Research Centre  
Insight Centre for Data Analytics

Post title  
Postdoctoral Researcher in Inertial Sensing

Level on the Framework  
Level 1

Post duration  
Fixed Term up to 12 Months

Research Career Framework
As part of this role the researcher will be required to participate in the DCU Research Career Framework http://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.

Background
The Insight Centre for Data Analytics (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 450 researchers from Ireland’s leading ICT centers to develop a new generation of data analytics technologies in a number of key application areas.

The €88m Centre is funded by Science Foundation Ireland and a wide range of industry partners. Insight’s research focus encompasses a broad range of data analytics technologies from machine learning, decision analytics and social network analysis to linked data, recommender systems and the sensor web. Together, with more than 70 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy. Current project funding is to July 2019.

The Project
The specific project for this role, involves the development of novel strategies for analysis of human movement using body worn inertial sensing and machine learning.
**Background & Role**

Insight wishes to recruit a Postdoctoral Researcher on a fixed term contract basis to facilitate the delivery of a number of research projects. Working at the boundary of research and industry, this includes projects featuring a collaborative programme of research between industry and Insight researchers.

**Main Duties and Responsibilities**

Reporting to his/her Principal Investigator(s) the Postdoctoral Researcher will:

- Investigate novel approaches that extend the current state of the art in wearable sensing for human movement understanding and analysis.
- Contribute to the design and implementation of prototype demonstrators.
- Provide support and advice to PhD students working on similar topics.
- Produce top quality journal and conference publications, in collaboration with the Principal Investigators (PIs).
- Participate in Insight Centre activities, including industry showcases, annual reviews and industry and agency visits to the Insight labs.
- Other tasks relevant to successfully implementing the project’s and the Research Centre’s research programme.
- Carry out administrative work associated with the programme of research as necessary

**Below are some pointers for the type of experience we require:**

- Excellent knowledge of machine learning; knowledge of deep learning would be a distinct advantage.
- Excellent software skills including knowledge of one or more of Java, C++, PHP, node.js, Objective-C, C, Python, Bash, Perl, JavaScript, d3.js.
- Experience working with UNIX, Linux, VMWare, OSX or Windows operating systems.
- Database management skills would be an advantage: MySQL, MongoDB, CouchDB, Neo4j, SQL.

**Skills**

- Excellent written and oral proficiency in English (essential)
- Excellent written and verbal communication and interpersonal skills.
- Proven ability to prioritise workload and work to strict deadlines.
- Ability to work in a team and to take responsibility to contribute to the overall success of the team.
- Strong problem solving abilities.

**Minimum Criteria**
The ideal candidate will have a PhD in Computer Science, Engineering or a related discipline with strong software and programming skills and relevant experience in wearable sensing and the associated data processing.

**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.

**Salary Scale:** * €36,488 – €47,255 per annum
*Appointment will be commensurate with qualifications and experience will be made on the appropriate point of the salary scale, in line with current Government pay policy*

**Closing date:** 24th November 2017

**Informal enquiries to:**
Prof. Noel O'Connor, Insight Centre for Data Analytics, Dublin City University
E-mail: Noel.OConnor@dcu.ie Phone: +353 (0)1 700 5078

**Application Procedure**
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 702 Postdoctoral Researcher in Inertial Sensing**

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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