



Further Particulars

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

1. Role details

Vacancy reference:	8306
Job title:	Research Assistant / Associate
Reports to:	Research Fellow
Salary:	Ranging from £27,578 – £30,122
Terms and conditions of service:	Full time Research Staff
Grade:	AC1 / AC2
Duration of post:	1 st November 2012 – 31 st October 2014
Working hours:	Full time – 37 hours per week
Location:	Knowledge Media Institute of The Open University
Closing date:	12 th September 2012
Type of application form accepted:	Standard form
Number of referees required:	Three
Unit recruitment contact:	Ortenz Rose

2. Summary of duties

The Open University's Knowledge Media Institute (KMi) is looking for a Research Assistant or a Research Associate (depending on qualification) to work on the newly funded LinkedUp EU-project.

LinkedUp aims to push forward the development of solutions in the area of large scale, Web data management and integration through investigating the critical challenges related to open, distance education with open educational resources from a large variety of sources. A key to achieve this is the combination of Linked Data technologies with data analytics and data mining approaches, to make emerge personalised and relevant learning pathways, as well as the necessary learning material, obtained from combining and integrating information from the many different providers of open resources on the Web.

We are looking for somebody with knowledge and interest in the areas of the Semantic Web, data analytics or learning analytics to support the creation of linked data endpoints and applications for the purpose of intelligent, open education. In addition to technical realisations based on Semantic Web and linked data technologies, this will also include collaborating with a large network of European partners, including academic and research institutions, educational institutions and companies in the areas of semantic technologies, technology for education or learning analytics.

The appointments will be made on the Academic Grade 1 or 2 Salary Scales for Research Staff, ranging from £27,578 – £30,122 pa depending on qualifications and experience. Appointment as a Research Associate requires a PhD or three years equivalent in quality of achievement.

Job Description

The research assistant or associate will integrate a team within KMi and more broadly in the LinkedUp project investigating technological solutions for the large-scale management of heterogeneous data generated and exposed on the Web, as well as the application of such solutions in the general area of education. This will follow in particular projects to expose and exploit Linked Data at the open university (see data.open.ac.uk and relevant publications below), as well as the integration of such resources in a network of educational resource providers in the UK and across Europe.

The objective here is to create the necessary infrastructure to allow the concrete realisation of learning scenarios where learners can benefit from the technology to obtain personalised access to relevant educational resources, exploiting heterogeneous online sources of structured data concerning these resources. An interesting aspect of such scenarios and approaches relates to their openness, where all sort of resources (that are meant to be used for education, or complement existing educational resources, such as information from libraries and museums) might need to be integrated, and learners might be interested in many different domains, at many different levels of granularity.

The project requires in particular the creation of an effective and robust software (linked data-based) platform integrating information from a large variety of sources, the development of Web/mobile applications demonstrating the benefits of such large-scale, integrative platforms, as well as research into the combination of linked data-based data management methods with data analytics and mining techniques.

You will be contributing to KMi's Semantic Web and Linked Data software infrastructure and tooling. You should thus have strong software development skills for the development of (especially Web-based) end-user applications and prior experience in the use of Semantic Web/Linked data technologies and Web APIs. Experience and knowledge in educational technology, learning analytics and/or data mining would also be desirable.

You will be working as part of a team of dynamic researchers in the field of knowledge technologies, Semantic Web and Linked Data within KMi, and in the context of a European project consortium. There will be the opportunity to develop your research profile, to travel to give demos and presentations, and to write academic papers.

Relevant Publications and Further Information

1. d'Aquin, M. (2012) [Putting Linked Data to Use in a Large Higher-Education Organisation](#), Workshop: Interacting with Linked Data at Extended Semantic Web Conference, ESWC 2012
2. d'Aquin, M., Kronberger, G. and Suárez-Figueroa, M. (2012) [Combining Data Mining and Ontology Engineering to enrich Ontologies and Linked Data](#), Workshop: Knowledge Discovery and Data Mining Meets Linked Open Data - Know@LOD at Extended Semantic Web Conference (ESWC) 2012
3. Nikolov, A., d'Aquin, M. and Motta, E. (2012) [Unsupervised Learning of Link Discovery Configuration](#), 9th Extended Semantic Web Conference (ESWC 2012), Heraklion, Greece
4. Fernandez, M., d'Aquin, M. and Motta, E. (2011) [Linking Data Across Universities: An Integrated Video Lectures Dataset](#), 10th International Semantic Web Conference (ISWC 2011), Bonn, Germany, eds. Noy, et al.
5. Zablith, F., d'Aquin, M., Brown, S. and Green-Hughes, L. (2011) [Consuming Linked Data within a Large Educational Organization](#), Workshop: Second International Workshop on Consuming Linked Data (COLD) at International Semantic Web Conference (ISWC), Bonn, Germany
6. d'Aquin, M. and Motta, E. (2011) [Extracting Relevant Questions to an RDF Dataset Using Formal Concept Analysis](#), The Sixth International Conference on Knowledge Capture - K-CAP 2011
7. <http://data.open.ac.uk>, <http://lucero-project.info> and <http://linkeduniversities.org> contain information about the KMi's activities around Linked Data for education

3. Person specification

Essential Skills

- Degree in computing – if applying for a research associate position, a PhD in a relevant area;
- Strong software and Web development skills;
- Experience of Linked Data/Semantic Web-related technologies (RDF, RDF-S SPARQL, OWL, triple-stores);
- Ability to quickly demonstrate understanding of the project aims and specific tasks as requested;
- Self-starter in providing solutions to meet project needs;
- Ability to work in complex team relationships;
- Excellent written and oral communication skills;
- Work to challenging targets and deadlines.

Desirable Skills

- Good knowledge of data analytics and/or data mining techniques;
- Experience in developing Web APIs and robust online services;
- Experience working in (higher) education;
- Experience in developing mobile applications;
- Good publication record.

4. Role specific requirements e.g. Shift working

n/a

5. About the unit/department

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 Mathieu d'Aquin on Tel: +44 (0)1908 655526 or email m.daquin@open.ac.uk

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

7. The application process and where to send completed applications

Please ensure that your application reaches the University by: **12 September 2012**

Post it to:

Name/Job title: **Ortenz Rose – Senior Staffing Coordinator**

Department/Unit: [Knowledge Media Institute](#)

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 Dr Mathieu d'Aquin. Other members of the interview panel will include members of the project team. Interviews will be arranged as soon after the close date as is possible.

The selection process for this post will be by review of applications by the Chair and selected members of the interview panel. There may be a telephone interview before a formal interview. We will let you know as soon as possible after the closing date whether you have been shortlisted for interview together with details of the interview format. Further details on the selection process will also be sent to shortlisted candidates.

Applications received after the closing date will not be accepted.