

MTA Data & Analytics Intern Program
Data Engineering Associate
Email to apply: MTADA_Applications@MTAHQ.ORG

The Data & Analytics team is seeking students in computer science or engineering to serve as Data Engineering Associates in our intern program. Our work combines algorithmic database coding and the knowledge of colleagues in transportation operations and support functions to create tools to help the MTA improve performance and manage its most significant challenges. We design, build, test and deliver end-to-end, automated data pipelines over complex on-premises and off-premises platforms, extracting data from numerous systems and transforming structured, semi-structured and unstructured data into consistent, reliable, and usable datasets that our Data Science and Reporting teammates use to create dashboards and other decision-making tools.

The key functions of the Data Engineering Associate are as follows:

- Carry out tasks to operationalize data pipelines, data warehouses, data marts, multi-dimensional cubes, and data lakes to collect, structure, and integrate data sources for analysis and consumption
- Write automated test scripts to monitor data quality, validity, accuracy, and usability
- Conduct root cause analyses of data issues and implement cost effective resolutions
- Document data content and flows for use by teammates and other users
- Other tasks as assigned to problem-solve and achieve the goals of the team

All candidates must have:

- Strong skills in Python, SQL or R coding and database design
- Experience in documenting data processes and performing data quality checks
- Understanding of analytical methods (e.g., probability and statistics, algorithm design), advanced abilities in Excel, and experience with business intelligence tools like Power BI
- Knowledge of and preferably some experience in data science and performance reporting
- Strong written communication skills
- Familiarity with transit/transportation systems and the MTA organization is not necessary

Useful program information and requirements for applicants to know:

- Data & Analytics interns are an integral part of our team, responsible for project tasks as assigned and included in all team activities as schedules allow.
- Most interns are current or recent graduate or doctoral students, though we do hire undergraduates with the right skills and training.
- All MTA employees work in the office, which we believe supports higher performance in problem solving, productivity, communications, and mentoring. Each employee can work from home one day per week if project needs allow. Our office is in Lower Manhattan.
- Interns are paid a pre-determined hourly rate.
- Spring and Fall interns commit to weekly schedules between 20 and 28 hours. Summer and winter break interns work 35 hours per week. Time off for exams and breaks, as needed.
- Fall internships run September to December, Spring January to May, Summer June to August and Winter breaks between the fall and spring periods.
- Documentation of citizenship, permanent residence, or work authorization required. Offer letters provided for international students to complete work authorization applications.

Interested applicants should email their resume to MTADA_Applications@MTAHQ.ORG with the subject line “Data Engineering Associate Internship”