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	13942
Job title:	Research Assistant / Associate x2
Reports to:	Professor of Knowledge Technologies
Salary:	Ranging from £29,799 to £38,833
Terms and conditions:	Full time Research Staff
Grade	AC1 / AC2
Duration of post:	Until 30 June 2019
Working hours:	37 hours per week (full time, Monday to Friday)
Location:	Milton Keynes
Closing date:	12 noon on 3 October 2017
Type of application form accepted:	Standard or Accessible version (plus CV & covering letter)
Number of referees required:	Three
Unit recruitment contact:	Ortenz Rose

2. Summary of duties

The Open University's Knowledge Media Institute (KMi) in the UK has openings for **two Research Associate/Assistant (RA) positions** to join a successful team at the leading edge of research and development in several areas, including Data Science, Semantic Technologies, Visual Analytics, and Urban Computing. The team, which is led by Prof Enrico Motta, has recently been awarded a number of new grants to progress research in these areas, consolidate the infrastructure developed in the MK:Smart project (www.mksmart.org), and also engage with and train SMEs in the SEMLEP area to support data-intensive innovation.

The two RAs will tackle different aspects of our research agenda, working towards their own individual research and development objectives, while at the same time collaborating with the other members of team to ensure the realization of the wider team-level goals. In particular:

RA1 will work on issues at the intersection of Human-Computer Interaction and Big Data, developing new visual analytics solutions and data exploration support for the MK Data Hub (https://datahub.mksmart.org), a state of the art computational infrastructure for acquiring and managing large scale data sources. The MK Data Hub provides a unique environment, characterized by thousands of (static) datasets and (dynamic) data streams and therefore poses interesting new challenges with respect to enabling both non-expert users and application developers to quickly explore and make sense of the data available on this platform. Such sensemaking support will also include solutions to support public access to the data.

RA2 will focus on progressing our research agenda on Urban Computing, working with our partners in the MK Innovation Cluster to develop new solutions tackling urban challenges and sustainability issues in Milton Keynes and beyond. Urban Computing is a highly interdisciplinary field, leveraging technologies such as Machine Learning and Internet of Things, as well as a variety of other fields, such as urban planning, environmental science, intelligent mobility and others. Hence, we welcome applications from a broad range of candidates with expertise in any of these fields.

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

Essential:	RA1
	• Experience with Machine Learning and Data Mining algorithms;
	• Experience with the development of user interfaces;
	• Experience in Data Visualization;

	• Excellent programming skills for end-to-end software development (Java, Python, Javascript, or equivalent). RA2 • An understanding of the issues associated with Urban Computing; • Experience with handling data streams and Internet of Things solutions; • Experience with Machine Learning and Data Mining algorithms; • Excellent programming skills for end-to-end software development (Java, Python, Javascript, or equivalent).
Desirable:	RA1 and RA2 • Knowledge of existing data standards, e.g. linked, open and semantic data; • Experience with Apache Server, SQL/NoSQL solutions (including Graph DBs), and GNU/Linux; • Experience in the design and implementation of Web services and/or RESTful services.
Personal abilities and qualities	
Essential:	RA1 and RA2 • Ability to quickly demonstrate understanding of the project aims and specific tasks as requested; • An ability to engage with users and partners and understand their needs and requirements; • Self-starter in providing solutions to meet project needs; • Excellent written and oral communication skills; • Ability to work to challenging targets and deadlines; • Ability to handle constructive feedback.
Desirable:	n/a

4. Role specific requirements e.g. Shift working

n/a

5. About the unit/department

Faculty of Science, Technology, Engineering & Mathematics

The newly formed Faculty of Science, Technology, Engineering and Mathematics (STEM) comprises:

- 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 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 Enrico Motta on +44 (0)1908 653506 or email: enrico.motta@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

7. The application process and where to send completed applications

Please ensure that your application reaches the University by:	12 noon on 3 October 2017
Post it to:	Ortenz Rose
Name/Job title:	KMi Senior Co-ordinator - Staffing & Recruitment
Department/Unit:	The Knowledge Media Institute (STEM)
Address:	The Open University, Walton Hall, MILTON KEYNES. Bucks
Post Code:	MK7 6AA
Or e-mail your application to:	kmi-recruitment@open.ac.uk

8. Selection process and date of interview

The interview panel will be chaired by:	Enrico Motta - Professor of Knowledge Technologies
The other members of the interview panel will be:	TBA
The interviews will take place:	11 & 12 October 2017

The selection process for this post will include:	• A review of applications by the interview panel; • A formal interview. Please ensure you complete all relevant sections of the application form. You are encouraged to also include a curriculum vitae; however **any CV submitted <u>without</u> a completed application for employment form <u>will not</u> be accepted**. You are also asked to provide a covering letter describing how your skills make you a suitable candidate for the post.

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.

Applications received after the closing date will not be accepted.