

## Job Related Information

This document includes information about the role for which you are applying and the information you will need to provide with your application.

### 1. Role Details

Vacancy reference	14062
Job title:	Research Assistant / Associate - Text and Data Mining
Reports to:	Senior Research Fellow
Salary:	Ranging from £29,799 to £38,833
Terms and conditions:	Full time Research Staff
Grade	AC1 / AC2
Duration of post:	Temporary contract until 31 December 2018
Working hours:	Full time, Monday to Friday
Location:	Milton Keynes
Closing date:	30 November 2017 at 5pm
Type of application form accepted:	Short Application with CV (plus covering letter)
Number of referees required:	Three
Unit recruitment contact:	Ortenz Rose

## 2. Summary of duties

The team at the OU runs the world's largest aggregator of open access research papers called CORE. CORE provides free access to the full-texts of 8 million+ Open Access research papers as well as a number of intelligent information services for researchers and organizations. These include services enabling text & data mining, recommender systems, content management services for libraries & repositories. We are also in the process of developing analytical services to support business intelligence for research.

We are currently looking for a new member for our team with computer science background and experience in Text and Data mining to contribute to our research and development effort.

The appointment will be made on the Academic Grade AC1 or AC2 salary scales depending on qualifications and experience.

### *JOB DESCRIPTION*

You will work as part of a team of developers and researchers on designing, prototyping and putting into practice novel scalable solutions helping scientists to work with research literature more effectively. Your work will involve:

- Collaboratively designing Text and Data mining experiments;
- Gathering data and developing prototypes;
- Training and testing (machine learning ) models;
- conducting and analysing experimental data;
- contributing to the writing of research papers;
- moving prototypes into a production environment.

## 3. Person specification

### **Requirements (E = Essential/ D = Desirable)**

#### **Education, qualifications and training**

(E) A Master in Computer Science or related field, or equivalent experience.

(E) Appointment as a Research Associate requires a PhD in Computer Science or related field or 2+ years equivalent in quality of achievement.

#### **Knowledge, work and other relevant experience**

<b>Essential:</b>	<ul style="list-style-type: none"><li>• Good theoretical foundation and some practical experience with at least two of the following: data analysis/statistics, machine learning, natural language processing, information retrieval;</li><li>• Ability to design and prototype software solutions;</li><li>• Very good programming skills in Java;</li><li>• Ability to analyse data in Python, R or Matlab;</li></ul>
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	<ul style="list-style-type: none"> <li>• Good knowledge and experience of working with and querying databases;</li> <li>• Good knowledge of the Linux environment (deployment, essential scripting, configuration, logging, etc.);</li> <li>• Experience with code sharing, issue tracking (JIRA, GIT) and testing;</li> <li>• Willingness to follow an agile development process according to Scrum.</li> </ul>
<b>Desirable:</b>	<ul style="list-style-type: none"> <li>• Some experience with web development;</li> <li>• Ability to process data on a cluster (e.g. Hadoop/Spark).</li> </ul>
<b><u>Personal abilities and qualities</u></b>	
<b>Essential:</b>	<ul style="list-style-type: none"> <li>• Ability to quickly demonstrate understanding of the project aims and specific task as requested;</li> <li>• Ability to write technical reports and contribute to research papers;</li> <li>• Ability to pro-actively seek solutions to complex problems;</li> <li>• Fluency in English;</li> <li>• Team player;</li> <li>• Hard worker;</li> <li>• Ability to work to challenging targets.</li> </ul>
<b>Desirable:</b>	n/a

#### 4. Role specific requirements e.g. Shift working

n/a

#### 5. About the unit/department

##### **Faculty of Science, Technology, Engineering & Mathematics**

The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute (distinct research institute)
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

**“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”**

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

*We are inclusive:*

- We transform people's lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM

*We are highly innovative:*

- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy

*We deliver significant social and economic impact:*

- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working
- The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers
- Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK

The Knowledge Media Institute (KMi) of the UK's Open University is a highly successful interdisciplinary research centre founded at The Open University in 1995, and located in attractive premises at The Open University's main campus in Milton Keynes, UK. We offer a stimulating environment, widely acknowledged to be at the leading edge of research and development, particularly in Semantic Technologies, Human Computer Interaction, New Media and Information Retrieval. The style, impact and content of our work can be seen at <http://kmi.open.ac.uk/>

## 6. How to obtain more information about the role or application process

If you would like to discuss the particulars of this role before making an application please contact Dr Petr Knoth on +44 (0)1908 654548 or email: [petr.knoth@open.ac.uk](mailto:petr.knoth@open.ac.uk)


If you have any questions regarding the application process please contact Ortenz Rose on +44 (0)1908 654774 or email: [ortenz.rose@open.ac.uk](mailto:ortenz.rose@open.ac.uk)

## 7. The application process and where to send completed applications

Your application should contain:	<p>a) A completed short application for employment form;  b) An up-to-date CV;  c) Covering letter.</p> <p>Please ensure you complete all relevant sections of the application form. You are required to include a curriculum vitae; however <b>any CVs submitted <u>without a completed application for employment form will not be accepted.</u></b></p> <p>You are also asked to provide a covering letter describing how your skills make you a suitable candidate for the post.</p>
Please ensure that your application reaches the University by:	30 November 2017 at 5pm
E-mail your application to:	<a href="mailto:kmi-recruitment@open.ac.uk">kmi-recruitment@open.ac.uk</a>
Or post it to Name/Job title:	Ortenz Rose / KMi Senior Co-ordinator – Staffing & Recruitment
Department/Unit:	The Knowledge Media Institute (STEM)
Address:	The Open University, Walton Hall, MILTON KEYNES. Buck MK7 6AA

## 8. Selection process and date of interview

The interview panel will be chaired by:	Dr Petr Knoth - Senior Research Fellow
The other members of the interview panel will be:	To be advised
The interviews will take place on:	To be advised
The selection process for this post will include:	<ul style="list-style-type: none"> <li>• A review of applications by the interview panel;</li> <li>• A formal interview.</li> </ul>

	<p>We will let you know as soon as possible after the closing date whether you have been shortlisted for interview. Further details on the selection process will also be sent to shortlisted candidates.</p> <p>Applications received after the closing date will not be accepted.</p>
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