Research Centre: Insight Centre for Data Analytics & Lero – The Irish Software Research Centre

Post Title: Post-Doctoral Researcher

Level: Level 1

Post Duration: Fixed Term Contract up to 18 Months

Research Career Framework

As part of this role the researcher will be required to participate in the DCU Research Career Framework [http://www.dcu.ie/hr/ResearchersFramework/index.shtml](http://www.dcu.ie/hr/ResearchersFramework/index.shtml). This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your academic career.

Background

This position will involve two research centers at DCU.

The Insight Centre for Data Analytics ([http://www.Insight-centre.org](http://www.Insight-centre.org)) is a joint initiative between researchers at Dublin City University, NUI Galway, University College Cork and University College Dublin as well as other partner institutions. It brings together a critical mass of more than 400 researchers from Ireland's leading ICT centres to develop a new generation of data analytics technologies in a number of key application areas. Together, with more than 50 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

The Irish Software Research Centre Lero ([http://www.lero.ie](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. Lero specifically focuses on the key challenges of Evolving Critical Systems.
Role

Insight & LERO wish to recruit a Post-Doctoral Researcher on a fixed term contract basis to facilitate the delivery of some basic platform research as well as to provide input into an industry-sponsored research targeted project. The researchers will be based in the School of Computing at DCU and will work under the supervision of Dr. Markus Helfert (Lero) and Dr. Cathal Gurrin (Insight). The researchers will join a team of other Insight and Lero researchers as well as researchers and developers in the partner company.

The Project

The platform research is in the joint areas of lifelogging data analytics and cloud computing. The lifelogging goal is to develop lifelog data retrieval frameworks for wearable sensor data, and to coordinate the DCU NTCIR lifelog comparative evaluation campaign. The lifelog data retrieval goal will require the development of analytics components for multimodal lifelog data. The NTCIR evaluation campaign will involve coordinating the international effort, including data organization and result evaluation.

The cloud-computing project goal is to investigate user-level usage analysis in the cloud space, focusing on customer usage data mining for cloud. The research will investigate several models that allow to investigate the impact between user-level analytics and cloud architecture. Aim is to develop a Mining and Analytics component in the context of cloud computing in form of an artefacts and a pilot software implementation to evaluate its feasibility and usability.

Principle Duties and Responsibilities

Reporting to his/her Principal Investigator the Post-Doctoral Researcher will:

- Take a lead role in managing a specific programme of research under the supervision of the Principal Investigators.
- Identify and secure external sources of funding and manage budgets and resources accordingly.
- Disseminate the outcomes of the research in which he/she is engaged including publishing in high quality peer reviewed journals of international standing.
- Manage and supervise research groups and teams, in particular, teams of researchers comprised of Summer interns, undergraduate and early-stage PhD students
- Develop new models of research collaboration targeting key external stakeholders relevant to the projects outlined above.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School of Research Centre, or the University
- Engage in teaching and teaching support as assigned by the Head of School under the
direction of the Principal Investigator, in particular for modules including Digital World taught to undergraduate students and “Information Systems” and “Machine Learning” taught at Masters levels

- Manage and conduct administrative and management tasks associated with your programme of research.
- Provide support and advice to PhD students and postdocs working on similar topics.
- Participate in research centre activities, such as industry showcases and annual reviews

**Minimum Criteria**

It is essential that applicants have a PhD in Engineering or Computer Science and 5 years relevant experience. In addition, it is essential that the candidate has all, or a substantial subset of, the following skills:

- Experience in multimedia data analytics (including visual data)
- Experience of developing and evaluating visual lifelog retrieval engines
- Experience of coordinating evaluation campaigns such as NTCIR or CLEF
- Experience of, and knowledge of, artificial intelligence techniques
- Experience of cloud computing
- Experience of developing working software prototypes in an academic environment.
- Being familiar or experienced with project commercialisation.

**Salary Scale:** €35,488 to €46,255

*Appointment will be commensurate with qualifications and experience and will be made on the appropriate point of the salary scale, in line with current Government pay policy.

**Closing date:** 12 May 2017

**Candidates will be assessed on the following competencies:**

**Discipline specific knowledge and Research Skills** (demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline)

**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)

**Understanding the Research Environment** (demonstrates an awareness of
the research environment (e.g. funding bodies) and takes responsibility for how their research is conducted

Informal enquiries to:

Dr. Cathal Gurrin, Insight Centre for Data Analytics, Dublin City University
E-mail: cathal.gurrin@dcu.ie

Dr. Markus Helfert – Dublin City University
E-mail: markus.helfert@dcu.ie

Application Procedure

Application forms are available from the DCU Current Vacancies (Open Competitions) website at http://www4.dcu.ie/hr/vacancies/current.shtml and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0)1 700 5149; Fax: +353 (0)1 700 5500 Email: hr.applications@dcu.ie

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. Tel: +353 1 700 5149; Fax:

+353 1 700 5500 Email: hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref # 534 Post-Doctoral Researcher

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