



UNIVERSITY OF  
LINCOLN

## UNIVERSITY OF LINCOLN JOB DESCRIPTION

<b>JOB TITLE</b>	Post Doctoral Research Associate				
<b>DEPARTMENT</b>	School of Computer Science				
<b>LOCATION</b>	Lincoln				
<b>JOB NUMBER</b>	COS797	<b>GRADE</b>	7	<b>DATE</b>	November 2020
<b>REPORTS TO</b>	Professor Simon Parsons				

### CONTEXT

The School of Computer Science at the University of Lincoln is looking to appoint a Postdoctoral Research Associate as part of the "The Digital Sandwich - Digitised Food Supply Chain, fusing IoT, Blockchain and AI data layers to improve productivity, traceability and reduce waste" project.

The total cost of the project across the 10 consortium partners is over £9.5m, funded by Innovate UK, with the aim of digitising the food supply chain, fusing IoT, blockchain and AI layers to improve productivity, traceability and reduce waste.

The work at University of Lincoln will focus on building an agent-based model of the food supply chain, developing novel market-based approaches that smooth fluctuations in demand across the supply chain, thus helping to reduce food waste. The successful candidate will have relevant experience in agent-based modelling and/or market design. The post is fixed for 12 months, with strong support for career development and progression, in a growing research group with many opportunities for contract extension.

### JOB PURPOSE

The Post Doctoral 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. S/he is not expected to operate as an independent researcher.

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
Undertake a 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 and have excellent mathematical and coding skills (Java, Python, Matlab etc.).

Successful candidates will be expected to design, conduct and manage original research.

Evidence of authorship of research outputs of international standing is essential, as is the ability to work collaboratively as part of a team, including excellent written and spoken communication skills.

The postholder will engage collaboratively within an ambitious team at Lincoln and also with the project's many external partners, to work with state-of-the-art equipment, and to benefit from excellent support to produce and disseminate original research contributions.

### Key working relationships/networks

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



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## 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)
<b>Qualifications:</b>		
PhD or equivalent (good candidates may be accepted with a PhD pending, subject to publication record)	<b>E</b>	<b>A</b>
Extensive knowledge specific to project/area	<b>E</b>	<b>A/I</b>
<b>Experience:</b>		
Extensive experience of relevant research methods	<b>E</b>	<b>A/I</b>
Authorship of research outputs of national/international standing	<b>E</b>	<b>A/I</b>
Experience of research in specific project area	<b>E</b>	<b>A/I</b>
Teaching support	<b>D</b>	<b>A/I</b>
<b>Skills and Knowledge:</b>		
Ability to design, conduct and project manage original research in the subject area	<b>E</b>	<b>A/I</b>
Excellent written communication, including the ability to write reports and research outputs	<b>E</b>	<b>A/I</b>
Ability to prioritise own workload and work to specified deadlines under pressure	<b>E</b>	<b>A/I</b>
Ability to communicate complex subjects orally	<b>E</b>	<b>A/I</b>
Skills specific to project/area	<b>E</b>	<b>A/I</b>
<b>Competencies and Personal Attributes:</b>		
Flexible approach to workload	<b>E</b>	<b>I</b>
Ability to work on own and as part of a team	<b>E</b>	<b>I</b>
Enthusiasm and commitment	<b>E</b>	<b>I</b>
<b>Business Requirements:</b>		

**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.

<b>Author</b>		<b>HRBA</b>	
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