

**Applications are invited from suitably qualified candidates for the following position:**

**Research Centre:** Insight SFI Research Centre for Data Analytics  
**Post Title:** Analyst Programmer, KowRoo – AP II  
**Post Duration:** Fixed Term Contract up to 11 months

### **Dublin City University**

Dublin City University [www.DCU.ie](http://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.

Risks associated with travel, such as delays, accidents, criminality, or even death, can have an enormous impact on a business. The global security market is estimated to have an annual turnover in excess of \$66.9B for the US alone. KowRoo's is an EI commercialisation fund that combines analysis of real-time data that is personalised for the user, whilst integrating the risk appetite of the business, and communicating dynamic risk rating results via an app to the user. KowRoo will have a mobile app and desktop user interface, behind which a large volume of historical risk assessments generated from past analyses and real time incidents will be used as inputs to modern AI algorithms to build a real time robotic analyst "KowRoo".

## **The Role**

We are seeking an Analyst Programmer to participate in the design and development of a secure automated risk assessment system for users. In addition, the candidate will be exposed to development of an AI component for the project that will automate the decision making process for lending institutions. The successful candidate for this role will have lead a small team of developers.

Competency from front end to back-end is required for this highly innovative and ground-breaking project.

## **Duties and Responsibilities**

Please refer to the job description for a list of duties and responsibilities associated with this role.

## **Qualification and Experience**

### **Minimum Criteria**

Candidates will have a degree in an appropriate area or equivalent (NFQ Level 7). Typically, an honours BSc in Computer Science, Software Engineering or a related discipline with strong software and programming skills together with relevant experience in web application development with substantial backend integrations is expected. Candidates will also have 4 years of relevant working experience in software development.

### **Desirable Criteria**

- Familiar with agile development
- 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

### **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:** APII - € 49,145.00 – € 58,981.00

*Appointment will be commensurate with qualifications and experience will be made on the appropriate point of the salary scale, in line with current Government pay policy.*

**Closing date:** 13<sup>th</sup> April 2022

**Informal Enquiries in relation to this role should be directed to:** Dr. Andrew McCarren, Insight Centre for Data Analytics, at [andrew.mccarren@dcu.ie](mailto:andrew.mccarren@dcu.ie)

### **Application Procedure**

Applications should be submitted by e-mail to [andrew.mccarren@dcu.ie](mailto:andrew.mccarren@dcu.ie).

**Please clearly state the role that you are applying for in your application and email subject line:**  
**Job Ref #RF1628a Analyst Programmer, APII, KowRoo**

**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**