

RECRUITMENT PACK

This document includes the following information:

- Job Description
- Person Specification
- Additional information

Making an application:

Please complete the short on-line application form, which includes some standard questions, and attach the following documents. (Shortlisting is undertaken by a panel after the closing date on the basis of information provided.)

- a. A covering letter - explaining why you are interested in this post, and giving examples to demonstrate how you meet the requirements of the job as outlined in the Person Specification.
 - b. A curriculum vitae - giving full details of your qualifications and experience to date.
- Links to Guidance Notes and Frequently Asked Questions can be found on the Search Results page. These pages will open in a new window.
 - **We recommend that you take a copy of this recruitment pack to help with your preparation.**

A commitment to sustaining an inclusive and diverse community is one of the University's Core Values and we are keen to address any imbalances in our workforce.

The University of Essex is proud to be part of the Disability Confident scheme and is committed to supporting diversity and equality, representative of our inclusive community. As part of our commitment to this scheme any candidate who has a disability and meets all the essential criteria for the role will be offered an interview. We also work in partnership with national disability organisation [DisabledGo](#) who provide detailed online access guides to many of our campus buildings and facilities which you may find useful.

Please note: We are only accepting on-line applications for this post. However, if you have a disability that makes it difficult for you to provide us with information in this way, please contact the Resourcing Team (01206 874588/873521/873461) for help.

Closing Date: 07 August 2018

Interviews are planned for: 24 August 2018





JOB DESCRIPTION – Job ref REQ01547

Job Title:	AI Data Scientist (KTP Associate)
Contract:	Full-time. Fixed term for 36 months. The position is fixed term due to being part of a Government funded innovation programme, however there may be potential to continue in employment with the company partner following the completion of the KTP.
Hours:	37.5 hours per week (standard working week for host company)
Salary:	£34,250 - £36,800 per annum
Department/School/Section:	School of Computer Science and Electronic Engineering
Responsible to:	Professor Anthony Vickers Head of School of Computer Science and Electronic Engineering
Responsible to on a day to day basis:	Dr Haider Raza, Academic Supervisor, University of Essex and Philip Richards, Host Company Supervisor, Provide
Location:	This post will be based at: Provide CIC 900 The Crescent Colchester Business Park Colchester Essex CO4 9YQ

Purpose of the Job:

The University of Essex in partnership with Provide CIC offers an exciting opportunity to a recent graduate to contribute to the creation of a ground-breaking decision making engine using AI and Natural Language Processing (NLP) to reduce the frequency of face-to-face clinician appointments in a defined healthcare test area, guided by psychosocial research into acceptance and adoption of technological innovations in healthcare.

Duties of the Post:

The main duties of the post will include:

- Investigation and implementation of machine learning algorithms.
- Investigation of NLP, text analysis and machine learning techniques applied to health electronic records.
- Design and development of a commercial decision-making software service tool for different platforms, including mobile and web apps.
- Embedding technology and upskilling company staff.
- Supporting company scale up and exploitation of new technology.
- Participate in academic or industrial conferences and other events, to disseminate and present our research to the wider community.
- Regular travel around East Anglia to conduct fieldwork and meet with Provide CIC staff members.

These duties are a guide to the work that the post holder will initially be required to undertake. They may be changed from time to time to meet changing circumstances.

July 2018



PERSON SPECIFICATION

JOB TITLE: AI Data Scientist (KTP Associate)	POST REF: REQ01547
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Qualifications /Training

	Essential	Desirable
▪ BSc in Computer Science or a related discipline.	x	
▪ MSc in Statistics, Data Science, Computer Science, Mathematics or a related discipline.		x
▪ PhD in Computer Science, Data Science and aligned fields.		x

Experience/Knowledge

	Essential	Desirable
▪ Commercial experience in applied data science techniques.	x	
▪ Commercial experience in applied data science techniques within the healthcare sector.		x
▪ Good theoretical and applied knowledge of mathematical methods for data science, including foundational topics such as calculus, linear algebra, statistics and optimisation.	x	
▪ Good knowledge of at least one computer language (eg. Python, Java, R, MATLAB, etc.) and related data science stack (eg. Numpy, Scikit-learn, Scipy, Xgboost).	x	
▪ Good knowledge of machine learning algorithms (eg. Neural Networks, Decision trees, SVM, etc.) and related software libraries (eg. Keras, Lasagne, Tensorflow, Theano, etc.).	x	
▪ Ability to write custom neural network layers and objective functions.		x

Skills/Abilities

	Essential	Desirable
▪ Effective communication skills to be able to work collaboratively in a small team	x	
▪ Excellent time management and organisational skills and the ability to work to tight deadlines.	x	
▪ Ability to interface with people with commercial interests and from varied technical backgrounds.	x	
▪ Good command of written and spoken English	x	
▪ Ability to work independently and as part of a team	x	
▪ Proactive and committed to the project	x	

Other

	Essential	Desirable
▪ An understanding of, and commitment to, equality and diversity	x	
• Must be able to travel regularly around East Anglia to conduct fieldwork and meet with Provide CIC staff members.	x	
▪ Can meet the requirements of UK 'right to work' legislation *	x	

1 The University has a responsibility under the Asylum, Immigration and Nationality Act 2006 to ensure that all employees are eligible to work in the UK. Prior to commencing employment, the successful candidate will be asked to provide documentary evidence to this effect. The University may be able to offer Tier 2 Sponsorship for this role. For further information about UK immigration requirements please follow this link <https://www.gov.uk/government/organisations/uk-visas-and-immigration>



Working at the University of Essex

The University of Essex is proud to be:

A leading academic institution with an international reputation for the quality of its research and teaching and an international community that is committed to equality and diversity.

Knowledge Transfer Partnerships (KTP)

A Knowledge Transfer Partnership (KTP) is a three-way project between a company, a university and a graduate (known as an Associate), which enables the transfer of knowledge, technology and skills to which the company currently has no access. Supported by the university, KTP Associates manage strategic projects within the company.

A KTP can help graduates to enhance their career prospects by providing them with an opportunity to manage a challenging project, which allows them to use their degree, and is central to an organisation's strategic development and long term growth.

Whilst the Associate leads the KTP project, they are supported by experienced staff from the company and university. They are also assigned a KTP Adviser, who supports them in maintaining good working relationships within the partnership and in planning their professional development in broad terms.

For more information visit <http://ktp.innovateuk.org>.

Provide CIC

Provide is a Community Interest Company (social enterprise).

We deliver a broad range of health and social care services in the community, and are committed to making sure that they are safe, responsive and of high quality. We work from a variety of community settings, such as three community hospitals, community clinics, schools, nursing homes and primary care settings, as well as within peoples' homes to provide more than 40 services to children, families and adults. We also offer some online services.

We provide services across Essex and in Cambridgeshire (including Peterborough), Suffolk and Norfolk as well as in the London borough of Waltham Forest. We have an income of approximately £67 million, employ more than 1,050 people and serve communities with a total population of more than 1.9 million people.

For more information, visit <https://www.provide.org.uk/>.

School of Computer Science and Electronic Engineering, University of Essex

The School of Computer Science and Electronic Engineering comprises 1,200 students from more than 75 countries, supported by 170 academic, research and support staff. The school is conducting world-leading research in areas such as evolutionary computation, brain-computer interfacing, intelligent inhabited environments and financial forecasting, and boasts the largest robotics research group of its kind in the UK.

For more information, visit <https://www1.essex.ac.uk/csee/about/default.aspx>.

General Information

Informal enquiries may be made to the project Academic Supervisor, Dr Haider Raza (email: h.raza@essex.ac.uk) or Robert Walker, KTP Manager (tel: 01206 874076 email: r.walker@essex.ac.uk). However, applications must be made online.



KTP is funded by a UK Government grant and this appointment carries no expectation of extension beyond the end of the fixed-term contract.

In principle, previous KTP Associates are not eligible to apply. There are some circumstances where a previous Associate can apply for a new KTP. Please check with your previous KTP Adviser for information.

Please note that the role holder will be based at Provide's offices in Colchester, but may be expected to travel to the University of Essex Colchester Campus from time to time.

People Supporting Strategy

Please find a link to the People Supporting Strategy.

<http://www.essex.ac.uk/hr/policies/docs/people-oct15.pdf>

Benefits

Our staff and students are members of the University for life. We believe a person's potential is not simply defined by grades or backgrounds, but by a willingness to question, to collaborate and to push at the edges of knowledge and their own potential.

As an employer we offer a range of benefits and a commitment to career development and equal opportunities in an environment that both reflects and creates a rich interaction of people, disciplines and ideas.

- Pension scheme
- Generous holiday entitlement
- Competitive salaries
- Training and development Family Friendly policies
- On campus childcare facilities, for more information visit www.wivenhoeparkdaynursery.co.uk
- Childcare vouchers
- Relocation package for qualifying staff
- Interest free season ticket loan
- Range of optional salary exchange tax benefits (pension, childcare and bicycle schemes)

No smoking policy

The University has a no smoking policy.

July 2018