Research Centre	Insight SFI Research Centre for Data Analytics
Post Title	Analyst Programmer
Post Level	Analyst Programmer I
Post Duration	Fixed Term Contract up to 12 months

Dublin City University

Dublin City University (DCU) 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', DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are 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 delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU's pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world's Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

The Insight SFI Research Centre for Data Analytics

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.

Role Profile

Artificial intelligence is disrupting many sectors. One sector which can benefit significantly from AI but which is having difficulty in its adoption is the medical device sector. The inclusion of artificial intelligence into medical devices can bring challenges in terms of how it can be achieved in safe, accountable, trustworthy ways.

Entitled "Safe and Trustworthy Artificial Intelligence in Medical Devices – a Regulatory-Friendly Framework" this project is seeking a Researcher who can leverage our pooled knowledge across Dublin City University (Insight), Dundalk IT and Arizona State University to translate AI, privacy and software processes into useable frameworks which industry can use to develop innovative safe and secure medical devices. We are seeking to advance the development of healthcare technology in such a way as to improve industry's adoption of AI and regulators' capacity to support within their assessment process, the development of new medical devices, which involve sophisticated AI. The medical device industry has been identified, by the IDA, Enterprise Ireland and Science Foundation Ireland, as a key growth sector for the Irish economy. The value of AI in enhancing the performance of medical devices is well documented in academic research and clinical investigations however, the regulatory context of AI especially in terms of trustworthiness and transparency assurances present challenges to medical device manufacturers. We seek a software engineer to join our team to help in addressing this problem.

Principal Duties and Responsibilities
Please see attached job description for principal duties and responsibilities of the role.

Minimum Criteria

Candidates must have a degree in an appropriate area or equivalent (NFQ Level 7), (typically an in Computer Science, Software Engineering or a related discipline) and two years' relevant experience.

Qualifications, Skills and Experience Required

The successful candidate will ideally have:
- Strong software and programming skills and relevant experience in any technology stack.
- Experience in the development of well-designed software that is clear, documented, tested and delivered continuously to production.
- Experience in Agile software engineering processes.
- Experience in taking professional responsibility for the technical quality of the features delivered across the team, including documentation, testing strategies, and code.
- A strong and demonstrated interest in remaining up to date on emerging technologies and architectures including those relevant to data science and analytics.
- Leverage technical knowledge to cut scope while maintaining or achieving the overall goals of the product.
- A demonstrable knowledge of AI and machine learning in particular.
- 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, Kotlin, Swift, 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 and Bitbucket.
- Familiarity with Test Driven Development, Continuous Integration and Continuous Delivery.
- Strong communication skills for documenting workflows, tools, or complex areas of a code base.
- Ability to work in a team.
- Strong analytical and troubleshooting skills.

Skills
- Excellent written and oral proficiency in English (essential).
- Excellent written and verbal communication and interpersonal skills.
- Proven ability to prioritize workload and work to strict deadlines.
- Ability to work in a team and to contribute to the overall success of the team.
- Strong problem-solving abilities.

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.

Essential 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.

Salary Scale: Analyst Programmer I Salary Scale € 41,936 - € 49,143

*Appointment will be commensurate with qualifications and experience

Closing date: *Friday, 22nd July 2022*
For more information on DCU and benefits, please visit Why work at DCU?

Informal Enquiries in relation to this role should be directed to:
Professor Tomás Ward, Professor of Data Analytics, Insight Centre for Data Analytics, Dublin City University. Email: tomas.ward@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 website at
https://www.dcu.ie/hr/vacancies-current-vacancies-external-applicants (external applicants)

Applications should be submitted by e-mail with your completed application form to
hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref: #ST1700 Analyst Programmer Insight

Dublin City University is an equal opportunities employer.

In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.

The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the DCU Policy Starter Packs