

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 876559) for help.

Closing Date: 28 September 2018

Interviews are planned for: 17 October 2018



JOB DESCRIPTION – Job ref REQ01809

Job Title and Grade:	Front-End and Services Developer, Grade 7
Contract:	Fixed term, full-time until 31/05/2022. This post is fixed term due to funding.
Hours:	A notional minimum of 36 hours per week
Salary:	£30,395 - £33,199 per annum
Department/Section:	Smart Meter Research Portal Project Team UK Data Archive
Responsible to:	Co-Investigator
Reports on a day to day basis to:	Repository Architect
Purpose of job:	<p>The Front-End and Services Developer builds and optimises the front-end infrastructure based on UX/UI designs set by the repository architect in response to researcher requirements. The post holder will also work closely with other developers in the team to acquire the necessary skills to manipulate data from ElasticSearch and Hadoop clusters at the back-end in a microservices environment, taking an active role in how the application functions as well as in how it looks.</p> <p>This post holder will be responsible for:</p> <ul style="list-style-type: none"> • Ensuring the technical feasibility of UI/UX designs for the Smart Meter Research Portal (SMRP) • Building reusable code and libraries for future use • Rapid prototyping of new features and amending them in response to user feedback • Developing and suggesting new user-facing features • Optimizing web applications for maximum speed and scalability.

Duties of the Post:

- Understands core technical concepts related to the Smart Meter Research Portal (SMRP) and how to conceive and develop new methods and UX/UI components for this platform.
- Understands the basic principles of data modelling and is able to bridge the gap between those models and their visual representation.
- Designs, codes, tests, corrects and documents code or scripts under the direction of others to grow the portfolio of deliverables for SMRP.
- Assists 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 the front-end and supporting services are resilient, scalable and future-proof.
- Ensures risks associated with deployment are adequately understood and documented and correctly executes test scripts under supervision.
- Assists in planning and in the delivery of the core user-facing activities of the SMRP, including the management of and participation in projects.



- Represents the section from a UX/UI perspective at management and other meetings; actively contributes to information exchange within the section and between other sections and service partners as appropriate.
- Internal Training and Capacity Building: Works closely with colleagues in the SMRP team to acquire big data and microservices knowledge.

Any other duties required by the Director 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#>

August 2018

PERSON SPECIFICATION

JOB TITLE: FRONT-END AND SERVICES DEVELOPER

Qualifications/Training

	Essential	Desirable
▪ Undergraduate degree or equivalent, in a computer-related or data-related discipline	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Experience/Knowledge

	Essential	Desirable
▪ Proficient understanding of web markup, including HTML5 and CSS3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Proficient understanding of client-side scripting and JavaScript frameworks, for example ReactJS	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Good understanding of search engine and indexing principles	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of working with RESTful web services	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of coding against databases, either relational or ORM	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of handling XML and/or JSON data structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of IDEs such as Eclipse or IntelliJ or VSCode	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Familiarity with programming in Java SE7 or above	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Experience of code versioning tools like Git or Subversion	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Basic knowledge of image authoring tools such as Gimp or Photoshop.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Familiarity with test-driven development practices	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Familiarity with or a demonstrable interest in Hadoop big data infrastructure and big data analytics e.g. Hortonworks, Cloudera, Apache Spark etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience working with Docker and/or other containerisation technologies e.g. Kubernetes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Working knowledge of data modelling principles and/or metadata schema	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of managing and using large-scale complex data	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of functional programming e.g. Scala	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of working with NoSQL databases e.g. triple stores or graph databases	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of working with cloud services e.g. AWS, Azure etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Experience of Java web frameworks e.g. Spring or Play or Grails etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Skills/Abilities

	Essential	Desirable
▪ Good interpersonal written and verbal communication skills	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Good numeracy skills	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Exceptional attention to detail	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Ability to acquire new technical skills rapidly as a “self-starter”	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ High personal integrity, with the ability to maintain the confidentiality of personal data	<input checked="" type="checkbox"/>	<input type="checkbox"/>

▪ The ability to produce high quality work within deadlines	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Self-motivation, initiative, and ability to work independently	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Ability to work within a non-hierarchical team, to fail fast and give/receive constructive criticism.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Ability to manage a diverse workload and competing priorities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ IT skills and familiarity with Linux based software	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Other

	Essential	Desirable
▪ Ability to meet the requirements of UK 'right to work' legislation*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Can fulfil the staff vetting procedure for Government contracts (See General Information)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ Willingness to travel for work-related purposes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
▪ A commitment to providing high quality research resources to the user community	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* 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 may 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>

ADDITIONAL INFORMATION

UK Data Archive, University of Essex

You can find more information about the UK Data Archive and the UK Data Service at the following link:

- <http://www.data-archive.ac.uk>
- <http://ukdataservice.ac.uk>

You can also follow us on Twitter:

- @UKDataArchive
- @UKDataService

General information

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

Staff Vetting Procedures for Government Contracts:

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 Disclosure and Barring Service (DBS) check to get a copy of your criminal record. This is called 'basic disclosure'. This only asks about unspent convictions. More information about the process can be at <https://www.gov.uk/request-copy-criminal-record>.

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: <https://www.essex.ac.uk/staff/recruiting-staff/recruitment-of-ex-offenders-and-disclosure-and-barring-service>

People Supporting Strategy

Please find a link to the People Supporting Strategy below:

<https://www.essex.ac.uk/-/media/documents/directories/human-resources/people-supporting-strategy.pdf>

Pay and benefits

We advertise our salaries on a range to indicate the trajectory of progression that can be made. Appointments are usually made at the start of the salary range. The university salary structure includes automatic pay progression within the published grades, subject to service and performance. In addition to this, there are performance related annual pay review schemes in place.

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)

This document is produced by:

Resourcing Team
Human Resources
University of Essex
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom
Tel: +44 (0)1206 876559
Email: resourcing@essex.ac.uk

August 2018