The Competition and Consumer Protection Commission (CCPC).

Candidate Information Booklet

Job Title: Data Engineer

Grade: Assistant Principal Officer (AP)

Closing date: 3.00pm, Wednesday, 28th May, 2025

CCPC

Coimisiún um Iomaíocht agus Cosaint Tomhaltóirí | Competition and Consumer Protection Commission

General Information:

Job Title: Data Engineer

Grade: Assistant Principal Officer (AP)

Starting Salary: *€80,668

*Point of entry on this salary scale may differ from the minimum point of the scale if the successful candidate is a current public or civil servant.

Employing Authority: Competition and Consumer Protection Commission (CCPC)

Office Location: Bloom House, Railway Street, Dublin 1, D01 C576

Working Hours: 35 hours per week

Hybrid / Agile / Remote Working: You will be required to attend the office at least 40% of your time and can avail of remote working up to 60% of your time, this is subject to business requirements.

The CCPC generally operates on a fully remote basis during the month of August and fully remote over the Christmas period. This arrangement is subject to business requirements.

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Annual Leave: 30 days per annum.

Tenure: Wholetime, Permanent

The Competition and Consumer Protection Commission (CCPC):

The Competition and Consumer Protection Commission ("CCPC") is the statutory body responsible for enforcing competition and consumer protection law in Ireland. The CCPC's broad mandate, covering all sectors of the economy, gives it a vital role in ensuring that markets work better for consumers.

We are governed by an Executive Chairperson and three Commission Members ("the Commission"). The Commission is responsible for the strategic and operational management of the organisation to deliver on our mission and meet our regulatory objectives.

Each Division of the CCPC is overseen by a Member of the Commission, led by a Divisional Director and managed by a senior management team from within the Division. We are staffed with people from a wide range of technical backgrounds, including economists, lawyers, digital forensic specialists, investigators, communications professionals and more.

You can read our strategy statement which outlines the vision, mission, values and goals of the CCPC. Further information on the work of the CCPC to be found at www.ccpc.ie.

Equal Opportunities

The CCPC is an equal opportunities employer. We are committed to championing an inclusive and diverse workforce that reflects modern Ireland and the people we serve. We strive to create a culture where everyone has equal access to opportunity and feels comfortable and confident to be themselves at work. Reasonable Accommodations will be provided, if required, during this process. To discuss and request reasonable accommodations in confidence please contact ccpccareers@cpl.ie

Division Overview

The Forensic Technology & Data Analytics Division (FTDA) supports all other Divisions within the CCPC, particularly the Enforcement Divisions, in the areas of Digital Forensics, eDiscovery, Open-Source Intelligence and Data Analytics. The Division has recently undergone an expansion with the full transformation of laboratory systems and technical capabilities.

You will be an integral part of the Forensic Technology and Data Analytics (FTDA) team, comprising a Director (Principal Officer), two Deputy Directors (AP1) and one FTDA Senior Analyst (HEO).

The Role:

We are looking for a Data Engineer with a passion for building intuitive, user-friendly applications to help our investigation teams. Your work will empower investigators to make informed decisions and identify potential breaches of competition and consumer protection law, as well as breaches of other legislation falling within the CCPC's remit. You will get to work closely with our enforcement teams to understand key indicators and ensure the applications align with enforcement goals.

Your goal will be to simplify complex NLP methodologies into accessible, actionable insights for our Enforcement Divisions.

In this role your work will initially support the role of the CCPC's Forensic Technology & Data Analytics Division (FTDA) on the following cross divisional projects:

- Screening for bid rigging - detection of collusion in public tendering processes
- Price Indication Directive - Online price monitoring

The Successful Candidate:

In addition to the immediate appointment from this campaign, an order of merit may be established. This may be used to fill any future vacancies at the same level within this or other Divisions of the CCPC where roles have similar responsibilities and/or similar skills are required.

The Successful Candidate is as follows:

- Comfortable working on own initiative.
- Works well with others as part of small team.
- Enjoys the opportunity to develop best practices and input into full development lifecycle.
- Finds new and better ways of doing things.
- Interested in upskilling and education.
- Dedicated to ongoing research and development in areas of expertise.
- Takes a leading role in project management and is comfortable giving input.
- Appreciates the opportunity and importance of diversifying skills in other areas of computer science and data science.

Key Responsibilities:

- Develop User-Friendly NLP Tools that can analyse large datasets of public tender documents and vendor communications to identify potential collusion or anti-competitive behaviour.
- Pattern Recognition & Anomaly Detection: Use NLP algorithms to detect suspicious patterns in the language, tone, and structure of bids, proposals, and other tender-related documents, flagging possible signs of collusion such as identical language, unusual bid behaviours, or coordinated pricing strategies.
- Develop NLP Tools for Price Monitoring: Build and deploy NLP-based tools to extract and analyse pricing information from various e-commerce platforms, websites, and online marketplaces.
- Simplify NLP for Non-Technical Users: Ensure that the NLP models and results are presented in an easy-to-understand way for non-technical end users, including visualization dashboards, simple reports, and intuitive interfaces that highlight key insights and potential red flags.
- Model Development & Optimization: Develop, fine-tune, and evaluate NLP models for tasks like text classification, sentiment analysis, entity recognition, and similarity detection, with a focus on identifying unethical practices.
- Data Preprocessing & Feature Engineering: Develop robust text preprocessing pipelines that clean and prepare large volumes of unstructured text data (e.g., bids, contracts, emails) for analysis.
- Opportunity to travel and liaise with National and International experts to help solve problems.
- Opportunity to assist the FTDA team in the areas of Digital Forensics, eDiscovery and Open Source Intelligence.
- Opportunity to test and develop in-house Gen AI tools.

Essential:

- Education: Bachelor's or Master's degree in Computer Science, Data Science, or a related field.
- Proven Experience: 2+ years of experience in developing NLP tools and models, ideally for business applications, and with a focus on user-friendly interfaces.
- Programming Skills: Strong proficiency in Python, including experience with NLP libraries such as NLTK, SpaCy, Hugging Face Transformers, or similar.
- Communication Skills: Strong verbal and written communication skills to present complex technical concepts in an accessible and clear manner for non-technical stakeholders.
- User-Centric Design: Experience in developing software or tools with a strong focus on usability, ensuring the tool is intuitive for non-technical users.
- NLP Expertise: Deep understanding of NLP techniques for tasks like text classification, entity recognition, semantic analysis, and pattern detection.

Desirable:

- Problem Solving: Ability to understand the nuances of public procurement processes and translate them into actionable insights through NLP and machine learning.
- Experience with Data Visualization: Familiarity with data visualization tools (e.g., Tableau, Power BI, or custom dashboards) to present findings in a non-technical, actionable manner.
- Cloud and Scalability: Experience deploying NLP solutions on cloud platforms (e.g., AWS, Azure, Google Cloud) for scalability and production readiness.
- Experience with container orchestration (e.g., Docker, Kubernetes)

Application Process:

To apply for this role using the link on the CCPC careers page, please submit an up-to-date CV and a cover letter, max 500 words, outlining your experience relating to the key responsibilities of the role. Applicants should note that canvassing will result in your exclusion from the process.

Shortlisting:

Shortlisting of candidates will be based on the information provided in their application. In order to satisfy the shortlisting panel, you need to clearly highlight within your application how your skills and experience meet the essential criteria. If this is not clearly displayed, it may prevent your application progressing to the shortlisting stage.

Interview Process:

There will be two interviews for this role that are likely to take place in mid June and in the beginning of July. During the first-round interview, the CCPC will conduct competency style interviews based on the Assistant Principal Officer (AP) competencies below:

1) Leadership
2) Analysis and Decision Making
3) Management and Delivery of Results
4) Interpersonal and Communication Skills
5) Specialist Knowledge, Expertise and Self Development
6) Drive and Commitment

Full details of these competencies can be found on the CCPC careers page under FAQ.

The second-round interview will involve an assessment using practical methods such as presentation skills, writing assignments or role play.

To find out more about what it is like to work in the CCPC, FAQ's, terms and conditions and the benefits on offer, please visit our CCPC careers page