Office Title: Senior Data Engineer
Civil Service Title: Computer Specialist (Software)

Level: 3
Salary Range: $105,000 - $115,000

Division / Work Unit: Information Technology Division/EDM
Number of Positions: 1

Job ID: 537116
Hours / Shift: Monday – Friday (9am -5pm)

Position Status: Full-Time / Permanent
Application Deadline: Until Filled

DISCLAIMER: The NYC Department of City Planning does not offer Sponsorship, of any kind, for any type of employment opportunity.

THE AGENCY
The Department of City Planning (DCP) plans for the strategic growth and development of the City through ground-up planning with communities, the development of land use policies and zoning regulations applicable citywide and sharing its perspectives on growth and community needs with sister agencies in collaboration with the Office of Management and Budget (OMB).

DCP’s six strategic objectives include: (a) catalyze long-term neighborhood improvement through integrated planning and targeted accompanying public investments; (b) encourage housing production, affordability, and quality; (c) promote economic development and job growth; (d) enhance resiliency and sustainability of neighborhoods; (e) ensure integrity, timeliness and responsiveness in land use reviews; and, (f) supply objective data and expertise to a broad range of planning functions and stakeholders.

Central to its mission, DCP supports the City Planning Commission in its annual review of approximately 450 land use applications. The Department also works closely with OMB in developing the Ten-Year Capital Strategy, and helping administer the $1 billion Neighborhood Development Fund, geared toward ensuring that growing neighborhoods undergoing rezoning have accompanying infrastructure investments.

The New York City Department of City Planning is a great place to work – cultivating intellectual inspiration, professional development and creativity. Visit our website at www.nyc.gov/planning to access the full listing of job opportunities and to learn more about our great agency.
THE DIVISION

Information Technology Division (ITD) is responsible for supporting the agency’s technology footprint including technology infrastructure across five boroughs, as well as workflow applications and databases for analytics and decision making. The division is comprised of 50+ inter-disciplinary staff with specialties in desktop support, server engineering, telecom, application development, database maintenance, data processing, data visualization and mapping, amongst many others. The division provides technology support for agency staff across five boroughs.

The Enterprise Data Management (EDM) section within ITD is responsible for creating and implementing the agency’s data strategy and data governance policy; updating and maintaining core citywide datasets in support of 911 dispatch and the operations of city agencies; and improving the creation, use, and availability of geospatial data sets within the agency.

THE ROLE

EDM is seeking a Senior Data Engineer to join the Data Engineering team. DCP’s Data Engineering team’s mission is to create and publish high quality public datasets, build transparent and automated data pipelines using open-source technologies, develop a data ecosystem by offering comprehensive documentation and analytics resources, and bring people together across teams and agencies to share data and learn from each other. The Data Engineering team is continually evolving, and this new hire will have the ability and support to improve existing infrastructure and processes and drive forward new projects and initiatives. The ideal candidate will be passionate about data literacy, quality, and accessibility, have strong technical skills, and be excited about advancing the adoption of new technologies in DCP and City government.

Under minimal supervision, the Senior Data Engineer’s primary areas of responsibility include, but are not limited to:

• Taking a lead role in the designing, deploying, and scaling of current infrastructure to ensure that Data Engineering maintains and improves existing processes, and expands its abilities and offerings.
• Understanding the technologies used by the team and recommending new technologies. Ideating, designing, and implementing improvements to products and processes to ensure that the team is using the best tools for the job.
• Building Data Engineering data products, which involves:
  o operating data ingestion pipelines and managing data storage,
  o running scripts that transform input data by standardizing text fields, geocoding, merging, aggregating, and performing basic spatial manipulations, and
  o reviewing outputs by writing custom scripts and/or using established QAQC tools to identify errors, inconsistencies, and edge cases in datasets.
• Designing new data products from concept to completion, working on specifications with product owners, creating technical designs with team members, helping to plan sprints, contributing to documentation, and delivering a finished product. Leading project-based teams and delegating tasks to other team members.
• Mentoring other data engineers.
• Learning and wrangling complex legacy data systems and bringing the infrastructure into a modern development stack.
• Sharing your accomplishments and lessons learned with NYC Planning, other city agencies, and the world via talks, presentations, blogs, or other mediums.

PREFERRED QUALIFICATIONS:

• Four or more years of experience in the field of data engineering.
• Highly skilled in scripting processes with Python and SQL.
• Comfortable working, collaborating, and organizing projects in GitHub.
• Proficient in automating processes using GitHub Actions and bash.
• Knowledge of and experience with DevOps using a containerization software such as Docker.
• Practical experience with open-source enterprise relational databases, such as PostgreSQL.
• Experience working with spatial data in PostGIS, Carto, GeoPandas, or GDAL.
• Experience reading and writing to object-based cloud storage.
• Organized and detail oriented with the ability to bring logic to heterogeneous data environments.
• Seeks out learning resources and team-member guidance to fill knowledge gaps.
• Able to work in a collaborative development environment.
• Able to communicate to both technical and non-technical audiences.

MINIMUM REQUIREMENTS:
Authorization to work in the United States is required for this position. NYC Department of City Planning does not provide sponsorship for international employees. Applicants are responsible for ensuring that they meet all minimum qualifying requirements for this position, at the time of application.

(1) A baccalaureate degree from an accredited college, including or supplemented by twenty-four (24) semester credits in computer science or a related computer field and two (2) years of satisfactory full-time software experience in designing, programming, debugging, maintaining, implementing, and enhancing computer software applications, systems programming, systems analysis and design, data communication software, or database design and programming, including one year in a project leader capacity or as a major contributor on a complex project; or

(2) A four-year high school diploma or its educational equivalent and six (6) years of full-time satisfactory software experience as described in “1” above, including one year in a project leader capacity or as a major contributor on a complex project; or

(3) A satisfactory combination of education and experience that is equivalent to (1) or (2) above. College education may be substituted for up to two years of the required experience in (2) above on the basis that sixty (60) semester credits from an accredited college is equated to one year of experience. A masters degree in computer science or a related computer field may be substituted for one year of the required experience in (1) or (2) above. However, all candidates must have a four year high school diploma or its educational equivalent, plus at least one (1) year of satisfactory full-time software experience in a project leader capacity or as a major contributor on a complex project.

NOTE: In order to have your experience accepted as Project Leader or Major Contributor experience, you must explain in detail how your experience qualifies you as a project leader or as a major contributor. Experience in computer operations, technical support, quality assurance (QA), hardware installation, help desk, or as an end user will not be accepted for meeting the minimum qualification requirements.

Special Note
To be eligible for placement in Assignment Level IV, in addition to the Qualification Requirements stated above, individuals must have one year of satisfactory experience in a project leader capacity or as a major contributor on a complex project in data administration, database management systems, operating systems, data communications systems, capacity planning, and/or on-line applications programming.
TO APPLY: All applications must be submitted through ESS

City Employees
1. Log in to ESS.
2. Search for job ID number: 537116
3. Click on the job business title: Senior Data Engineer
4. Click on “Apply Now” at the bottom of the posting

Non-City Employees – Please visit: https://www1.nyc.gov/jobs/ and follow the steps below:
1. Search for job ID number: 537116
2. Click on the job business title: Senior Data Engineer
3. Click on “Apply Now” at the bottom of the posting

Only applicants under consideration will be contacted. Appointments are subject to Office of Management and Budget (OMB) approval.

As of August 2, 2021, all new hires must be vaccinated against the COVID-19 virus, unless they have been granted a reasonable accommodation for religion or disability. If you are offered city employment, this requirement must be met by your date of hire, unless a reasonable accommodation for exemption is received and approved by the hiring agency.

PLEASE NOTE: New York City residency is generally required within 90 days of appointment. However, City Employees in certain titles who have worked for the City for 2 continuous years may also be eligible to reside in Nassau, Suffolk, Putnam, Westchester, Rockland, or Orange County. To determine if the residency requirement applies to you, please discuss with a Human Capital representative.

The City of New York is an inclusive equal opportunity employer committed to recruiting and retaining a diverse workforce and providing a work environment that is free from discrimination and harassment based upon any legally protected status or protected characteristic, including but not limited to an individual's sex, race, color, ethnicity, national origin, age, religion, disability, sexual orientation, veteran status, gender identity, or pregnancy.

As a current or prospective employee of the City of New York, you may be eligible for federal loan forgiveness programs and state repayment assistance programs. Please review the notice to see if you may be eligible for programs and how to apply at nyc.gov/studentloans.