

**Research Centre** Insight SFI Research Centre for Data Analytics

**Post Title** Research Fellow in Data and Analytics

Level on Framework: Level 2

**Post Duration** Fixed Term Contract up to 31st Dec 2022

# Background

The Insight SFI Research Centre for Data Analytics (http://www.Insight-centre.org) is an SFI funded Research Centre which brings together researchers from University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions, Trinity College Dublin (TCD), University of Limerick (UL), Maynooth University (MU) and Tyndall National Institute. It creates a critical mass of more than 400 researchers from Ireland's leading ICT clusters to carry out research on a new generation of data analytics technologies in a number of key application domain areas, such as Health and Human Performance, Smart Communities, Internet of Things, Enterprise and Services and Sustainability and Operations.

The €150m Centre is funded by Science Foundation Ireland and a wide range of industry and European Union 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 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

## **Research Career Framework**

As part of this role the researcher will be required to participate in the DCU Research Career Framework (<a href="http://dcu.ie/hr/ResearchersFramework/index.shtml">http://dcu.ie/hr/ResearchersFramework/index.shtml</a>). 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 you can advance your academic career.

### The Project

The project proposed is collaborative between Data and Analytics Research Centre based in DCU and the Centre of Excellence for Data and Analytics within AIB, based in Dublin. The project is intended to be initially exploratory in nature assessing research questions of mutual interest to all parties and successful candidate such that the outcome solves real life problems. The aim of the project is to design and build a solution to a Data and Analytics problem leading to its practical application.

The research questions themselves will be agreed between both parties and directed by the researcher so that the work is both publishable and practically applied immediately post design.

### **Principle Duties and Responsibilities**

- Take a lead role in managing a specific programme of research under the supervision of the Principal Investigator.
- Conduct a programme of research into data quality assessments, automation of due diligence checks in the context of banking and the evolutionary challenges surrounding COVID-19 from a retail banking perspective. The successful candidate will be given substantial freedom to co-design a specific research programme within the scope of the project.
- Identify and secure external sources of funding and identify new collaboration opportunities.
- Assist the Principal Investigators (PIs) in overseeing software and system development for various projects.
- Manage budgets and resources accordingly and liaise as necessary with the support units within DCU to achieve this.
- 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.
- Develop new models of research collaboration.
- To collect, collate and analyse research data.
- To maintain accurate project records and project confidentiality.
- Make an international and national contribution to the research field in which he/she is engaged including as an invited speaker at an international conference and through invitation to participate in commercial research.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
- Manage and conduct administrative and management tasks associated with your programme of research and the requirements of the funder.

#### **Minimum Criteria**

- A PhD in Computer Science, Engineering or a related discipline
- A minimum of 4 years' postdoc experience,

### **Desirable Criteria**

- Relevant experience working in Industry
- A proven track record of delivery and success
- Experience of conducting self-directed research
- An international research profile and a track record of publications record in high-quality international journals and conferences.

Applicants must possess advanced computing skills and should have analytical and problem solving skills, excellent communication skills, as well as knowledge of some of the relevant academic literature. In addition, candidates should have a high level of interpersonal skills, team working skills, the ability to work collaboratively with others, report writing, time management skills and ability to work to deadlines. Desirable attributes include experience in industry-led research with international patent output, presentation skills and academic article writing skills.

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

**Discipline Knowledge & Research skills** – Demonstrates the ability to design and/or implement a substantial programme of research including initiating and leading new research programmes (for example by using critical judgement and an understanding of new research methodologies)

**Understanding the Research Environment** – Demonstrates a thorough understanding of the research environment both nationally and internationally, the ability to secure significant research funding and where relevant the ability to apply for intellectual property rights and/or patents for their research

**Communicating Research** – Demonstrates excellence in communicating their research nationally and internationally (for example by publishing in high quality peer reviewed journals of international standing and through invitation to participate in commercial research) and the ability to deliver teaching based on their own research

Managing & Leadership skills – Successfully leads and manages research programmes including the management and supervision of a small research team and the financial management of research programmes

# **Mandatory Training:**

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety, Research Integrity and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

#### **Additional Information:**

The successful candidates will be offered opportunities for developing their own careers in a number of directions including support for conference/workshop travel, upskilling through Insight's continuous professional development in areas like research ethics and data privacy, student supervision and development and submission of their own research project proposals.