Research Centre	Insight SFI Research Centre for Data Analytics
Post Title	Research Fellow Covid-19 Project (Meat Processing)
Level of Framework:	Level 2
Post Duration	Fixed Term Contract up to 14 months

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 (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.

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

Rapid response to the COVID-19 pandemic requires infection prevention and control measures that can anticipate the eruption of hot-spots throughout society and act effectively to exclude infection from such environments, while also building a series of urgent "fire-fighting"; measures should initial defences fail. Meat processing plants in Ireland and abroad have proved to be flashpoints for super-spreader and rapid fire events that threaten spill-over into broader society. Integrating data from a variety of disparate data sources and using it to help highlight and predict potential breakouts in these environments will have a considerable impact reducing the spread of the infection.

The Role
We are seeking a Research Fellow to participate in the research, design and development of a secure data portal that will allow researchers from all over the world to use the data from a wide variety of data sources. In addition, the candidate will assist in the development of an AI component for the project that aims to highlight when a Covid-19 outbreak is due to occur. Competency from front end to back-end is required for this highly innovative and ground-breaking project. More specific details can be discussed upon interview.

Principle Duties and Responsibilities
Specific duties include:
- Take a lead role in managing a specific programme of research under the supervision of
- the Principal Investigator.
- Identify and secure external sources of funding and identify new partnership opportunities.
- 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
Applicants should have a PhD in Computer Science, Engineering, or related area. Applicants should also have a minimum of 4 years relevant postdoctoral/industry-related research experience or equivalent at post-doctoral researcher level.

In addition, it is desirable that the candidate has a subset of the following skills:

- A track record of delivery and success
- Experience of conducting self-directed research
- Experience of developing start-ups and/or SMEs.
- An international research profile and a track record of publications record in high-quality
- international journals and conferences.
- Strong problem solving abilities.
- Relevant experience working in Industry
- Advanced computing skills

Applicants should also demonstrate 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 social skills, team working skills, report writing, time management skills and ability to work to deadlines.

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates the ability to design and implement part of a programme of research (for example by using critical thinking and the application of relevant research methodologies).

Understanding the Research Environment – Demonstrates a thorough understanding of the research environment both nationally and internationally and the ability to contribute substantially to grant applications.

Communicating Research – Demonstrates the ability to communicate their research effectively to the research community and wider society (for example by publishing their research in high quality peer reviewed journals) and the ability to teach and tutor students.

Managing & Leadership skills - Successfully manages research projects including the management and supervision of postgraduates and/or junior research staff.

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.