



## Further Particulars

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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:	<a href="#">7228</a>
Job title:	<a href="#">Research Assistant / Associate</a>
Reports to:	<a href="#">Professor of Knowledge Technologies</a>
Salary:	<a href="#">Ranging from £27,428 – £35,469</a>
Terms and conditions of service:	<a href="#">Full time Research Staff</a>
Grade:	<a href="#">AC1 / AC2</a>
Duration of post:	<a href="#">Until 31<sup>st</sup> January 2012</a>
Working hours:	<a href="#">Full time – 37 hours per week</a>
Location:	<a href="#">Knowledge Media Institute of The Open University</a>
Closing date:	<a href="#">15<sup>th</sup> June 2011</a>
Type of application form accepted:	<a href="#">Standard form</a>
Number of referees required:	<a href="#">Three</a>
Unit recruitment contact:	<a href="#">Ortenz Rose</a>

## 2. Summary of duties

The sheer complexity and number of functionalities embedded in many everyday devices already exceed the ability of most users to learn how to use them effectively. In the EU-funded SmartProducts project we are investigating these issues in a number of scenarios, drawn from the aerospace, car and home appliances industries. In particular, a key requirement for 'smart products' imposed by our scenarios is that they need to be able to exhibit *proactive behaviour*, both to improve the level of assistance to users and also to be able to co-operate effectively with other smart products in shared task scenarios.

The Open University's Knowledge Media Institute (KMi) is looking for a Research Assistant/Associate able to develop further the current version of our architecture for supporting proactive reasoning in networks of smart products and to apply it to the project testbeds. This will require both extending the current capabilities of the architecture – e.g., to support a number of types of proactive behaviour, and also to complete the implementation of the architecture, to be able to test it in networks of co-operating physical devices.

The appointments will be made on the Academic Grade 1 or 2 Salary Scales for Research Staff, ranging from £27,428 – £35,788 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 position will centre on the design, implementation and evaluation of solutions at the intersection of semantic technologies and ubiquitous computing, to support co-operative problem solving in networks of smart products.

You will be working as part of a world-class team of KMi researchers in the field of semantic technologies, in the context of a European project consortium. There will be opportunities to develop your research profile, to travel to give demos and presentations, and to write academic papers.

### **Relevant Publications and Further Information**

d'Aquin, M., Nikolov, A. and Motta, E. (2010) How much Semantic Data on Small Devices?, EKAW 2010 Conference - Knowledge Engineering and Knowledge Management by the Masses, Lisbon, Portugal.

Nikolov, A., d'Aquin, M., Giordanino, M. and Vildjiounaite, E. (2011) D.2.1.3: Final Version of the Conceptual Framework, SmartProducts Deliverable D2.1.3 – available at <http://projects.kmi.open.ac.uk/smartproducts/smartproducts-d-2-1-3-final.pdf>

Sabou, M., Kantorovitch, J., Nikolov, A., Tokmakoff, A., Zhou, X. and Motta, E. (2009) Position Paper on Realizing Smart Products: Challenges for Semantic Web Technologies, Workshop: The 2nd International Workshop on Semantic Sensor Networks.

Fernandez, M, Zhang, Z., Lopez, V., Uren, V., Motta, E. (2011). Ontology Augmentation: Combining Semantic Web and Text Resources. Proceedings of KCAP 2011, Banff, Canada.

### 3. Person specification

#### Essential

- Familiarity with existing Semantic Web standards and technologies, e.g. RDF(S), OWL, SPARQL
- Strong software development skills, esp. with distributed Java architectures
- Ability to handle constructive feedback
- Ability to work in a team
- Ability to work to deadlines
- Strong verbal and written communication skills

#### Desirable

- Familiarity or ability to quickly get up to speed with agent-based architectures
- Experience with ubiquitous computing platforms
- Experience with mobile computing
- Experience with rule engines
- Experience with task-centric models of problem solving
- Experience with AI programming languages – e.g., Lisp
- Experience with Knowledge Representation

### 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 Professor Enrico Motta on Tel: +44 (0)1908 653506 or email [e.motta@open.ac.uk](mailto:e.motta@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](mailto:o.rose@open.ac.uk)

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

Please ensure that your application reaches the University by: **15 June 2011**

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](mailto:kmi-recruitment@open.ac.uk)

## 8. Selection process and date of interview

The interview panel will be chaired by Professor Enrico Motta. 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.

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.