

**City of New York
DEPARTMENT OF INVESTIGATION
Intern Vacancy Notice**

Intern Title: Data Analyst Intern

Intern ID: 0002

Work location: 180 Maiden Lane

Intern Description

The New York City Department of Investigation (DOI) is one of the oldest law enforcement agencies in the country with a mission of combating municipal corruption. It serves the people of New York City by acting as an independent and nonpartisan watchdog for New York City government, City agencies, and City employees, vendors with City contracts, individuals and entities that receive City funds.

The Data Analytics Unit invites applications for the role of Data Analyst Intern to support cross-squad investigative decision-making. Guided by classic Standard Analytic Techniques and the Data Science Lifecycle, the intern will play a pivotal role in the following:

- **Problem Understanding:** Collaborate with Analysts, Investigators, and Squads to define critical objectives and craft responses to DOI's on-going strategic priorities.
- **Data Collection and Understanding:** Undertake a proactive approach to gather data from diverse sources, such as public repositories and internal acquisition channels, and develop a deep understanding of data context, quality, and potential biases.
- **Data Preparation and Cleaning:** Implement data preparation techniques, ensuring the integrity and reliability of data through cleaning, normalization, and transformation processes. This includes loading data into DOI systems and verifying its accuracy, completeness, and consistency.
- **Exploratory Data Analysis and Feature Engineering:** Employ exploratory data analysis to help uncover underlying patterns, relationships, and anomalies within datasets. Engage in feature engineering to enhance predictive power and data model relevance.
- **Modeling and Algorithms:** Occasionally apply statistical models and machine learning algorithms to support automated inductive reasoning and decision-making.
- **Evaluation and Interpretation:** Critically evaluate analytic products to ensure they are actionable and align with DOI objectives to combat fraud, waste, and abuse.
- **Deployment and Operationalization:** Document and communicate data analytic methodologies. Help ensure they can be effectively integrated into Analysts' on-going workflow.
- **Feedback and Iteration:** Engage in continuous learning with expert feedback from Analysts, Investigators, and Squads.

If selected, the intern will be fingerprinted and undergo a background investigation.

This is an unpaid internship.

Essential Duties:

- Work collaboratively with Analysts, Investigators, and Squads.
- Ensure rigorous data collection, relevance, and integrity.
- Preform advanced data summarization and reporting.

Required Knowledge, Skills, and Abilities:

- Ability to work efficiently and multi-task in a collaborative environment and independently.
- Excellent critical thinking and problem-solving skills.
- Comfort with statistical inference and analysis.
- Foundational knowledge of relational databases and SQL.
- Hands-on Excel for pivot tables and conditional formatting.
- Hands-on programming/scripting in (at least) one mainstream language (e.g., Python, R, Rust, C++, Java, etc.).

The City of New York is an equal opportunity employer and is strongly committed to a policy of non-discrimination. We are committed to recruiting a diverse and inclusive talent pool.