

## Candidate Information

<b>Position:</b>	Data Scientist - KTP Associate - STATSports
<b>School/Department:</b>	KTP and Business Networks
<b>Reference:</b>	18/106782
<b>Closing Date:</b>	Wednesday 10 October 2018
<b>Salary:</b>	£29,000 - £35,700 per annum. One of the key KTP benefits for graduates is access to a £11,730 training and travel budget over the 24 month project.
<b>Anticipated Interview Date:</b>	Monday 22 October 2018
<b>Duration:</b>	24 Months

### Job Purpose

This partnership will develop and commercialise analytics for on-field sports performance analysis in team-based sports. We wish to recruit a highly skilled and motivated individual to work in STATSports in collaboration with Queen's University Belfast for 24 months. Through this Knowledge Transfer Partnership, STATSports seeks to develop and commercialise analytics for on-field sports performance analysis in team-based sports. The technical focus of this position job would be to develop, prototype and commercialise novel technologies for spatio-temporal data analytics in the context of team-based sports, this will enrich the STATSports product through a suite of analytics features, and will embed industry leading data science expertise in the company. This unique research opportunity blends applied academic research with working in an industry setting with access to cutting-edge technology, data and resources. The postholder will be based in STATSports, Newry.

The programme of work will consist of the following project stages:

#### Stage 1:

Acquire necessary background knowledge about general sports analytics developed by STATSports and those related to spatio-temporal analysis. Complete literature review on sports science and spatio-temporal sports data analytics

#### Stage 2:

Develop novel metrics and visualisations to quantify and assess the effectiveness of player positioning and movement.

#### Stage 3:

Explore and quantify the interaction effects of player positioning and physical output on match outcomes.

#### Stage 4:

Advanced analytics to develop methodologies to enhance STATSports' capabilities to deliver actionable insights to clients. User manuals/guides will be developed and staff training to ensure embedding of the new capability in the business.

### 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.
- Mentor and work in tandem with a Sports Data Science PhD student in Queen's University Belfast to generate publications for data science venues such as SIGKDD and ICDM.
- 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.
- 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

### **Essential Criteria**

- Hold a Masters degree in the area of Data Analytics, Data Science, Data Mining, Machine Learning or a closely related discipline. Candidates who hold a 2.1 Honours degree (or equivalent) in Computer Science, Mathematics, Statistics, Data Science or a closely related discipline in addition to 1 year's relevant work experience will also be considered.

Candidates must clearly state how their degree is relevant to the role.

- At least 2 years' relevant work or research experience\*. To include:
  - Experience in mathematical modelling and optimisation.
  - Proficiency in programming and experimental analyses with one or more programming languages such as Python or Java, or statistical programming languages such as R or Stata.
  - Experience in working with large datasets, including methods to retrieve and query over such datasets
- Strong proficiency drafting technical reports, research briefs, and manuscripts.

\*can include relevant experience gained through a PhD, student project, module or placement.

- Good oral written and presentation skills.
- Ability to think logically, create solutions and make informed decisions.
- A high level of numeracy and the ability to interpret data.
- High level of IT skills
- Ability to work effectively as a member of a group
- Well organised, attention to detail and 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 or be about to obtain a PhD in Data Analytics or a closely related discipline.
- Advanced knowledge of statistical languages, data visualisation software and other programming languages.
- 3 year's relevant work experience (Experience can include relevant experience gained during a PhD).
- Experience with spatio-temporal data analysis.
- Experience with wearable sensor data.
- Knowledge of Machine Learning algorithms (SVM, KNN, Decision Trees, Random Forests, etc.).
- Experience with SQL Databases.
- Track record of having published research in highly-ranked venues in data analytics.
- Ability to deliver training and follow-up support to operatives.
- Ability to effectively communicate complex ideas to a wide range of audiences.
- Ability to influence people effectively.
- Tenacious and committed to achieving goals.

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.
- 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](http://www.ktpjobsni.com).