



Candidate Information

Position:	Blockchain Engineer - KTP Associate - Devenish Nutrition
School/Department:	KTP and Business Networks
Reference:	19/107262
Closing Date:	Wednesday 27 March 2019
Salary:	£25,000 to £33,000 per annum. 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:	Thursday 11 April 2019
Duration:	24 months

Job Purpose

To apply Blockchain technology to develop a secure and advanced supply chain and traceability system in the agri-food sector from source, through the production processes, and onto the consumers.

Main Activities and Responsibilities

Through a two Associate Knowledge Transfer Partnership with Queen's University Belfast, Devenish's overall aim is to apply Blockchain technology to develop a secure and advanced supply chain and traceability system in the agri-food sector from source, through the production processes, and onto the consumers. The two KTP Associates will be working together to achieve a common goal - Associate 1 will be the Systems Developer and Associate 2 will be the Blockchain Engineer.

Associate 1 (Systems Developer) will work with the existing software systems that provide data tracking within Devenish, and primarily work on designing and implementing the interface between the current systems and the blockchain storage. Associate 2 (Blockchain Engineer) will focus on the use of blockchain technology to provide secure storage and tracing of Devenish's processing systems' data. In the early stages of the project both Associates will work together closely on the overall identification of requirements, in particular deciding which data needs to be stored securely, and on the design of the common data format. The Blockchain Engineer will then focus on the development of the Blockchain algorithms for integration into the current Devenish systems, will research available blockchain implementations and, using existing software libraries where possible, to develop a blockchain repository for this data.

Under the direction of the company and academic supervisor, and in close liaison with the Systems Engineer, this KTP Associate (Blockchain Engineer) will deliver the following key project stages:

- Review data required and generated by existing software systems.
- Design of Common Data Format
- Specification/Design of blockchain repository.
- Implementation of blockchain repository.
- Integration and testing of modified processing systems with blockchain storage.
- Documentation/Dissemination and Training.

Planning and Organising

- Manage and coordinate the items of work as laid out in the project plan (individual work plan will be provided by Supervisors).
- Plan day-to-day activity within the framework of the agreed work plan.
- Contribute to the planning and management of the project, approximately 3-6 months in advance.
- 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

- Plan and manage day-to-day resources to ensure the project runs to time and on budget.
- Coordinate and obtain approval for planned expenditure/allocation of resources with the Management Committee and Steering Group.
- Carry out supervision of placement students or other staff members as required.

- Monitor travel and development budgets and produce a Personal Development Plan which will ensure best use of financial resources.
- Attend training modules (mandatory and additional job-specific training). This may be local, national and international.
- 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

- Present regular progress reports to members of the Steering and Management Groups and to external audiences.
- Liaise with company staff on a daily basis. Contribute to training of staff in the company and university as required.
- Build relationships with both company and university staff to ensure effective working practices are established.
- Attend and contribute to any appropriate meetings, both in the company and the university as required.
- Act as an Ambassador for the Knowledge Transfer Partnership Scheme.

Additional Information

- 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.
- 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.
- 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.
- 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

- Hold, or be about to obtain in July 2019, at least a 2.1 Honours Degree (or equivalent) in Computer Science or a closely related subject.
- Completion of a substantial software development project in either university or industry.
- Working experience of at least one of Java, C# or C++.
- Experience in database design and development.
- Good oral written and presentation skills.
- Ability to deliver training and follow-up support to company staff.
- Ability to think logically, create solutions and make informed decisions.
- A high level of numeracy and the ability to interpret data.
- Ability to work effectively as a member of a group.
- Team player with a desire to learn and a willingness to teach and mentor as part of a team.
- Able to take ownership of, and responsibility for, assigned work.
- Must be proactive, self-motivated, attentive to detail, well organised with the ability to meet tight deadlines.
- An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
- Ability to take part in Associate management courses (requiring two one-week periods in England).
- Willing/able to travel throughout the UK and Ireland and abroad, as necessary.

DESIRABLE CRITERIA

- Hold a higher degree in a relevant discipline.
- 1 year's relevant work experience*
- Experience in distributed systems or Blockchain technology or cloud computing.

- An understanding of the agri-food sector
*can be demonstrated through completion of a relevant placement.
- Ability to keep abreast of developments in Blockchain technology.
- Ability to influence people effectively.
- Tenacious and committed to achieving goals.