

RECRUITMENT PACK

This document includes the following information:

- Job Description
 - Person Specification
 - Additional information
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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 876559) for help.

Closing Date: 13 March 2019

Interviews are planned for: Late March / Early April 2019



JOB DESCRIPTION – Job ref REQ02381

Job Title:	AI Data Scientist (KTP Associate)
Contract:	Full-time. Fixed-term for 30 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:	40 hours per week (standard working week for host company)
Salary:	£32,000 - £35,000 per annum
Department/School/Section:	School of Computer Science and Electronic Engineering (CSEE)
Responsible to:	Head of School of Computer Science and Electronic Engineering
Responsible to on a day to day basis:	Academic Supervisor, University of Essex and Company Supervisor, TT Education
Location:	This post will be based at: TT Education The Yellow House Knowledge Gateway Nesfield Road University of Essex Colchester CO4 3ZL

Purpose of the Job:

The University of Essex in partnership with TT Education offers an exciting opportunity to a recent graduate with the relevant skills and knowledge to develop a new CPD tracker using AI and embedded machine learning to track and enhance performance of all staff and to gather data from the CPD tracker that will provide insight into effective strategies offering senior leaders a clear path for development driving industry-wide improvement.

Duties of the Post:

The main duties of the post will include:

Technical duties

- Investigation and implementation of AI and machine learning techniques.
- Investigation of NLP and text analytics, applied to management systems.
- Iterate development of ML models using selected techniques. Provide comparisons with existing knowledge and techniques and interpretable rules, and propose ways they could be implemented by operational teams.
- Simulate, test, analyse and collate results for reports, presentations and publications.
- Design and development of a commercial management service tool.
- Support scaling of the technology to a commercial scale.

Project Management duties

- Embedding technology and upskilling company staff.



- Support exploitation and commercialisation of a new-to-market technology, including communication with and presenting to potential clients and industry representatives.
- Collaborate with Academic team on preparation of academic journal publications.
- Provide regular updates on progress to the project team via oral and written reports and presentations.
- Manage the project risk log.
- Manage project budgets, specifically travel, consumables and personal development budgets.

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.

February 2019

PERSON SPECIFICATION

JOB TITLE: AI Data Scientist (KTP Associate)	POST REF: REQ02381
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Qualifications /Training

	Essential	Desirable
▪ A degree in Computer Science or a related discipline, or equivalent experience	X	
▪ MSc in Statistics, Data Science, Computer Science, Mathematics or a related discipline		X
▪ PhD in Statistics, Data Science, Computer Science, Mathematics or a related discipline		X

Experience/Knowledge

	Essential	Desirable
▪ Good theoretical and applied knowledge in a range of statistical and computational techniques, including regression and classification methods, machine learning and data visualisation	X	
▪ Good theoretical and applied knowledge of mathematical methods for data science, including foundational topics such as statistics, optimisation, calculus and linear algebra	X	
▪ Experience in applied data science techniques, such as NLP, text analytics, recommender systems	X	
▪ Good knowledge and experience of high level programming languages (preferably R, Python)	X	
▪ Experience of working both with structured and unstructured data	X	
▪ Experience of project management to successful conclusion and working within a team, preferably in a commercial environment		X

Skills/Abilities

	Essential	Desirable
▪ Effective communication skills to be able to work collaboratively in a small team	X	
▪ Strong presentation skills and experience of presenting technical information to a lay audience	X	
▪ Ability to work to deadlines	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
▪ Can meet the requirements of UK 'right to work' legislation*	X	
▪ An understanding of, and commitment to, equality and diversity	X	



* 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>

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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>.

About TT Education

TT Education are the UK's leading school improvement organisation, working with schools, academies and trusts in the United Kingdom and beyond to improve the quality of children's education.

In 2018, we were delighted to be recognised for the outstanding quality of our support and training for schools through the award of School Improvement Provider of the Year 2018.

Founded in January 2012 by David Maytham, everything we do is underpinned by the belief that every child has the right to a good education. We're dedicated to improving life chances for all pupils by empowering teachers and leaders to help create sustainable improvement in their schools through engaged learning and inspirational leadership.

We help schools, teachers and leaders to make progress through our outstanding CPD courses, inset days, consultancy, digital solutions and longer-term packages of school improvement support.

School of Computer Science and Electronic Engineering (CSEE)

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://www.essex.ac.uk/csee/>

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 KT Adviser for information.

Please note that the role holder will be based at Aquatronic Group located in Colchester, Essex, 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 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
- 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

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