JOB DESCRIPTION

Vacancy Ref: A2944

Job Title:	Senior Research Associate (AELARS)	**Present Grade:** 7
Department/College:	School of Computing and Communications	
Directly responsible to:	Dr Wenjie Ruan	
Supervisory responsibility for:	None	

Other contacts

Internal:
Staff and Students at the University; colleagues in the School of Computing and Communications

External:
Project partners, ORCA Hub, Liverpool University

Major Duties:

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.

2. Developing a novel interpretability method to enable the end-users to understand the decisions from learning- enabled autonomous systems.

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.

4. To collaborate with industrial and research project partners and to take a leading role in the coordination of research and development activities.

5. Participation in all project meetings, taking the lead responsibility for Lancaster University where necessary; preparation and presentation of talks, posters and reports to disseminate the results of these studies

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.

7. Taking a leading role in the preparation of conference and journal papers for publication of project findings.

8. Participation in (and ultimately taking the lead in) writing new research proposals that build on the expertise developed in this project.

9. Any other duties appropriate to the grade, as directed by the Principal Investigator or his representative.