

Lead Data Engineer, Team Systems & Data

Start Date: January 10, 2022

Team: Systems & Data

Location: Flexible

About Achievement First

Achievement First serves more than 15,000 students in 41 schools in five communities across Connecticut, New York, and Rhode Island. All of our students come to us through blind lottery. The majority are Black, Latinx, and children from low-income families who will be the first in their families to graduate from college. The mission of Achievement First is to deliver on the promise of equal educational opportunity for all of America's children. We know that every child—regardless of race, zipcode, or economic status—deserves access to great schools. For more information about the Achievement First mission, model, our schools and team, please visit our website at www.achievementfirst.org.

The Opportunity

The Lead Data Engineer will oversee the Development & Engineering vertical within the Systems & Data team at Achievement First, owning the vision, architecture, and implementation of AF's mission critical data infrastructure on AWS. They will lead the efforts to continuously evolve AF's data warehouse with the addition of new datasets and help AF achieve its goals around using data to drive instructional improvement. This position reports to the VP of Systems & Data.

Responsibilities of the Lead Data Engineer will include but are not limited to:

Development & Engineering vertical management

- Lead short- and long-term vision setting, strategic planning and roadmap development for the development & engineering vertical within AF's Systems & Data team
- Manage the development & engineering vertical (currently 2 junior developers) including hiring, onboarding, coaching and professional development of direct reports
- Collaborate with data analysts, product managers and other stakeholders within the organization to gather technical requirements, define project scope and estimate efforts/timelines
- Translate project goals into clearly articulated, actionable project requirements and tasks. Oversee development efforts across the team to ensure project timelines and specifications are met
- Lead development team planning sprints
- Ensure close alignment between ongoing development team priorities and the data analytics team at AF

Data warehousing and application development

- Lead the strategy, architecture, and implementation of AF's cloud data infrastructure on AWS
- Design, build and maintain data pipelines to ingest data from relational and non-relational data sources used across AF
- Oversee the implementation of web applications built internally to collect quality data and simplify processes

- Lead initiatives to research, prototype and adopt new technologies to further AF's data infrastructure and web application stack
- Establish best practices and standards for AF's data architecture and development practices
- Support integration of dev ops practices into development workflows including but not limited to automated deployments using CI/CD, developing infrastructure as code, and establishing data security/access policies and practices
- Oversee the maintenance of existing on-prem data architecture and develop roadmap to transition legacy processes and infrastructure to the AWS ecosystem
- Track cloud infrastructure utilization against budget and optimize infrastructure on an ongoing basis
- Monitor and support production data refresh jobs; ensure timely resolution per SLA agreed upon with stakeholders

Skills and Characteristics

- 5+ years of experience as a data engineer or in a similar role; 2+ years of experience in a senior/lead capacity
- 5+ years of experience with
 - Data modeling, data warehousing and building data/ETL pipelines
 - Writing complex queries in SQL
 - At least one programming language such as Python
- 2+ years of experience with
 - Building data infrastructure on cloud platforms such as AWS, GCP or Azure
 - Amazon Redshift, Google Bigquery or Snowflake
 - Relational databases such as SQL server or Postgres
 - Workflow orchestration tools such as Airflow or Step Functions
- Working knowledge of the following is required:
 - REST APIs
 - Database performance tuning and optimization
 - ETL tools such as Microsoft SSIS
- Strong candidates will have experience with several of the following
 - Infrastructure as code tools such as Terraform, AWS Cloudformation
 - CI/CD pipelines and developer tools such as AWS Code Pipeline/Code Build
 - Version control tools such as Git
 - Data visualization tools such as Tableau, Looker or PowerBI
 - NoSQL databases and data lakes
- Strong written and verbal communication skills; ability to articulate technical concepts to non-technical audiences
- Problem-solving skills with strong attention to detail
- Desire to continuously learn new technologies and improve processes for efficiency and scalability
- Belief in the Achievement First mission and educational model
- Maturity, humility, sense of humor and "roll-up-my-sleeves" attitude
- You are vaccinated against COVID-19 (see more below for policy details).

Compensation

Salary for this position is competitive and commensurate with experience. Additionally, AchievementFirst offers a comprehensive benefits package.

To Apply

Apply by completing [our online application form linked here](#).

Research shows that while men apply to jobs when they meet about 60% of job criteria, women and other marginalized groups tend to apply only when they check every box. So, if you think you have what it takes, but you're not sure that you check every box, we still want to hear from you.

Achievement First is an equal opportunity employer and an organization that values diversity. People from all diverse backgrounds are strongly encouraged to apply. You can learn more about diversity at Achievement First here: <http://www.achievementfirst.org/about-us/diversity/> .

Achievement First requires vaccination against COVID-19 for all employees. Reasonable Accommodations based on a qualifying disability or sincerely held religious belief are being considered in accordance with applicable law.

[Click here](#) to read our full policy.