

Executive Division

Research and Analytics Department – New York City

Data Scientist

Reference No: RAD_NYC_DAS_6362

Application Deadline is February 21, 2025

Goal:

The Research and Analytics Department in the Office of the New York State Attorney General (OAG) is seeking candidates for a full-time Data Scientist position. This role will primarily support initiatives across the <u>Social Justice Division</u>, with a particular focus on supporting the Voting Rights Section in the <u>Civil Rights Bureau</u>. The section is charged with, among other things, enforcing the newly-enacted <u>New York Voting Rights Act</u>, one of the strongest state voting rights laws in the country, including implementing one of the first-ever state "preclearance" programs.

The Data Scientist will utilize a vast array of tools to explore datasets, develop new databases, and use statistical modeling to detect anomalies in information pertinent to OAG investigations. The goal of the data scientist at OAG is to ensure that our most complicated cases and policy arenas have the benefit of advanced analytical tools, methodologies, and strategic thinking to understand how otherwise elusive trends can be laid bare once we dive into the underlying data.

Purview:

As part of an innovative team housed in the Executive Division, you will primarily work with senior staff and bureaus within OAG's Social Justice Division to support the division's major initiatives, investigations, and policy development. Our team researches and writes analytical reports garnering national attention, directs multi-million-dollar grant programs, and supports OAG's major investigations. See for example: lawsuit against auto lender for deceptive practices, <a href="prediction-prediction

Employing over 1,800 people across New York state, OAG is both the "People's Lawyer" and the state's chief legal officer. The Data Scientist supports OAG's work in numerous legal and regulatory arenas, including protecting the rights of investors and consumers, coordinating state-wide criminal investigations, promoting civil rights, economic and social justice, encouraging harm-reducing public health strategies, and preserving the state's environment. The OAG also advises the Executive branch of state government and defends actions and proceedings on behalf of the state.

Duties:

Data can and does play a pivotal role in decisioning on a wide range of OAG's work. The Data Scientist is primarily responsible for:

- All aspects of using data to develop and test legal hypotheses, including:
 - Brainstorming with legal teams on the data required
 - Acquiring data through public sources and assisting legal teams to acquire data from confidential sources to ensure the delivery of data sufficient for investigation
 - o Testing data for reliability
 - o Distilling and incorporating relevant academic and other analytical research
 - Developing and executing appropriate methodologies for data exploration and analysis
 - o Clearly communicating findings verbally and through written reports and visualizations

- o Continuously updating analysis in the face of feedback and new data
- Quantifying uncertainty in analytical findings
- Working closely with legal teams on all the aspects above and providing guidance and recommendations on decision making around data
- Additional responsibilities may include:
 - Developing predictive modeling to detect anomalies
 - o Developing or programming new databases or data tools
 - Writing fact and expert reports for submission to the court and defending analysis and findings in depositions
 - o Helping to maintain and improve the team's shared computational infrastructure
 - Staying informed of the latest advances in data tools and techniques and sharing newfound skills with the team
 - o Performing other duties as requested

Qualifications and Skills:

- Advanced degree in computer science, mathematics, applied statistics, physics, engineering or similar disciplines with demonstrated research capability or bachelor's degree and equivalent experience and training
- At least two (2) years of demonstrated qualitative, quantitative, or investigative research abilities
- Experience with the following technologies:
 - o Programming, scripting, and statistical languages (e.g., Python, R, use of dataframes)
 - Experience drawing GIS maps, geocoding data, and running geographic analyses (e.g., ArcGIS, QGIS, and/or mapping in python)
 - o Data visualization software (e.g., Tableau, d3, altair, plotly, matplotlib, bokeh)
 - o Relational databases and advanced SQL queries
 - Git/github familiarity
- Excellent oral, written, and presentation communication skills
- Ability to communicate technical concepts and results to non-technical audiences
- Highly organized, self-directed, and curious
- Personable and positive, with a high level of integrity
- Experience working with voting, electoral, or related data
- Candidates with additional experience in any of the following are preferred:
 - Linux command line tools
 - Graph databases (e.g. Neo4J)
 - o Cloud, distributed, and container computing platforms (e.g. AWS, Redshift, EC2, docker)
 - Machine learning frameworks (e.g. supervised and unsupervised methods such as neural networks, random forests, and generalized linear models)
 - Analyzing social networks (e.g. Facebook, Twitter, Instagram)
 - Natural Language Processing or Entity Resolution

The hiring rate for this position is \$107,988 plus \$3,400 in location pay. As an employee of OAG, you will join a team of dedicated individuals who work to serve the people of our state through a wide variety of occupations. We offer a comprehensive New York state benefits package, including paid leave, health, dental, vision, and retirement benefits, and family-friendly policies. Additionally, OAG offers a robust Workplace Flexibilities Program with multiple options for employees, including telecommuting (up to two days per week) and alternative work schedules.

Candidates from diverse backgrounds are encouraged to apply.
The OAG is an equal opportunity employer and is committed to workplace diversity.

How to Apply

Applications must be submitted online. To apply, please click on the following link: RAD_NYC_DAS_6362

To ensure consideration, applications must be received by close of business on February 21, 2025.

Applicants must be prepared to submit a complete application consisting of the following:

Cover Letter

- You may address your letter to the Legal Recruitment Unit.
- Indicate why you are interested in this position and what makes you a strong candidate. You may
 wish to include information about what life experiences you will bring to the position that will
 enhance OAG's ability to better serve the diverse population of this state.

Resume

Writing Sample

- In lieu of a writing sample, please provide a code sample (data ETL and/or analysis in python, R, and/or SQL; this can be a link to a public github/gitlab repo).
- If needed, please include a cover page to provide the reviewer with any relevant context or background information.

• List of three (3) references

- Only submit professional references, supervisory references are preferred.
- For each reference, indicate the nature and duration of your relationship.
- Include contact information and email addresses for each reference.
- Please note that your references will not be contacted until after you interview for the position.

If you have questions regarding a position with OAG, the application process, or need assistance with submitting your application, please contact Legal Recruitment via email at recruitment@ag.ny.gov or phone at 212-416-8080.

For more information about OAG, please visit our website: ag.ny.gov