

Candidate Information

Position: Software Developer – KTP Associate – Fusion Antibodies

School/Department: KTP and Business Networks

Reference: 19/107879

Closing Date: Wednesday 6 November 2019

Salary: £22,000 – £26,000 per annum. One of the key KTP benefits for graduates

is access to a £6,375 training and travel budget over the 18-month project.

Anticipated Interview Date: Monday 25 November 2019

Duration: 18 months

Job Purpose:

This project will develop a new innovative software solution for the design of antibody libraries that will be integrated into the service offering provided by the company in antibody engineering, to transform their capabilities and competitiveness.

Main Activities and Responsibilities:

Fusion Antibodies specialises in the development and engineering of antibodies for the biotechnology and pharmaceutical industries worldwide - the company partner is seen as a world leader. Fusion Antibodies are keen to evolve their services at the cutting edge of innovation in the field of antibody engineering. This KTP will enhance the company's competitiveness in the marketplace for engineered antibodies.

We wish to recruit a suitably qualified graduate to develop a new innovative software package for the design of antibody libraries that will be integrated into the service offering provided by the company in antibody engineering, to transform their capabilities and competitiveness.

Under the guidance of the academic and company supervisors the KTP Associate will deliver the following project stages:

- 1. Familiarisation with the technology and services provided by the company partner and examine informatic software and bespoke algorithms pertinent to enhance library design.
- 2. Development of bioinformatic based approach to analyse antibody protein sequences.
- 3. Development of a bioinformatics algorithm to interface hierarchic antibody library with structural analysis.

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
- 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 at least a 2.1 (or equivalent) Honours Degree or higher Degree in Software Engineering, Computer Science or a closely related discipline. Applicants must clearly state their qualifications and degree classification in their application.
- 2. 6 months relevant experience in a computational field*

*can be demonstrated through completion of a relevant placement.

- 3. Completion of a substantial software development project in either university or industry.
- 4. Working experience in an OO language (Ruby, Python, C#, Java or similar).**
- ** can be demonstrated by completion of a relevant module, project or placement.
- 5. Experience of database design and development.**
- ** can be demonstrated by completion of a relevant module, project or placement.
- 6. Good oral written and presentation skills.
- 7. High level of IT skills.
- 8. Ability to think logically, create solutions and make informed decisions.
- 9. A high level of numeracy and the ability to interpret data.
- 10. Ability to work effectively as a member of a group.
- 11. Well organised, attention to detail and ability to meet tight deadlines.
- 12. An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
- 13. Ability to take part in Associate management courses (requiring two one-week periods in England).
- 14. 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 years relevant work experience.*

*can be demonstrated through completion of a relevant placement.

- 3. Experience of working with Linux/UNIX environments.
- 4. Experience managing, integrating and analysing different data sources.
- 5. Proficiency with a modern high-level programming language.

- 6. Experience creating, querying and maintaining databases, particularly SQL and Neo4J or similar.
- 7. Experience with suitable statistical analysis and plotting languages, particularly R, Python.
- 8. Experience in supervised or unsupervised learning techniques.
- 9. Experience in bioinformatics.
- 10. Ability to deliver training and follow-up support to operatives.
- 11. Ability to influence people effectively.
- 12. Tenacious and committed to achieving goals.