

## Candidate Information

<b>Position:</b>	Data Science and Analytics Associate - KTP Associate
<b>School/Department:</b>	KTP and Business Networks
<b>Reference:</b>	19/107316
<b>Closing Date:</b>	Sunday 28 April 2019
<b>Salary:</b>	£25,000 to £35,700 per annum. One of the key KTP benefits for graduates is access to a £9,000 training and travel budget over the 24 month project.
<b>Anticipated Interview Date:</b>	Tuesday 14 May 2019
<b>Duration:</b>	24 months

### JOB PURPOSE:

The aim of the project is to apply advanced analytics to enhance business value and understanding of consumer behaviour.

An exciting opportunity to work as a Knowledge Transfer Partnership (KTP) Associate has arisen as part of a 24-month KTP with Queen's University Belfast and Péarlaí Ltd. This project offers a skilled and motivated graduate the opportunity to take on research challenges in the application of advanced analytics and machine learning to develop offerings which will drive business value. Péarlaí have a strategic opportunity to benefit from the use of advanced analytics to drive additional value from the data currently collected. To achieve this goal Péarlaí are in the early stages of developing an in house Artificial Intelligence capability, of which this KTP is an integral part.

A key goal of the KTP is to use machine learning to more accurately target customers with text messages to increase conversion rates. The post holder will be working alongside an existing team of data engineers and business professionals The post holder will be based in either Péarlaí's Belfast city centre office space or Péarlaí in Newry, Co Down.

### MAJOR DUTIES:

1. The KTP Associate, under the guidance of company and academic supervisors, will be tasked with delivering the following key project phases:
  1. A critical overview of the business, data understanding, and technical architecture.
  2. Installation of a functioning analytics platform.
  3. Preparing the data for analysis.
  4. Detailed preliminary exploration of the numerical data.
  5. Modelling: Building a customer segmentation prototype software application and documentation to display the results of the segmentation analysis.
  6. Modelling Evaluation & Deployment
  7. Project Dissemination

### 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 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.

**ESSENTIAL CRITERIA:**

1. Hold, or be about to obtain in July 2019, at least a 2.1 Honours degree (or equivalent) in Computer Science, Applied Statistics, Mathematics, Data Analytics or a closely related discipline.
2. At least 3 months' relevant work or research experience\* in data science, in at least one of the following areas:
  - advanced statistical analysis
  - machine learning and AI
  - predictive analytics
  - natural language processing
  - advanced data visualisation.
3. Proficiency in one or more programming languages commonly used in data science and AI such as R or Python or equivalent.

\*may be demonstrated through a suitable module or student project or placement

4. Good oral, written and presentation skills.
5. Ability to interact with clients at all levels of the business.
6. Ability to communicate complex technical and statistical concepts to non-specialists.
7. Ability to think logically, create solutions and make informed decisions.
8. A high level of numeracy and the ability to interpret data.
9. The ability to think critically about a statistical problem using real data.
10. Highly motivated and capable of working independently.
11. Ability to work effectively as a member of a group.
12. Well organised, attention to detail and ability to meet tight deadlines.
13. An interest in staying with the Company. (Associates are normally invited to apply for permanent positions).
14. Ability to take part in Associate management courses (requiring two one-week periods in England).
15. 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. At least 1 year's relevant work experience.
3. Experience of SQL and database design/data warehousing.
4. Experience of AWS or other cloud based technologies.
5. Experience of managing a significant data analytics project over its life-cycle.
6. Experience of proximity marketing via technology based solutions.
7. Proficiency with common data science and machine learning libraries and packages.
8. Proficiency with one or more relevant common GUI data science tools.
9. Proficiency with data visualisation tools or libraries.
10. Ability to deliver training and follow-up support to operatives.
11. Exhibit intellectual discipline and humility.
12. Ability to influence people effectively.
13. 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.

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