



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow (KTP) in Data Analytics (Smart Agriculture), Faculty of Biological Sciences and Karro Food Group Ltd.



Salary: £30,000 - £34,000 p.a. plus training package up to £4,300. This position is not on the University of Leeds salary scale.

Reference: CSRIS1171

**Fixed-term until 31 March 2022 due to external funding for a fixed period
Based at the company premises in Malton**

Research Fellow (KTP) in Data Analytics (Smart Agriculture)

Faculty of Biological Sciences and Karro Food Group Ltd.

Are you a graduate with a PhD (or close to completion) with substantial advanced statistical modelling, data analytics, or forecasting? Do you have experience developing analytical models in R, Matlab or Python? Are you keen to launch your career by managing a challenging project in industry?

We have an opportunity for you to fast-track your career in business by leading a high-profile, strategically important project from start to completion. Through a [Knowledge Transfer Partnership \(KTP\)](#), you will be working in partnership with Karro Food Ltd., part of [Karro Food Group Ltd.](#) in conjunction with the [Faculty of Biological Sciences](#) to develop a future health and performance forecasting tool for pigs. By quantifying predictors of individual animal health and performance, the tool will use data from a multi-platform monitoring system and machine learning techniques.

Karro is a leading producer of pork products, supplying high-welfare meat products to retail, food service and manufacturing customers in the UK and abroad. The company is known for its high health and welfare standards for the animals on its farms. The aim of this project is to combine cutting edge monitoring technologies with advanced data analytics in order to optimise pig health, welfare and overall performance. You will help the partnership to achieve its strategic goals through the use of advanced data analytics to accurately forecast performance, health and disease throughout every pig's life-course.

You will be an employee of the University of Leeds and will have full access to University facilities. You will have access to the University's USS pension scheme, with generous employer contributions. You will be encouraged to base yourself part-time at the Karro Food Ltd company premises at Malton, North Yorkshire (and/or remotely, as per government guidance), working to Karro's terms to enable you to gain additional skills and project-specific understanding of the operations and logistics of the company and production system.

You may be required to undertake occasional UK-wide travel, and potentially international travel, in line with national travel restrictions in place. Members of the Faculty of Biological Sciences, the Animal Welfare Epidemiology laboratory, and the



University's [Faculty of Medicine and Health](#) will provide academic and technical support to you throughout the project.

You will have access to a training and development package worth £4,300, to be spent according to your needs and the project's requirements, enabling you to work effectively on your KTP project and to plan for your future career. You will also attend two weeks of residential KTP training to equip you with the skills and knowledge required to complete the project successfully, for which time is allocated and funding provided.

What does the role entail?

As Research Fellow (KTP) in Data Analytics (Smart Agriculture), your main duties will include:

- Understanding the commercial context of the project;
- Understanding the requirements of the end-user, and developing the product specification based on these;
- Potential data collection and fieldwork in house, on farm and/or at the abattoir;
- Designing, developing and testing the data dashboard app, using dimension reduction and machine learning to forecast performance;
- Creating comprehensive documentation & training materials for use of the data dashboard, including providing training to Karro's IT team regarding the underlying code;
- Keeping accurate records, including the creation of a repository for all knowledge generated during the KTP;
- End of project dissemination and communications.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As Research Fellow (KTP) in Data Analytics (Smart Agriculture), you will have:

- A PhD (or be close to completion) with substantial statistical modelling, data analytics, or forecasting;



- Experience in writing, enhancing, and running code in R/Matlab/Python;
- Strong analytical skills, with the ability to work accurately and carefully;
- The ability to design, execute and draw conclusions from research independently;
- Excellent communication skills, both written and verbal;
- The ability to communicate your research to end-users, and to academics at national and international conferences and in other disciplines;
- The ability to work well both independently and as part of a team;
- Strong initiative and a proactive approach, with excellent organisational, planning and self-management skills, including the ability to prioritise workloads to meet deadlines/demand and deliver high quality work under pressure;
- Some industrial/work experience and a strong desire to develop a career in industry;
- Full valid UK driving licence (or alternative means of travel), enabling visits to remote client locations.

You may also have:

- A growing track record of peer reviewed publications in international journals;
- Experience in a field of research relating to Animal Science or Agriculture;
- Experience working with livestock in a commercial or research environment;
- Experience working in a commercial environment.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Please include your current curriculum vitae, including a list of your publications with your application.



Contact information

To explore the post further or for any queries you may have, please contact:

[Professor Lisa Collins](#), Professor of Animal Science, University of Leeds

Tel: +44 (0)113 343 5940

Email: l.collins@leeds.ac.uk

Additional information

Interview location

Due to the current Government Coronavirus guidance and social distancing measures, the interviews for this role are likely to be conducted remotely using Microsoft Teams or Zoom. More information will follow should you be successful in gaining an interview.

Working at Leeds

You will be an employee of the University of Leeds and will have access to University facilities. However, you will be based for the majority of your time at the company premises, working to their terms. You will have access to the University's USS pension scheme, with generous employer contributions. You will also have access to the University's [Organisational Development and Professional Learning](#) (OD&PL) programme.

Faculty and School Information

Further information is available on the research and teaching activities in the links contained within the text above.

A diverse background

The University of Leeds and the Faculty of Biological Sciences are committed to providing equal opportunities for all and offer a range of family friendly policies. The University is a charter member of Athena SWAN (the national body that promotes gender equality in higher education), and the Faculty of Biological Sciences was re-awarded a Bronze award in 2017. We are proud to be an inclusive Faculty that values



all staff, and are happy to consider job share applications and requests for flexible working arrangements from our employees. Our Athena SWAN webpage provides more information. <http://www.fbs.leeds.ac.uk/equality-and-diversity/athena->

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk. The post is located at the company premises. Candidates with disabilities wishing to review access to the building are invited to contact James Hartford (Research and Innovation Service), J.Hartford@leeds.ac.uk or Tel: 0113 343 0928.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

