Research Centre: Lero – the Irish Software Engineering Research Centre

Post title: Postdoctoral Researcher in IT Architecture for Smart Cities

Level on Framework: Level 1

Post duration: 2 Year Full Time Fixed Term contract

Research Career Framework

As part of their role the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Background

The Irish Software Research Centre Lero (http://www.lero.ie) brings together leading software research teams from Universities and Institutes of Technology in a coordinated centre of research excellence with a strong industry focus. Lero has raised the level and profile of Irish software research with such effect that it is now one of the best known and highly regarded software research centres in the world.

Role

As a result of a new research centres grant, we have a vacancy for one Postdoctoral Researcher who will be involved in undertaking research relating to Smart Cities and IT Architectures. The researcher will be based in the School of Computing at DCU and will work under the supervision of Dr. Markus Helfert, a Lero Investigator at DCU. The researcher will join a team of Lero PhD students and researchers, as well as researchers in partner companies.

Project Leader: Dr. Markus Helfert

The objective of this research project is to investigate and develop a Reference Architecture for Smart Cities. The Postdoctoral Researcher will have specific responsibility for selecting a suitable Architectural Design Process and Framework, working with Partners in Industry and Cities, and examining the application and impact of IT Architectures in Smart Cities. The researcher should have previously acquired knowledge of Business Process Modelling and IT/Enterprise Architecture. The research will be in close collaboration with Lero’s industry partners.

Principal Duties and Responsibilities

Reporting to his/her Principal Investigator, the main duties will include:

- Assisting in identifying and developing future research and funding initiatives.
- Contributing to literature reviews and the development of the research design
- Collecting and collating the research data
- Analysing and supporting the interpretation of the research data
• Engaging in the dissemination of the results of the research in which he/she is engaged with the support of and under the supervision of the Principal Investigator.
• Contributing to academic articles, conference papers and other publications
• Engaging and supporting other researchers working on projects affiliated to the Centre’s research programme
• Engaging in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
• Liaising with both internal and external stakeholders including industry and academic partners/collaborators.
• Carrying out administrative work associated with the programme of research as necessary.

Minimum Criteria

Applicants should have a PhD in Computer Science, Software Engineering, or a related discipline. Evidence of strong empirical research skills and knowledge of some of the relevant academic literature on software architecture and analysis is an essential requirement.

In addition, it is desirable that the candidate has:

• Experience in the respective application domains smart cities and cloud computing
• Research experience in the area of IT Architecture, Business Processes and/or Enterprise Architecture or a related field
• Knowledge of empirical methods and collaboration with Industry would be an advantage
• Demonstrated skills in the design, management and conduct of research
• A high level of interpersonal and team working skills
• Strong report writing, time management skills and ability to work to deadlines
• Experience in industry-led research, good presentation and academic article writing skills would also be desirable.

Salary scale: €37,750 - €46,255
Appointment will be commensurate with qualifications and experience

Closing date: 26th June 2015

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications

Communicating Research – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students.
Application Procedure

Informal enquiries to:

Dr. Markus Helfert, DCU School of Computing - Email: markus.helfert@computing.dcu.ie, Tel: +353 (0)1 700 5620

*Please do not send applications to this email address, instead apply as described below*

Application forms are available from the DCU Current Vacancies (open Competitions) website at [http://www.dcu.ie/vacancies/current.shtml](http://www.dcu.ie/vacancies/current.shtml) and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0)1 7005149.

**Please clearly state the role that you are applying for in your application and email subject line:**
**Job Ref #73A: Postdoctoral Researcher L1 IT Architecture for Smart Cities**

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500

Email: hr.applications@dcu.ie

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