



**UNIVERSITY OF LINCOLN
JOB DESCRIPTION**

JOB TITLE	Post Doctoral Research Associate in Robotics and Autonomous Systems				
DEPARTMENT	LIAT				
LOCATION	Lincoln Campuses				
JOB NUMBER	COS967	GRADE	7	DATE	March 2025
REPORTS TO	Prof Marc Hanheide				

CONTEXT

The University of Lincoln robotics team is working on a large project with the agri-robotics industry, towards the open development platform for robotic crop harvesting. The platform will facilitate open and standardised access to the core software and hardware components providing key functionality such as autonomy, safety or perception enabling rapid adoption by the industry and academia. The core functionality will enable further development and customisation which can be privately exploited by the industry, leading to faster adoption of more reliable robotic technology in agriculture. Such a strategy will lead to step changes in farming productivity and help to alleviate global problems with the availability of a workforce in the sector. In this project, the principle will be demonstrated by developing commercial robotic systems for tomato and strawberry harvesting.

JOB PURPOSE

We are looking to recruit a Research Associate with a research profile in autonomous robot navigation to join our agri-robotics research team.

The Research Associate is responsible for conducting research on the project, as directed by the Principal Investigator, and is expected to operate with a significant degree of autonomy.

The post holder may be required to help supervise the work of more junior researchers.

KEY RESPONSIBILITIES

Literature Surveys

Undertake literature surveys and other investigations of the state-of-the-art, and prepare reports as required.

Programme of Research

Design and undertake programme of research under the direction of the Principal Investigator, demonstrating a significant level of autonomy.

Lead in the production of high-quality research outputs, including reports, papers and other publications of national/international standing.

Project Management

Perform project management activities, planning, scheduling, monitoring and reporting on progress of research projects.

Liaison and Networking

Identify and liaise with internal and external collaborators, and with colleagues in the Department, maintaining positive and effective working relationships.

Internal Research Activities

Participate in and help to organise internal research activities, including seminars, research meetings and conferences.

Continuous Professional Development

Undertake continuous professional development activities.

Grant Applications

Contribute to the production of grant applications.

Teaching Support

Engage in teaching support activities, up to a maximum of six hours per week, possibly including leading a small number of units (no more than two per annum).

Aid in the supervision of postgraduate research students.

In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.

ADDITIONAL INFORMATION

Scope and dimensions of the role

Applicants should have, or expect to soon obtain, a PhD in a relevant area. You must have excellent mathematical and coding skills and prior experience with relevant software packages. The new position offers the opportunity to engage in international collaboration within an ambitious team, to work with state-of-the-art hardware and software, and to benefit from excellent support to produce and disseminate original research contributions in the leading conferences and journals.

Key working relationships/networks

Internal	External
<ul style="list-style-type: none">• Principal Investigator• Co-Investigators• Head of Research Centre• Head of School• Other research and academic staff within the school	<ul style="list-style-type: none">• Research collaborators• Sponsors and clients



**UNIVERSITY OF LINCOLN
PERSON SPECIFICATION**

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Selection Criteria	Essential (E) or Desirable (D)	Where Evidenced Application (A) Interview (I) Presentation (P) References (R)
Qualifications:		
PhD or equivalent (good candidates may be accepted with a PhD pending, subject to publication record)	E	A
Extensive knowledge specific to project/area	E	A/I
Experience:		
Extensive experience of relevant research methods	D	A/I
Authorship of research outputs of national/international standing	E	A/I
Experience of research in specific project area	E	A/I
Teaching support	D	A/I
Skills and Knowledge:		
Ability to design, conduct and project manage original research in the subject area	E	A/I
Excellent mathematical and coding skills (C++/Python)	E	A/I
Knowledge of working with robots and using ROS (ROS2 desirable)	E	A/I
Excellent written communication, including the ability to write reports and research outputs	E	A/I
Ability to prioritise own workload and work to specified deadlines under pressure	E	A/I
Ability to communicate complex subjects orally	E	A/I
Skills specific to project/area	E	A/I
Competencies and Personal Attributes:		
Flexible approach to workload	E	I
Ability to work on own and as part of a team	E	I
Enthusiasm and commitment	E	I

Essential Requirements are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

Author	GC	PBP	AH
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