

Candidate Information

Position:	RiSC+ Research Fellow - UK Food Supply Chains
School/Department:	Queen's Business School
Reference:	25/112359
Closing Date:	Tuesday 28 January 2025
Salary:	£39,922 - £43,605 per annum
Anticipated Interview Date:	Thursday 13 February 2025
Duration:	3 years

JOB PURPOSE:

To be a highly productive, ambitious and collaborative member of the RiSC+ team assisting in the development of research proposals and the planning and delivery of the research activity specifically in Modelling UK Supply Chains as complex systems for resilience.

The post is a critical role, and as such, successful applicants will have responsibilities in independent research, research planning and reporting and for collaboration with project partners.

The post is part of the ReImagining Supply Chains Network Plus (RiSC+ Network) project, whose main aim is to model and reimagine supply chains across the UK in food, critical minerals and fashion. The RiSC+ Network will offer evidence that exposes vulnerabilities, remedies current risks and demonstrates future potential, ultimately helping to empower the UK to move towards more resilient and secure supply chains.

MAJOR DUTIES:

1. Undertake research under supervision into Modelling UK food supply chains as complex systems for improved resilience.
2. Map food supply chains by making use of complete databases and data analytics to understand the way in which supply chains operate.
3. Assist in the creation of a digital twin for key supply chains and develop new ways in which supply chains could operate and be configured to increase their resilience to external threats and factors such as climate change and geopolitical tensions.
4. Conduct carbon footprint analysis, ethical considerations around slavery and more general sustainability analysis in-line with European Union Deforestation Regulation (EUDR) compliance to understand the supply chain risks and uncertainty.
5. Carry out analyses, critical evaluations, and interpretations of data and literature using methodologies and other techniques appropriate for food-related research.
6. Produce high quality research outputs consistent with project aims and commensurate with career stage. This will include collaborating and co-authoring with PI and project team (as appropriate) on outputs.
7. In consultation with the project team, promote research milestones and outputs at national and international conferences.
8. Assist grant holder in the preparation of funding proposals and applications to external bodies.
9. Carry out occasional educational supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
10. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.
11. Disseminate diverse types of outputs to a range of groups including scientific, policy, industry and lay audiences.
12. Prepare and present regular updates on research progress to the RiSC+ Network team.

ESSENTIAL CRITERIA:

1. Hold at least a 2:1 honours degree in Computer Science, Data Analytics, Business Analytics, Operations Research, Industrial Engineering or closely related discipline.

2. Have, or be about to obtain, a relevant PhD in Computer Science, Data Analytics, Business Analytics, Operations Research, Industrial Engineering or closely related discipline (candidates about to receive their PhD should provide proof that their viva is scheduled within two months).
3. Recent relevant research experience to include:
 - Demonstrable experience in data analytics, business analytics or big data analytics.
 - Demonstrable experience in handling complex, interconnected and highly dimensional data.
 - Demonstrable experience with computer coding languages (such as R, Python).
 - Demonstrable experience with the use of MATLAB or similar software packages.
 - A track record of publications appropriate to stage in career.
 - Demonstrable experience in programming/scripting, beyond that taught in undergraduate engineering courses.
 - A proven track record of using relevant techniques to carry out analyses, critical evaluations, and interpretations of data as relevant to the research project.
 - Working effectively as part of a research team in the development and promotion of the research theme.
4. Ability to contribute to broader management and administrative processes.
5. A sufficient breadth of knowledge of data analytics, business analytics or closely related discipline.
6. Ability to work in a team.
7. Willingness to undertake additional training in research methods and other related skills as required.
8. Practical problem solving skills, independence of thought and initiative.
9. Ability to communicate complex information effectively in oral and written format.
10. Ability to build relationships to develop internal and external networks.
11. Ability to assess and organise resources.
12. Excellent interpersonal skills.
13. Willing to spend time on placement at partner facilities / travel to same on a regular and frequent basis if needed.

DESIRABLE CRITERIA:

1. Demonstrable experience in:
 - Supply chain mapping and analysis.
 - Food/agriculture industry.
 - Supply chain fraud investigations.
 - Artificial Intelligence and Edge Computing.
 - Industrial engagement and technology transfer.
 - Academic and industrial reporting/presentation skills.

ADDITIONAL INFORMATION:

Informal enquiries may be directed to: Hangfei Guo, h.guo@qub.ac.uk