



Research Centre	Insight Centre for Data Analytics
Post title	Postdoctoral Researcher
Level on the Framework	Level 1
Post duration	Fixed Term up 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 centres 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 a 3D modelling solution based on the reconstruction of a 3D scene from 2D images/video of that scene. The solution must be viable for use on a mobile phone in a heavily constrained environment.

Background & Role

Insight wishes to recruit a Postdoctoral Researcher on a fixed term contract basis to facilitate the delivery of the project. Working at the boundary of research and industry, the project is a collaborative programme of research between Insight researchers and one of our industry partners.

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 3D model generation from 2D images/video.
- Contribute to the design and implementation of a prototype demonstrator.
- 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 2D and 3D computer-based models and their applications across the disciplines of computer graphics, computer vision, and visualisation.
- Excellent software skills including knowledge of one or more of Java, C++, C, and Python.
- Excellent mathematical modelling and optimisation skills.
- Excellent computational modelling and optimisation skills.
- Experience with Matlab would be an advantage.
- Experience of machine learning would be an advantage.
- Experience of mobile app development would be an advantage.
- Database management skills would be an advantage.

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 Computer Vision and 3D Modelling.

Salary Scale: * €36,488 – €37,013 per annum

*Appointment will be commensurate with qualifications and experience

Closing date: 23rd January 2018

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.

Informal enquiries to:

Dr. Patricia Moore, Insight Centre for Data Analytics, Dublin City University

E-mail: patricia.moore@eeng.dcu.ie

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

Application Procedure

Application forms are available from the DCU Current Vacancies (open Competitions) website at <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 751 Postdoctoral Researcher, Insight Centre for Data Analytics

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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