DATA ENGINEER – CLIENT IMPLEMENTATION

Collective Data is seeking a client-facing Data Engineer to help customers bring accurate, usable data into our fleet, asset, and quartermaster management platform.

The primary focus of this role is working directly with clients and internal teams to efficiently load live and historical data from legacy systems, databases, spreadsheets, APIs, and other sources. This person will understand client requirements, evaluate source data, develop mapping and transformation logic, and build reliable processes for initial migrations and ongoing data feeds.

The ideal candidate combines strong SQL skills, practical problem-solving, and clear communication. They should also know how to use AI tools to accelerate data analysis, develop solutions, and improve efficiency while independently validating results. The role includes light database administration, with PostgreSQL experience strongly preferred.

Key Responsibilities:

Client Collaboration and Data Planning

- Work directly with clients to understand their source systems, data structures, business processes, and migration or integration needs.
- Partner with Client Delivery, Project Management, Support, Product, and Development teams to define requirements, dependencies, timelines, and acceptance criteria.
- Translate business requirements into clear source-to-target mappings, transformation rules, and loading plans.
- Explain data issues, technical options, and project progress in language clients and internal stakeholders can understand.

Data Migration and Integration

- Design, build, and maintain processes for loading historical records and ongoing operational data into the Collective Data platform.
- Extract and transform data from relational databases, CSV and Excel files, APIs, ODBC connections, and other sources.
- Write efficient SQL for profiling, cleansing, mapping, transformation, validation, and reconciliation.
- Identify and resolve duplicates, missing values, inconsistent formats, invalid references, and other data quality issues.

- Develop repeatable loading processes with logging, error handling, safe reruns, and controls to prevent duplicate or incomplete imports.
- Validate record counts, relationships, key values, and business totals with clients and internal teams before accepting a load.
- Troubleshoot failed imports and integration issues, identify root causes, and implement durable fixes.
- Create reusable scripts, mapping templates, and documentation that reduce manual work across client projects.

Light Database Administration

- Assist with database health checks, query tuning, indexing, and troubleshooting, particularly in PostgreSQL.
- Support approved database access, permissions, and routine maintenance activities.
- Coordinate with Development and Infrastructure teams on database changes, backup and recovery needs, and performance issues.
- Follow established change controls when working with production databases and client data.

AI-Assisted Analysis and Solutions

- Use approved AI tools to accelerate source-data analysis, SQL and script development, troubleshooting, and documentation.
- Identify practical opportunities to improve data workflows through AI and automation.
- Review, test, and validate AI-generated outputs for correctness, performance, and suitability.
- Handle client data according to company security requirements when using AI tools.

Required Qualifications:

- Demonstrated experience in data engineering, data migration, database development, or a closely related role.
- Strong SQL skills, including complex joins, transformations, troubleshooting, and query optimization.
- Experience moving data between systems and validating the accuracy and completeness of results.
- Working knowledge of relational database design, keys, constraints, and referential integrity.
- Experience with a scripting language such as Python for data processing and automation.
- Ability to work directly with clients, ask effective questions, and turn incomplete requirements into workable solutions.

- Practical experience using AI tools to support analysis or technical solution development.
- Strong attention to detail, documentation habits, and ability to manage multiple client projects.

Preferred Qualifications:

- PostgreSQL experience.
- Experience with ETL/ELT processes, REST APIs, ODBC, and scheduled or incremental data loads.
- Experience with SaaS implementations, legacy system migrations, or customer data onboarding.
- Familiarity with XML, JSON, and configurable business applications.
- Experience with fleet, asset, inventory, maintenance, or government operational data.
- Familiarity with version control and basic database administration.

What Success Looks Like:

- Clients live and historical data is loaded accurately, efficiently, and within agreed timelines.
- Data issues are identified early and resolved with clear ownership and communication.
- Imports and integrations are repeatable, documented, and easy to troubleshoot.
- Reusable tools and automation reduce manual effort and client onboarding time.
- Client and internal teams trust the quality of the data and understand how it was validated.

Who is Collective Data?

Collective Data is a leading provider of Fleet Management and Asset Management software for both the public and private sectors. Our mission is to empower organizations with intelligent software solutions that help streamline operations, reduce costs, and improve efficiency.

Why Join Us?

At Collective Data, we value innovation, collaboration, and the personal growth of our employees. We offer a competitive salary and benefits package, flexible work arrangements, and an environment where your input is valued and encouraged.

Interested in making a difference with Collective Data? Please submit your resume and cover letter detailing your relevant experience to careers@collectivedata.com

Collective Data is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or protected veteran status and will not be discriminated against on the basis of disability.