RECRUITMENT PACK

This document includes the following information:

- Job Description
- Person Specification
- Additional information

Making an application:

When completing the on-line application form you will be asked to answer questions to help you demonstrate how you meet the requirements of the post. Your answers will be used at the shortlisting and interview stages of the recruitment process. We therefore recommend that you take a copy of this recruitment pack to help with your preparation.

NOTE: You don't have to answer the questions in one attempt, but can save your incomplete application and return to it at another time. You may want to draft your answers using Microsoft Word and then copy your text into the application form. Please be aware that formatting (e.g. underline, bold, bulleting) will be lost in this process. If you are using an Apple product you will need to use an alternative web browser to Safari such as Google Chrome.

- 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) for help.

Closing Date: 22 October 2017

Interviews are planned for: To be confirmed

Produced by:
Resourcing Team
Human Resources
University of Essex
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom
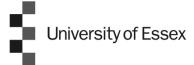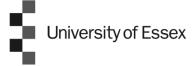**Tel: +44 (0)1206 873521/874588**
Email: resourcing@essex.ac.uk

University of Essex

JOB DESCRIPTION – Job ref REQ00911

Job Title and Grade:	Data Engineer Grade 8
Contract:	Fixed-term, Full-time This post is full-time and fixed-term until 30 March 2021. The post is fixed term due to the nature of the funding
Hours:	A notional minimum of 36 hours per week
Salary:	£32,548 - £38,832 per annum
Department/Section:	UK Data Archive
Responsible to:	Functional Director
Reports on a day to day basis to:	Repository Architect
Responsible for:	Frontrunners
Purpose of job:	The Data Engineer delivers and optimises the infrastructure designs set by the repository architect. This post-holder will be responsible for: • Implementing data flows to connect operational systems, data for the new Data Service as a Platform (DSaaP) in specific support of the Smart Meter Research Portal (SMRP) project. • Documenting source-to-target mappings. • Re-engineering manual data flows to enable scaling and repeatable use within DSaaP. • Support the build of data streaming functionality. • Write ETL scripts and code to make sure the ETL process performs optimally with Apache NiFi, HBase and Spark. • Design and develop business intelligence reports and solutions. Building accessible data for analysis.

Duties of the Post:

The main duties of the post will include:

1. Understanding and advocating core technical concepts related to DSaaP and how to conceive and develop new methods and algorithms for this platform.

2. Understanding the concepts and principles of data modelling and being able to produce, maintain and update relevant data models for SMRP.

3. Designing, coding, testing, correcting and documenting simple programs or scripts under the direction of others to grow the portfolio of deliverables for DSaaP

4. Assisting with the design and implementation of tools and techniques to enable data visualisation and understanding of smart meter energy data in accordance with agreed organisational standards that ensure services are resilient, scalable and future-proof.

5. Assisting with the design and implementation of tools and techniques to enable data visualisation and understanding of smart meter energy data in accordance with agreed organisational standards that ensure services are resilient, scalable and future-proof.

6. Acting as the lead advocate for new approaches to privacy and disclosure, including chairing a privacy working group.

7. Any other duties dependant on seniority.

Any other duties as may be assigned from time to time by the Head of Section or their nominee.

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.

Terms of Appointment:
For a full description of the terms of appointment for this post please visit:
http://www.essex.ac.uk/hr/current-staff/terms.aspx#

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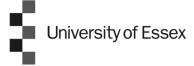
PERSON SPECIFICATION

JOB TITLE: Data Engineer

Qualifications /Training

	Essential	Desirable
▪ Undergraduate or first degree in a computer-related or data-related discipline	☒	☐

Experience/Knowledge

	Essential	Desirable
▪ Experience of statistical methods including data analysis, regression, clustering etc.	☒	☐
▪ Experience of working with databases and querying (SQL, mySQL etc.)	☒	☐
▪ Working knowledge of machine learning or artificial intelligence, and text analytics	☒	☐
▪ Experience of managing and using large-scale complex data	☒	☐
▪ Experience of implementing components of data pipelines (e.g. ETL or messaging systems)	☒	☐
▪ An understanding of the data processing requirements and QA operations for the production of high quality data resources	☒	☐
▪ Experience of R and/or Python based statistical software and experience of using these packages for data management	☒	☐
▪ Working knowledge of data modelling principles and metadata schema	☐	☒
▪ Experience of implementing, or an understanding of secure data systems	☐	☒
▪ Understanding of the research needs of external researchers and the user community	☐	☒
▪ Experience of or an interest in big data infrastructure and big data analytics	☐	☒
▪ Formal programming training or experience, particularly Java	☐	☒
▪ Experience of a user support role in any context	☐	☒
▪ Experience of working with NoSQL databases e.g. triple stores or graph databases	☐	☒
▪ Experience of constructing and adapting reports or visualisations in BI or Analytics platforms e.g. Tableau or Pentaho or SSRS etc.	☐	☒

Skills/Abilities

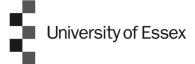|	Essential	Desirable
▪ Good interpersonal written and verbal communication skills	☒	☐
▪ Good numeracy skills	☒	☐
▪ Exceptional attention to detail	☒	☐
▪ High personal integrity, with the ability to maintain the confidentiality of personal data	☒	☐
▪ The ability to produce high quality work within deadlines	☒	☐
▪ Self-motivation, initiative, and ability to work independently	☒	☐
▪ Ability to work within a non-hierarchical team, to fail-fast and	☒	☐

	Essential	Desirable
give/receive constructive criticism		
▪ Ability to manage a diverse workload and competing priorities	☒	☐
▪ IT skills and familiarity with Linux based software	☒	☐

Other

	Essential	Desirable
▪ Ability to meet the requirements of UK 'right to work' legislation*	☒	☐
▪ Willingness to travel for work-related purposes	☒	☐
▪ A commitment to providing high quality research resources to the user community	☒	☐
▪ Can fulfil the staff vetting procedure for Government contracts	☒	☐

* 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. Please note that the University will not be able to issue a Tier 2 Certificate of Sponsorship for this post. For further information about UK immigration requirements please follow this link
https://www.gov.uk/government/organisations/uk-visas-and-immigration

September 2017

Additional Information

UK Data Archive

For more information on the UK Data Archive, please visit: http://www.data-archive.ac.uk/ and https://www.ukdataservice.ac.uk/

People Supporting Strategy

Please find a link to the People Supporting Strategy.

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

General information

Informal enquiries may be made to Darren Bell, Repository Architect (telephone: 01206 873574 or e-mail: dbell@essex.ac.uk). However, all applications must be made online.

This post involves access to Government systems, information or data and will be subject to the staff vetting process. The UK Data Archive is ISO 27001, certified for Information Security Management.

The University of Essex has Government contracts, some of which require it to access Government systems, information or data. We have a duty to protect these assets and this obligation extends to our employees.

Due to the nature of the work, applicants who are offered employment in this role will be subject to a vetting procedure before the appointment is confirmed to enable the University to verify the following for the successful candidate:

- ▪ Identity
- ▪ Employment history (for a minimum of the past 3 years)
- ▪ Nationality and immigration status
- ▪ Criminal Record (unspent convictions only)
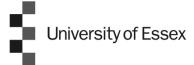
Criminal Record Disclosure Checks:

We encourage all applicants to provide details of warnings, reprimands, cautions or unspent criminal convictions at an early stage in the application process. Should you wish to declare such information, please email the Resourcing Team in confidence, (resourcing@essex.ac.uk) attaching brief details, or alternatively post details to the Resourcing Manager, Human Resources, University of Essex, Wivenhoe Park, Colchester CO4 3SQ. This information is seen only by those directly involved in the recruitment process.

Should you be appointed to this post you will be asked to make an application for a Basic criminal record Disclosure. This only asks about unspent convictions. More information about the process can be at http://www.disclosurescotland.co.uk/.

Having a criminal record will not necessarily bar you from working with us – this will depend on the nature of the position and the circumstances and background to your offence. A copy of the University of Essex policy on the recruitment of ex-offenders is available on the University website: http://www.essex.ac.uk/personnel/Pol&Proc/Rec&sel/disclosure.html

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
- 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.

This document is produced by:

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