



Applications are invited from suitably qualified staff for the following position:

**Insight SFI Research Centre for Data Analytics
Trainee Analyst Programmer (Covid – 19 Project)
Fixed Term Contract up to 31st Jan 2022**

DCU

Dublin City University (www.dcu.ie) is a research intensive, globally engaged, dynamic institution which has developed its own research specialists, established internationally recognized centres of excellence that have substantive collaborative links with leading universities and industrial partners. DCU is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation DCU acts as an agent of social, cultural and economic progress. DCU is Ireland's fastest growing university and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick's Campus and CU All hallows campus. 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 to advance your academic career.

The Insight SFI Research Centre for Data Analytics

The Insight SFI Research Centre for Data Analytics (<http://www.insight-centre.org>) is a joint initiative between researchers at University College Dublin, NUI Galway, University College Cork, and Dublin City University, as well as other partner institutions. It brings together a critical mass of more than 400 researchers from Ireland's leading ICT centres to develop a new generation of data analytics technologies in a number of key application areas.

The €150m 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 220 partner companies, Insight researchers are solving critical challenges in the areas of Connected Health and the Discovery Economy.

Project Description

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. Our proposal will enhance knowledge of the dynamics and underlying physics, chemistry and biology of such events, thereby safeguarding and enhancing the sustainability of Ireland's food production and processing sectors. The work programme will also enhance diagnostics capability in these settings, enabling real-time phylogenetic tracing of the spread of infection across space and time. This technology will be valuable not only during the course of the current pandemic but also in building a foundation on which to build a rapid response to future emerging infectious diseases threatening animal and human health.

Role Profile

The Insight SFI Research Centre for Data Analytics is now recruiting for a Trainee Analyst Programmer position to join the Understanding and Preventing COVID-19 Outbreaks in Meat Processing Plants - Prepared for the Future (UPCOM) team working on industry research & development projects funded by SFI Covid-19 programme.

Duties and Responsibilities:

The duties and responsibilities of the position include but are not limited to:

- Acquire and deploy technical architecture in an agile engineering process within the project.
- Participate in additional training to attain competency in software engineering processes as necessitated.
- Demonstrate a commitment to quality over expediency in software development
- Engage regularly and effectively with project partners.
- Identify and populate in dialogue with the Principal Investigator and revised roadmaps for the proposed system.
- Develop cutting edge software based solutions to architectural and component transformation and modernisation, in strict accordance with Non-Disclosure Agreements (NDAs) as specified by project partners.

Experience and Qualifications

Candidates must hold a degree in an appropriate area or equivalent (NFQ Level 7), (typically an in Computer Science, Software Engineering or a related discipline).

In addition, successful candidates will ideally have;

- Experience assisting in the development of well-designed software that is clear, documented, tested and delivered continuously to production.
- An up-to-date knowledge of emerging technologies and architecture
- The ability to leverage technical knowledge to cut scope while maintaining or achieving the overall goals of the product.
- The ability to leverage technical knowledge to improve the quality and efficiency of product applications and tools.

- Relevant development experience with at least one popular programming language such as Java, Ruby, Python, Node.js/Javascript, Rust, Go, or C/C++/, C#.
- Experience using existing libraries, frameworks, and RESTful APIs to create complex applications.
- Experience using code management and revision services such as Github.
- Familiarity with Test Driven Development, Continuous Integration and Continuous Delivery.
- Strong communication skills for documenting workflows, tools, or complex areas of a codebase.
- Understanding of basic statistical clustering techniques would be beneficial.
- Ability to thrive in a fast-paced environment and multi-task efficiently.
- Ability to work and collaborate in a team.
- Strong analytical and troubleshooting skills.

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.