

Candidate Information

Position: Blockchain Engineer – KTP Associate – Linden Foods

School/Department: KTP and Business Networks

Reference: 20/108069

Closing Date: Monday 3 February 2020

Salary: £25,000 – £31,000 One of the key KTP benefits for graduates is access

to a £8,500 training and travel budget over the 24 month project.

Anticipated Interview Date: Wednesday 19 February 2020

Duration: 24 months

Job Purpose

To develop an industry leading food traceability system by applying blockchain technology within a red meat business to deliver total integrity of our supply chain and production processes.

Main Activities and Responsibilities

Linden Foods is an award winning meat manufacturer, located in County Tyrone in Northern Ireland. Jointly owned by ABP Food Group we are part of the Linden Food Group. The Group has four strategic locations in Northern Ireland and England. Linden Foods process and manufacture top-quality beef, lamb, pork and chicken for branded and own label products. Linden Foods' strategy to place it at the forefront of the meat industry. Central to ongoing company growth is a focus on Innovation, Integrity, Quality and Value. In our industry, traceability systems are key. Through this KTP the graduate will work alongside company and academic supervisors to deliver the project aim of developing an industry leading food traceability system by applying blockchain technology within a red meat business to deliver total integrity of our supply chain and production processes. The post-holder will be based in Linden Foods (Dungannon).

The project will consist in the following key integrated project stages:

- 1. Review of supply chain, blockchain technologies and project context i.e application of blockchain technology to food security and traceability.
- 2. Develop Prototype Blockchain Tracking System and Minimal Viable Product (MVP)
- 3. Investigate the feasibility of the proposed blockchain system and support for platform architecture choices
- 4. Develop traceability systems for farm and logistic systems, integration with existing factory systems including DNA tracing and integration with current and planned customer/consumer systems integration
- 5. Deployment of new blockchain systems in collaboration with the existing IT team
- 6. Dissemination of knowledge within the company and industry and assistance in marketing new processes and technology.

Planning and Organising

- 1. Manage and coordinate the items of work as laid out in the project plan (individual work plan will be provided by Supervisors).
- 2. Plan day-to-day activity within the framework of the agreed work plan.
- 3. Contribute to the planning and management of the project, approximately 3-6 months in advance.
- 4. Ensure that all training and development activity is scheduled to ensure that progress on the work plan objectives is not interrupted or delayed.

Resource Management and Responsibilities

- 1. Plan and manage day-to-day resources to ensure the project runs to time and on budget.
- 2. Coordinate and obtain approval for planned expenditure/allocation of resources with the Management Committee and Steering Group.
- 3. Carry out supervision of placement students or other staff members as required.
- 4. Monitor travel and development budgets and produce a Personal Development Plan which will ensure best use of financial resources
- 5. Attend training modules (mandatory and additional job-specific training). This may be local, national and international.

6. Perform any other additional duties as agreed by the Local Management Committee and Steering Groups to contribute to the development of the company, the university and the Associate.

Internal and External Relationships

- 1. Present regular progress reports to members of the Steering and Management Groups and to external audiences.
- 2. Liaise with company staff on a daily basis. Contribute to training of staff in the company and university as required.
- 3. Build relationships with both company and university staff to ensure effective working practices are established.
- 4. Attend and contribute to any appropriate meetings, both in the company and the university as required.
- 5. Establish contacts with additional groups and organisations (other KTP Associates, other university departments, other industrial contacts, and Innovate UK) as required to develop knowledge and understanding and form relationships for future collaboration.
- 6. Act as an Ambassador for the Knowledge Transfer Partnership Scheme.

Additional Information

- 1. Knowledge Transfer Partnerships is a UK programme that enables businesses to work with universities to gain access to specialist knowledge and expertise and apply it within their organisation. Each Partnership recruits a Graduate to work in the company, implementing and embedding the latest research techniques. Guidance is provided by the academic and company supervisors to ensure that the objectives of the project are met. Although the scheme is aimed at recent graduates, any suitably qualified individual may apply.
- 2. Each KTP is a fully salaried job that lasts between twelve and thirty six months, providing the graduate with an opportunity to fast track a career in industry. Each KTP Associate has a training and development budget and a travel budget. This funding provides opportunities for job-specific training, attending and presenting at conferences, visiting trade shows, customers and suppliers etc. Two, one week residential management training modules are also provided as part of the package.
- 3. This partnership received financial support from the Knowledge Transfer Partnerships (KTP) programme. KTP aims to help businesses to improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK knowledge base. This successful Knowledge Transfer Partnership project, funded by UK Research and Innovation through Innovate UK, is part of the government's Industrial Strategy.
- 4. As members of University staff, KTP Associates can join the University pension scheme, gain access to University resources such as the Library and sports facilities.

More details are available at www.ktpjobsni.com.

Essential Criteria

- 1. Hold, or be about to obtain in July 2020, at least a 2.1 Honours Degree (or equivalent) or higher degree in Computer Science, Software Development, Software Engineering or a closely related subject.
- 2. Knowledge of cloud computing or blockchain technology.
- 3. Completion of a substantial software development project in either university or industry.
- 4. Demonstrable working experience of at least one of Java, C# or C++.
- 5. Good oral written and presentation skills.
- 6. High level of IT skills.
- 7. Ability to think logically, create solutions and make informed decisions.
- 8. A high level of numeracy and the ability to interpret data.
- 9. Ability to work effectively as a member of a group.
- 10. Well organised, attention to detail and ability to meet tight deadlines.
- 11. An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
- 12. Ability to take part in Associate management courses (requiring two one-week periods in England).
- 13. Willing/able to travel throughout the UK and Ireland and abroad, as necessary.

Desirable Criteria

- 1. Hold, or be about to obtain, a higher degree in a relevant discipline.
- 2. 1 year's relevant work experience*

*can be demonstrated through completion of a relevant placement.

- 3. Experience in distributed systems or Blockchain technology or cloud computing.
- 4. Completion of a blockchain project.
- 5. Experience in database design and development.

- 6. An understanding of the agri-food sector
- 7. Ability to deliver training and follow-up support to operatives.
- 8. Ability to influence people effectively.
- 9. enacious and committed to achieving goals.