UNIVERSITY OF LINCOLN
JOB DESCRIPTION

JOB TITLE	Research Fellow in Active Manipulation				
DEPARTMENT	School of Computer Science				
LOCATION	Brayford Pool				
JOB NUMBER	COS582	GRADE	7	DATE	September 2018
REPORTS TO	Professor of Computational Learning				

CONTEXT

The University of Lincoln is seeking to appoint a new Research Fellow to join a project, subject to funding by Innovate UK. The GRASP-berry project aims to develop a highly novel high-speed soft fruit picking robot. We will test the use of active manipulation to detect and pick occluded fruit, plus a novel high speed robotic picking system. This project will be led by Berry Gardens Growers Ltd, with partners University of Lincoln, Saga Robotics Ltd and ABB Ltd.

JOB PURPOSE

We are looking to recruit a postdoctoral Research Fellow with relevant experience and/or a keen interest in a number of research areas, including (not exclusively):

- robot perception and manipulation;
- motion planning;
- machine vision for agricultural applications;
- learning for autonomous systems;
- software engineering in robotics.

The post holder may be required to help supervise the work of some 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 (or equivalent) in a relevant area. You must have excellent mathematical and coding skills (C++/Python, ROS, PCL, OpenCV). The Research Fellowship offers the opportunity to engage in international collaboration within an ambitious team, to work with state-of-the-art robotic hardware and software, and to benefit from excellent support to produce and disseminate original research contributions in the leading international conferences and journals.

Key working relationships/networks	
Internal	**External**
- Principal Investigator - Co-Investigator - Head of Research Centre - Head of School - Other research and academic staff within the school	- Research collaborators - Sponsors and clients

UNIVERSITY OF LINCOLN
PERSON SPECIFICATION

JOB TITLE	Research Fellow in Machine Learning and Deep Neural Architectures	JOB NUMBER	COS582

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 working in multi or cross-disciplinary settings	E	A/I
Experience of research in specific project area	E	A/I
Experience of supervising research students	D	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 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	GL	HRBP	SP