

# **Candidate Information**

Position: School/Department: Reference: Closing Date: Salary: Software Engineer – KTP Associate – EventMAP KTP and Business Networks 19/107776 Wednesday 18 September 2019 £27,000 – £31,000 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. Tuesday 1 October 2019 24 months

Anticipated Interview Date: Duration:

### Job Purpose

Development of a fully functional resource scheduling software solution to facilitate the complex planning and management needs of all capability training operations within the defence, policing, emergency and healthcare sectors in the UK, with the aim of wider global application in these markets.

#### **Main Activities and Responsibilities**

EventMAP's core business is in providing tools and expertise to help their clients solve their most complex scheduling problems. Our tools offer interactive event planning, space planning, resource management, timetabling and scheduling capabilities that optimise and reduce the cost of these activities for our clients.

An exciting opportunity to work as a Knowledge Transfer Partnership (KTP) Associate has arisen as part of a 24-month KTP with EventMAP in collaboration with Queen's University Belfast. This project offers the opportunity to take on research challenges in the development of a fully functional resource scheduling software solution to facilitate the complex planning and management needs of all capability training operations within the defence, policing, emergency and healthcare sectors in the UK, with the aim of wider global application in these markets. The postholder will be based in EventMAP in Belfast.

The project is planned to consist of:

- reviewing of markets, technologies and project context and of existing resource allocation and timetabling concepts;
- reviewing applicable multi-objective optimisation approaches;
- developing an initial prototype training management system;
- evolving the initial prototype through various stages to a deployed full Training Schedule Optimisation System;
- embedding the new product in the EventMap portfolio; and
- dissemination of knowledge gained within EventMap and beyond.

#### **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.

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.
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 Honours Degree (or equivalent) in Computer Science or a closely related discipline.

Candidates must clearly state their qualifications when making their application.

2. At least 6 months' relevant work experience in development.

3. Proficiency in programming and experimental analyses with one or more programming languages such as C++, C#, Java or Python and experience with modern development IDEs such as Visual Studio.

- 4. Some exposure to building web-based applications using such JavaScript frameworks such as React, Backbone, Angular.
- 5. Experience and understanding of relational database systems such as SQL Server, MySQL, etc.
- 6. Completion of relevant programming and technology modules at undergraduate level.
- 7. Completion of a substantial software development project (either group-based or sole) in either university or industry.
- 8. Good oral written and presentation skills.

9. High level of IT skills.

- 10. Demonstrate excellent communitcation skills.
- 11. Ability to think logically, create solutions and make informed decisions.
- 12. A high level of numeracy and the ability to interpret data.
- 13. Excellent interpersonal skills.
- 14. Excellent interpersonal skills.
- 15. Ability to work effectively as a member of a group.
- 16. Reliable, well organised, attention to detail and ability to meet tight deadlines.
- 17. An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
- 18. Ability to take part in Associate management courses (requiring two one-week periods in England).
- 19. Willing/able to travel throughout the UK and Ireland and abroad, as necessary.

# **Desirable Criteria**

- 1. Hold, or be about to obtain, a related higher IT-based degree.
- 2. At least 1 years work experience in development or relevant IT.
- 3. Test Driven Development experience.
- 4. Experience working with GitLab/GitHub or other related source control management tools.
- 5. Management or leadership of IT project groups, including requirements analysis.
- 6. Exposure to purely Research and Development projects.
- 7. Ability to deliver training and follow-up support to operatives.
- 8. Ability to influence people effectively.
- 9. Tenacious and committed to achieving goals.