Research Assistant (Vistamilk Project)
Insight SFI Research Centre for Data Analytics
Fixed Term Contract up to 24 Months

Overview

Dublin City University www.DCU.ie is a young, ambitious and vibrant University, with a mission 'to transform lives and societies through education, research, innovation and engagement'. Known as Ireland's 'University of Enterprise and Transformation', it is committed to the development of talent, and the discovery and translation of knowledge that advances society and the economy. DCU is the Sunday Times Irish University of the Year 2021.

The University is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. It currently has more than 18,000 students enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education. DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on creating a transformative student experience, and its positive social and economic impact. This exceptional commitment on the part of its staff and students has led to DCU's ranking among the top 2% of universities globally. It also consistently features in the world's Top 100 Young Universities (currently in QS Top 70 Under 50, Times Higher Top 150 Under 100).

DCU is placed 84th in the world, in the Times Higher Education University Impact Rankings – measuring higher education institutions' contributions towards the UN Sustainable Development Goals. Over the past decade, DCU has also been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

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.

The Project

The specific projects for which this role involves are funded through various sources including Enterprise Ireland and industry collaborations.

Duties and Responsibilities

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

- Conduct a programme of research in the broad field of data warehousing with a particular emphasis on probabilistic database approaches and graphical data models to be applied in the agri sector. Additionally, the candidate should have experience in data cleaning and pre-processing techniques.
- Assist the Principal Investigators (PIs) in overseeing software and system development for various projects.
- Contribute to the design and implementation of the project's prototype demonstrators.
- Participate in Insight Centre activities, including industry showcases, annual reviews and industry and agency visits to the Insight labs.
- Assist with presentation and documentation of demonstrator systems for industry sponsors.
- Other tasks relevant to successfully implementing the assigned research programme.
- Carry out administrative work associated with the programme of research as necessary

Below are some examples of technologies that will be are used

- Java, C++, PHP, node.js, Objective-C, C.
- Python, Bash, Perl, JavaScript, d3.js.
- UNIX, Linux, VMWare, OSX or Windows operating systems.
- MySQL, MongoDb, SQL, Neo4j, NoSQL.

Qualifications and Experience

Minimum criteria

The candidate should have a first class honours degree in a computer related discipline and should also have a solid knowledge of Python and data science libraries.

In addition to the above it is desirable that the candidate possess a subset of the following skills.

Although experience in data acquisition and data engineering is not a pre-requisite, it is desirable that candidates have some experience in these areas, with a good knowledge of SQL.

- Excellent written and oral proficiency in English (essential)
- Excellent written and verbal communication skills.
- The ability to prioritize workload and work to strict deadlines.
- Strong problem solving abilities

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