build on the expertise developed in this project.</li> <li>9. Any other duties appropriate to the grade, as directed by the Principal Investigator or his representative.</li> </ol>			