

NAME OF POSITION: DATA ANALYST INTERN (TEMPORARY, 9 MONTHS)
POSITION NO: DAI/2023

CLOSING DATE : 12.00 MIDDAY, FRIDAY
16th JUNE 2023

INFORMATION BOOKLET

DUBLIN CITY COUNCIL IS SEEKING TO RECRUIT DATA ANALYST INTERNS TO SUPPORT THE ORGANISATION'S TRANSFORMATION WORK IN AREAS SUCH AS THE CORPORATE DATA UNIT, SMART CITIES, SMART DUBLIN, AND DUBLIN FIRE BRIGADE. APPLICATIONS ARE INVITED FROM STUDENTS PURSUING/COMPLETED DATA SCIENCE, DATA ANALYTICS, GEOSPATIAL / GIS ANALYTICS OR SUITABLE RELATED COURSES, WHO MEET THE ELIGIBILITY REQUIREMENTS, AND WISH TO BE CONSIDERED FOR INCLUSION ON A PANEL FROM WHICH VACANCIES FOR DATA ANALYST INTERN (TEMPORARY – NINE MONTHS) MAY BE FILLED.

- **Applicants should note that this is a temporary placement (nine months)**
- **The successful candidate(s) may be working remotely some days (2 days a week) as part of hybrid working arrangement and must have access to strong, dependable and secure internet access as well as a suitable and safe working environment**

DUBLIN CITY COUNCIL

Dublin is an international capital city and is the economic engine of the region and state. **Dublin City Council** aims to enhance the city's attraction as a place in which to invest, to work, to live and to visit. Dublin City Council takes the lead role in shaping the strategic vision of the city. It provides and funds a diverse, multi-layered and evolving range of services to both citizens and visitors to Dublin, which includes the provision of housing, planning, development, environmental, roads and traffic, leisure and community services. For further information on Dublin City Council, please log onto www.dublincity.ie

The Corporate Services and Transformation department in the council has responsibility for the broader transformation agenda and leads on digital services and also has recently established a corporate office of data analytics. The smart city function also sits under the department.

The placement may be assigned to work / support a diverse range of city services and functions throughout the course of the internship.

Smart City Unit (Smart Dublin)

Dublin City Council has developed a world-leading Smart City programme. It drives forward the use of new technologies to improve our city's operations, improving efficiencies, reducing costs,

driving economic growth and future proofing our communities. This feeds into the wider [Smart Dublin programme](#), which is an initiative of the four Dublin Local Authorities, bringing together technology providers, academia and citizens to transform public services and enhance quality of life. Smart Dublin also incorporates Dublinked, Smart Dublin's Open Data portal.

The Smart City team works together with technology providers, academia and citizens to develop data-driven solutions to local challenges. Within the council, the Smart City team is building staff awareness around these new technologies; empowering departments to innovate and explore new work practices to improve the way we operate. The programme has won international recognition for its model of collaboration and has delivered successful projects with leading technology companies including Google, Microsoft, Intel, IBM and Bentley Systems. Flagship projects include the Google Project AirView mapping hyper local air quality for Dublin as well as Bentley's digital twin programme with DCU. Find out more here: www.smartdublin.ie See link to projects: <https://trello.com/b/188o9azf/smart-dublin-project-board>

Data & Analytics Unit

The Data & Analytics Unit provides the Council with an enhanced understanding of the city through the use of data and analytics. The Unit works closely with other departments within DCC to assist with evidence-based decisions and to identify opportunities to improve services for citizens. The Unit is responsible for managing and analysing data from a wide range of sources to provide insights into the city's performance, trends and needs. At a high level, the main responsibilities of the Unit are:

- Develop and implement data management strategy and data strategy to support the Council's goals and objectives.
- Ensure high-quality data management and analytics services are provided to all stakeholders.
- Establish data governance policies and procedures to ensure compliance with regulatory requirements.
- Manage data acquisition, validation, and integration processes to ensure the accuracy and completeness of data assets.
- Develop and maintain data models, data dictionaries, and metadata repositories to support effective data management and analysis.
- Collaborate with business owners to identify data-driven insights and opportunities to improve operational efficiency and effectiveness.
- Define and track key performance indicators (KPIs) to measure the success of data management and analytics initiatives.
- Develop and deliver data analytics training programs to improve data literacy across the Council.
- Evaluate and recommend new technologies, tools, and processes to enhance data management and analytics capabilities.
- Co-ordination of open data.

Dublin Fire Brigade – Organisational Intelligence Unit

Dublin Fire Brigade operate several data intensive functions, most of which are currently undergoing transformation or change. These functions are delivered through the recently formed Organisational Intelligence Unit and for the most part, are not yet part of an interoperable enterprise system and therefore need to have ETL, Analytics and Visualisation enabled to provide a unified and consistent view across all business departments.

Key requirements of the data analytics function within DFB are;

- support ongoing management decision-making with reliable and consistent Key Performance Indicators
- support strategic management of the organisation with in-depth analysis of business functions, delivery and demand trends
- ensure reliable and consistent reporting of performance factors to key stakeholders
- production of analyses and insight tools using best practice with respect to documentation, reproducibility and accessibility.

The primary technology stacks used are;

- ESRI ArcGIS
- Tableau
- MS Sql Server
- FME
- Open Source Tools such as QGIS, R and Python

DFB have access to via license all data available under the National Mapping Agreement, Geodirectory, Geodirectory Building Intel as well as several datasets accessed via data sharing agreements. This is merged with internal data such as our Computer Aided Dispatch records (c. 200,000 emergency calls per year processed via our Eastern Region Control Centre), regulatory data related to DFB's statutory responsibilities under the Fire Services Act 1981 and related open datasets such as the Valuation Office Open Data and Building Control Management System (BCMS) Open Data with the aim of developing a holistic view of community and building risk within DFB's Functional Area.

DUBLIN CITY COUNCIL DATA INTERNSHIP PROGRAMME

Dublin City Council Data Internship Programme is designed to provide interns with valuable real-world experience equipped with the data skills and knowledge required to succeed in their future careers. The programme provides interns with opportunities to work on a variety of projects and tasks, including data analysis, management, and visualisation, and more. Interns will also receive mentoring and training from experienced data professionals and have the chance to work with a wide range of data sets related to city operations, planning, and sustainability.

This **Data Analyst (Temporary)** will support the City Council, with an emphasis on supporting its data analytic capabilities and help deliver, a better culture of data –driven decision-making across the organization. This role is expected to help support the development of better insights and data driven decision making with data analytics and spatial mapping opportunities and supporting policy decisions as required. There will also be opportunities to collaborate with tech companies,

academic institutions, various Dublin City Council departments and other public bodies as part of the role.

THE IDEAL CANDIDATE SHOULD:

The ideal candidate should be able to demonstrate the following knowledge, skills and competencies:

Technical Skills:

- Strong knowledge in data analysis techniques and statistical methodologies including data processing, modelling and visualization techniques (e.g. Tableau, Power Bi, SQL Server, SSRS, R, Python MS Excel).
- Understanding of statistical analysis techniques such as regression, hypothesis testing, and clustering is important for analyzing data effectively.
- Understanding of data cleaning and preprocessing techniques, including removing missing data, removing duplicates, and dealing with outliers.
- Knowledge of database management concepts and the ability to work with databases using SQL.
- Sound understanding on spatial data analysis and demonstrable knowledge on spatial data analysis tools (ArcGIS, QGIS, MapInfo, GeoMedia, FME etc.).
- Understanding of digital twins and their potential applications for cities and local authorities.
- Demonstrate a satisfactory knowledge on data management and data quality controls.
- Be able to identify, analyze, and interpret trends or patterns in complex data sets.
- Good problem solving and analytical skills.

Personal Skills:

- Be self-motivated with an ability to work on own initiative
- Operate successfully within a multi-disciplinary team environment.
- An ability to present and visualize insights gleaned from data collection to multiple audiences.
- Have good interpersonal communication skills with an ability to work co-operatively across the departments and partners.

QUALIFICATIONS

Character:

Each candidate shall be of good character.

Health:

Candidates shall be in a state of health such as would indicate a reasonable prospect to render regular and efficient service.

Education, Experience etc.:

Each candidate must, on the latest date for receipt of completed applications:

- Successfully completed first 2 years of a recognized degree (level 7 in the National Framework of Qualifications) and is currently pursuing the studies
- OR
- A recent graduate (level 7 or higher in the National Framework of Qualifications) in the area of Information Technology, Computer Science, Statistics or equivalent STEM qualification which includes the study of applied statistics, data science or data analysis.
- Have a good standard of teamwork experience.
 - Have satisfactory organizational skills.

DUTIES

Interns will gain experience over a wide range of areas, including, data management and analysis, emerging technologies and use of digital solutions to future proof our communities. Responsibilities and opportunities under the supervision of the Data Analyst in the section or a member of their team will include the following, but not limited to:

- Identification and management of high value data sets within DCC, working in close collaboration with internal departments and with external project partners.
- Robust data analysis on large and complex datasets from pervasive network of sensors for a wide range of environmental variables.
- Spatial and temporal modelling of city wide data.
- Experimentation
- Creation of dashboards and reports using advanced data visualization techniques.
- Supporting the organization for open data management.
- Learn to navigate through our highly complex systems and understand the underlying architecture.
- Defining the objective/problem and identifying all the intermediary activities to reach the end state.
- Perform root-cause analysis when data issues identified.
- Communicate findings from data analysis with different stakeholders.
- Liaising effectively across the Council to support an organization wide approach to data capture, management, analysis and reporting which drives quality improvement and informs service improvement objective.

SELECTION PROCESS

- The post of Data Analyst Intern (Temporary) will be filled from this advertised competition. Selection shall be by means of a competition conducted by or on behalf of Dublin City Council.



- Candidates should note that eligibility and short listing is conducted based only the information provided by them in their C.V. and Personal Statement.
- Dublin City Council reserves the right to undertake eligibility and / or shortlist candidates in the manner it deems most appropriate.
- A panel may be formed on the basis of interviews. A candidate whose name is on a panel and who satisfies the Council that they possess the qualifications declared for the post and that they are otherwise suitable for appointment may, within the life of the panel, subject to the appropriate Department of Housing, Local Government and Heritage sanction, be appointed as an appropriate vacancy arises.
- The life of the panel shall be for a period of one year from the date of its formation.
- Dublin City Council require any person that is offered this position, to take up duty within a reasonable period. If they fail to take up the appointment within such period, or such period as the Council in its absolute discretion may determine, the Council shall not appoint them.

INTERVIEW

The interview will be competency based and marks will be awarded under agreed competencies:

Technical skills and knowledge

Planning and Organizing

Interpersonal and Communication Skills

Delivering Results

Due to the urgent requirement of this post, interviews might take place as soon as possible once the closing date has passed. This means that you may be called forward for the interview at very short notice.

SALARY

The salary scale for the position of **Data Analyst Intern (Temporary – Nine Months)** is: - **€27,146** per annum pro rata.

Rate of remuneration may be adjusted from time to time in line with Government Policy.

Under the Public Service Stability Agreement 2013, the working hours for newly appointed/promoted staff are **35 hours per week**.

PARTICULARS OF POSITION

(a) The post is temporary, whole time and pensionable.

The successful candidate will, be assigned as Data Analyst Intern (Temporary), subject to satisfactory service, for a period of 9 months.

The nature of this employment is Fixed Term due to the purpose of this post being the employment of students to facilitate the gaining of relevant experience.

- (b) The holder of the post may be assigned to any section in Dublin City Council.
- (c) Dublin City Council reserves the right to, at any time, assign an employee to any Department now or in the future.

Notwithstanding the fact that this employment is temporary and for a fixed term, Dublin City Council reserves the right to terminate the employment prior to the Date of Cessation of the Temporary Contract, on the giving of the appropriate notice set down in the Minimum Notice and Terms of Employment Acts. Dublin City Council also reserves the right to terminate the employment on grounds of unsatisfactory service, attendance etc.

ADDITIONAL RELEVANT INFORMATION FOR APPLICANTS

- The *National Vetting Bureau (Children and Vulnerable Persons) Act 2012 to 2016* came into effect on 29th April 2016. The Act places a statutory obligation on Dublin City Council to ensure that 'any work or activity which is carried out by a person, a necessary and regular part of which consists mainly of a person having access to, or contact with children or vulnerable persons will be the subject of Garda Vetting.
- Subject to the provisions of the *Freedom of Information Act 2014*, applications will be treated in strict confidence.
- Any attempt by a candidate themselves or by any person(s) acting at the candidate's instigation, directly or indirectly, by means of written communication or otherwise, to canvass or otherwise influence in the candidate's favour, any employee of the City Council or person nominated by the City Council to interview or examine applicants, will automatically disqualify the candidate for the position being sought.
- It is important to remember that this is a competitive process for a role where integrity is paramount. Sharing information on the selection / interview process e.g. through social media or any other means, may result in a candidate being disqualified from the competition.
- Dublin City Council does not allow the unsanctioned use of any type of recording equipment during interviews or on its premises. This applies to any form of sound recording and any type of still picture or video recording, whether including sound recording or not, and covers any type of device used for these purposes.
- An applicant who is found to be ineligible at any stage of the competition will not be further considered. Provision of inaccurate, untrue or misleading information will lead to disqualification from the competition, withdrawal of employment offer or dismissal.
- A candidate who does not attend for interview when and where required by the City Council, or who does not, when requested, furnish such evidence as the City Council requires in regard to any matter relevant to their candidature, will have no further claim to consideration.
- The City Council will not be responsible for any expenses candidates may incur in connection

with their candidature.

CLOSING DATE

C.V.s and Personal Statement should be emailed to smartcity@dublincity.ie before 12.00 Midday, Friday 16th June 2023.

**SENIOR EXECUTIVE OFFICER
HUMAN RESOURCES DEPARTMENT**

Dated this 30th May 2023

This document is also available in Large Print, High Contrast Print and Braille on request.